SECTION 4.0
ALTERNATIVES

4.1 INTRODUCTION

Section 15126.6 of the CEQA Guidelines addresses the discussion of alternatives in an EIR. Key provisions of the CEQA Guidelines are identified throughout this section to explain the basis for the alternatives evaluation in this EIR. Section 15126.6(a) states:

> An EIR shall describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives. An EIR need not consider every conceivable alternative to a project. Rather it must consider a reasonable range of potentially feasible alternatives that will foster informed decision-making and public participation. An EIR is not required to consider alternatives, which are infeasible. The lead agency is responsible for selecting a range of project alternatives for examination and must publicly disclose its reasoning for selecting those alternatives. There is no ironclad rule governing the nature or scope of the alternatives to be discussed other than the rule of reason.

4.1.1 PROPOSED PROJECT SUMMARY

The 6.8-acre Jefferson Commons Specific Plan project site is located in the northeastern portion of the city. The project site is rectangular-shaped with linear street frontages along East Chapman Avenue and North Commonwealth Avenue. The site is developed with three office buildings and two apartment complexes.

The proposed project would allow for a mixed-use development with 375 student-oriented residential units, 30,000 square feet (sf) of retail/commercial uses, and 12,000 sf of space for the leasing office and recreation centers (the latter for the on-site residents). A 7-level parking structure with 1,225 parking spaces would be provided on the site with 1,105 spaces for residents and 120 parking spaces for retail uses.

4.1.2 PROPOSED PROJECT OBJECTIVES

The following objectives are associated with the proposed project:

- To create a student-oriented housing community with neighborhood serving retail to support the growing student population by providing rental housing opportunities while supplementing the urban environment.

- To establish zoning standards and implementation mechanisms applicable solely to the Jefferson Commons Specific Plan project consistent with the *Fullerton Municipal Code,* the General Plan, and State law that will provide for an integrated mixed use development.

- To design and develop an attractive facility that is compatible with the existing neighborhood and environment and provides a well-designed, new gateway to the City along Chapman Avenue.

- To provide an on-site circulation system that safely and efficiently conveys traffic through the project area provides adequate parking for residents and visitors; and separates vehicular and pedestrian activities.

- To create a pedestrian-friendly environment with community-serving commercial that supports the surrounding educational and commercial/offices land uses.

- Accommodate and encourage connectivity between bikeway, pedestrian, and bus networks.

- To provide private and common open space amenities such as athletic facilities, swimming pools, study courts, and passive recreational gathering spaces.

4.2 ALTERNATIVES TO THE PROPOSED PROJECT

In accordance with the CEQA Guidelines, the discussion in this section focuses on a reasonable range of alternatives. Alternatives that are considered in this EIR are listed below. There are no alternatives that were considered but rejected.

- No Project/No Development Alternative

- No Project Alternative − Development Pursuant to the Current General Plan Land Use Designation and Zoning

- For-sale Residential/Mixed-use Development Alternative

- Combination of Student-oriented Housing and For-sale Residential/Mixed-use Development Alternative

- Reduced Density Student-oriented Housing /Mixed-use Development Alternative

- Reduced Density Combination of Student-oriented Housing and For-sale Residential/Mixed-use Development Alternative

The analysis for each project alternatives includes the following:

- A description of the alternative.

- An analysis of environmental impacts and a comparison to the proposed project. Pursuant to the CEQA Guidelines, if an alternative would cause one or more significant effects in addition to those that would be caused by the project as proposed, the significant effects of the alternative shall be discussed, but in less detail than the significant effects of the project as proposed.

- An assessment of the alternative's ability to meet the project objectives (previously identified in Section 4.1.2).

4.2.1 NO PROJECT/NO DEVELOPMENT ALTERNATIVE

Section 15126.6(e)(2) of the CEQA Guidelines specifies that the "No Project analysis shall discuss the existing conditions at the time the Notice of Preparation (NOP) is published, as well as what would be reasonably expected to occur in the foreseeable future if the project were not

approved, based on current plans and consistent with available infrastructure and community services."

Section 15126.6(e)(3) of the CEQA Guidelines indicates that when the project is not a land use or regulatory plan, the No Project Alternative "is the circumstance under which the project does not proceed…the discussion would compare the environmental effects of the property remaining in its existing state against environmental effects which would occur if the project is approved."

Description of the Alternative

The No Project/No Development Alternative assumes that the existing uses on the 6.8-acre project site are retained and that no new development would occur. With this alternative, the site would retain the existing uses consisting of 103,515 sf of office space and 2 apartment complexes with a total of 79 residential units occupied by a mix of student and non-student residents.

Comparative Analysis of Environmental Impacts

Land Use and Related Planning Programs

Under this alternative, the existing land uses would be retained. A change in land use would not occur nor would a General Plan Amendment or zone change occur. However, this alternative would not fully achieve project objectives to create a student-oriented housing community with neighborhood-serving retail to support the growing student population while providing a well-designed, new gateway to the city along East Chapman Avenue. As with the proposed project, this alternative would not result in any significant land use impacts.

Aesthetics

The No Project/No Development Alternative does not involve any development or change in current uses. There would be no change to the visual quality or character of the project site or surrounding areas. Aesthetic changes associated with development of the project site would not occur with this alternative. It should be noted, however, that while the proposed project would alter the visual character of the site, it would serve to unify development within the project site and enhance the site's aesthetics rather than degrade the existing visual condition. No significant aesthetic impacts were identified for the proposed project and no significant aesthetic impacts would occur under this alternative.

Transportation and Circulation

The No Project/No Development Alternative would not change the existing traffic conditions because no development would occur, and no short-term (construction) or long-term (operational) traffic trips would be generated. Currently, two traffic study area intersections operate at a deficient level of service: Orangethorpe Avenue at State College Boulevard, and Chapman Avenue at the SR-57 northbound ramps. In 2010, these two intersections would continue to operate at a deficient level of service with the continuation of existing land uses on the project site. By 2025, four additional intersections would operate at a deficient level of service in the AM and/or PM peak hours. Existing on-site land uses would not be responsible for the provision of roadway improvements. Because no new development would occur, no traffic impacts are associated with this alternative.

Air Quality

The No Project/No Development Alternative would not involve any construction activities (including demolition and grading). Therefore, this alternative would avoid short-term significant and unavoidable construction-related air quality impacts that would occur with the proposed project. Both this alternative and the proposed project would generate long-term air quality emissions associated with vehicular and operational activities; however, implementation of the proposed project would increase vehicular traffic over existing levels associated with on-site land uses.

Noise

The No Project/No Development Alternative would not involve any construction activities on the project site. Therefore, noise associated with the activities resulting from the project would not occur under this alternative. Additionally, the incremental increase in long-term, traffic-related and operational noise levels associated with the proposed project would not occur. It should be noted that noise impacts from the proposed project can be mitigated to less than significant levels.

Cultural Resources

No new site development would occur under this alternative; no earthwork or grading would be required. Although on-site structures are not historically or architecturally significant, they would remain on site. The proposed project would require subsurface excavation; as such, there is the potential for subsurface cultural deposits (archaeological and paleontological) to be discovered during grading activities. The No Project/No Development Alternative would avoid any potentially significant impacts to known or unknown archaeological and/or paleontological resources. With mitigation, the proposed project impact is reduced to a level considered less than significant.

Population, Housing, and Employment

Under this alternative, no additional housing opportunities would be provided; the alternative would not assist the City in meeting its demand for student-oriented housing. This alternative would retain the 103,515 sf of office space on the site. Although the proposed project would remove all office uses from the site, Section 3.7, Population, Housing, and Employment, of this EIR determined that there is sufficient office space in the city and the surrounding area to allow for the relocation of displaced businesses. As with the proposed project, this alternative would not result in significant impacts to population, housing, or employment.

Geology and Soils

This alternative would not result in any grading or earthmoving activities. Therefore, potentially significant geology and soils impacts identified for the proposed project (prior to mitigation) would not occur under this alternative. With implementation of the mitigation program mentioned in Section 3.8, Geology and Soils, no significant geology impacts would occur.

Hazards and Hazardous Materials

Implementation of the proposed project may expose construction workers to lead and asbestos-containing materials (ACM) during the demolition of on-site structures. Under this alternative, all on-site structures would remain intact; as long as materials are not disturbed, no impacts related to lead or asbestos exposure to occupants or workers would occur. In addition, because there would be no construction or excavation activities, there would be no potential to

encounter previously unknown hazardous materials which could occur with the proposed project. It should be noted that potential project impacts related to hazardous and hazardous materials would be mitigated to a level considered less than significant.

Biological Resources

This alternative would not result in any grading or earthmoving activities nor would it result in the removal of on-site non-native trees. Therefore, potentially significant impacts related to tree removal during nesting season identified for the proposed project (prior to mitigation) would not occur under this alternative.

Hydrology and Water Quality

As discussed in Section 3.11, Hydrology and Water Quality, with implementation of the identified mitigation program, potentially significant hydrology and water quality impacts from the proposed project would be reduced to a level considered less than significant. This alternative would not result in any on-site grading and would not involve the construction of land uses proposed as part of the project. There would be no increase in impervious surface or runoff, nor would the concentration of pollutants in storm water runoff be increased. However, impaired storm water collection and treatment measures that would be implemented by the project would not occur.

Public Services

The No Project/No Development Alternative would not result in any short- or long-term impacts on public services because no new development would occur. Therefore, additional demands for public services would not be generated.

Utilities and Service Systems

Under this alternative scenario, there would be no short- or long-term impacts on utilities and service systems because no new development would occur on the project site. Therefore, additional demands for utilities and service systems would not be generated. The six-inch water main line would not need to be upgraded.

Conclusion

The No Project/No Development Alternative would avoid potential impacts resulting from the proposed project. All impacts associated with the proposed project would be fully mitigated with the exception of short-term, construction-related and long-term, operational air quality impacts. Despite this finding, this alternative would not meet the project objectives. Specifically, retention of the site with its existing office and housing uses would not provide a student-oriented housing community with neighborhood serving retail to support the growing student population while providing a well-designed, new gateway to the city along East Chapman Avenue.

4.2.2 NO PROJECT ALTERNATIVE – DEVELOPMENT PURSUANT TO THE CURRENT GENERAL PLAN AND ZONING LAND USE DESIGNATIONS

Description of the Alternative

Section 15126.6(e)(3) of the CEQA Guidelines indicates that the lead agency should analyze the impacts of the No Project Alternative by projecting what would reasonably be expected to occur in the foreseeable future if the project were not approved and the site were developed consistent with existing land use designations. Development pursuant to the site's existing

General Plan designations would involve land uses permitted under the Residential (High Density) and Commercial (Office) General Plan land uses designations, and the R-3 (Limited Density, Multiple Residential) and O-P (Office Professional) zoning designations. The project site is also within the East Fullerton Redevelopment Area. As currently designated, the site is intended for high density residential and office uses.

Comparative Analysis of Environmental Impacts

Land Use and Related Planning Programs

Under this alternative, the project site would be developed consistent with the existing General Plan and zoning designation for the site. Therefore, no General Plan Amendment or zone change would be required for the proposed project. Based on density assumptions set forth in the Land Use Element of the *General Plan*, the site could be developed with 190 residential units and 296,208 sf of office. The residential units would generate 528 residents. Compared to the proposed project, this alternative would have less residential development than the proposed project, but substantially more office uses than the No Project/No Development Alternative; the proposed project assumes no office uses. This alternative would be consistent with existing relevant planning programs and associated goals and policies to provide residential and office land uses on the project site; however, it would not fully meet the project objectives to provide a prominent gateway to the city along East Chapman Avenue or to provide student-oriented housing with neighborhood-serving retail in the northeastern portion of the City.

Aesthetics

Under this alternative, the physical layout of the project site with residential and office uses is unknown. However, this alternative represents an intensification of development when compared to existing on-site uses. Therefore, it can be assumed that this alternative would require construction of one or more mid-rise buildings and structured parking. It is not known whether this would include subterranean parking. Similar to the proposed project, the parking structure could be sited away from the adjacent residential uses to the south and east to minimize direct visual impacts. It is anticipated development of the site under the existing General Plan land use designations would not visually degrade the project site.

Under this alternative, the massing could be greater with taller buildings anticipated. The visual change would be more prominent from surrounding vantage points; however, as with the proposed project, landscaping and design details could be introduced to compliment the existing visual character of this part of Fullerton. While the visual change would be more substantial under this alternative, no significant visual impact would be expected.

Transportation and Circulation

This alternative assumes 190 residential units and 296,208 sf of office uses. The number of residences under this alternative is less than the proposed project; however, there would be considerably more office square footage than the amount of retail/commercial square feet proposed under the project. The duration of construction could be longer than with the proposed project. As such, construction-related traffic could be similar or greater than for the proposed project. This alternative would generate more AM and PM peak hour trips than the No Project/No Development Alternative and the proposed project, potentially resulting in greater traffic impacts compared to the proposed project. It is anticipated that traffic impacts with this alternative would be able to be mitigated to a less than significant level. Additionally, parking would be provided on-site based on City code requirements; no unmitigable significant impacts are anticipated under this alternative.

Air Quality

Similar to the proposed project, development under this alternative is anticipated to require grading and earth movement over the entire project site. This alternative could include subterranean parking based on the amount of on-site development. Due to more development than with the proposed project, the construction period may be extended. With the increased construction activities, this alternative would have similar or greater short-term construction impacts than the proposed project. This alternative would also have increased operational air quality impacts compared to the proposed project due to an increase in vehicular traffic and operational emissions.

Noise

Short-term construction noise impacts resulting from this alternative would be similar to the proposed project; however, the duration of construction may be longer. As with the proposed project, construction activities conducted in compliance with the City's Noise Ordinance are not considered significant. This alternative would generate more traffic compared to the proposed project and would have increased noise levels, including along roadways with sensitive receptors (e.g., residential uses to the south and east of the project site). However, this alternative would have fewer on-site sensitive receptors (i.e., residents) than the proposed project. As with the proposed project, it is anticipated that noise impacts would be mitigated to a level considered less than significant.

Cultural Resources

Under both this alternative and the proposed project, the potential to encounter unknown subsurface cultural resources during grading activities represents significant impacts. With implementation of the mitigation measures identified for the proposed project, potential impacts to archaeological and paleontological resources would be reduced to a level considered less than significant. The site does not contain significant historical resources.

Population, Housing, and Employment

This alternative scenario would generate approximately 604 employees on the project site. The proposed project would generate a nominal amount of employees with the 30,000 sf of retail uses proposed. As stated above, this alternative would generate 528 residents.[1] This alternative would generate 772 fewer residents than the proposed project. Because this alternative would be consistent with the City's General Plan and Zoning, the employment and population generated would be consistent with projected growth for the City and the region. This alternative would have a beneficial effect on housing in the northeastern portion of the city, although it would not provide as much housing as the proposed project. In addition, it would provide more office space in the city. However, it would not fully meet the project objectives to provide a prominent gateway to the city along East Chapman Avenue, student-oriented housing, or neighborhood-serving retail uses.

Geology and Soils

Development of this alternative is anticipated to require grading and earth movement over the entire project site, similar to the proposed project. It is assumed that some subsurface excavation would be required. This alternative would result in similar impacts related to geology and soils as the proposed project. Geology and soil impacts associated with the proposed project and the alternative can be mitigated to a level considered less than significant.

[1] Based on density assumptions set forth in the Land Use Element of the *General Plan*.

Hazards and Hazardous Materials

This alternative would most likely involve demolition of the existing buildings on site, and would generally have the same construction area. Similar to the proposed project, this alternative would not result in the potential impacts related to the use, handling, storage, transport, and disposal of hazardous materials, but could possibly expose construction workers to lead and ACM during demolition similar to the proposed project. There is a potential to encounter unidentified hazardous materials during construction. With mitigation, project impacts related to hazards and hazardous materials would be reduced to a level considered less than significant.

Biological Resources

Similar to the proposed project, development under this alternative is anticipated to require grading and earth movement over the entire project site. Therefore, potentially significant impacts related to tree removal during nesting season identified for the proposed project (prior to mitigation) would occur under this alternative. This impact would be fully mitigated with implementation of the mitigation program identified in Section 3.10, Biological Resources, of this EIR.

Hydrology and Water Quality

This alternative assumes development over the entire project site and would include landscaping and limited open space areas. As with the proposed project, all runoff would be required to be treated by pre- and post-construction best management practices (BMPs) prior to discharge into the storm drain system. Additionally, similar to the proposed project, this alternative would comply with all applicable local, State, and federal requirements for water quality.

Public Services

This alternative would increase the demand for public services over existing conditions. However, it is anticipated that service providers would be able to handle the additional demand, similar to the proposed project. It should be noted that potential impacts from the proposed project were determined to be less than significant.

Utilities and Service System

Both the proposed project and this alternative would increase the demand for public utilities and service systems, and new or upgraded facilities may be required. However, there are utilities within or adjacent to the project site to serve the proposed project as well as this alternative. Potential impacts associated with this alternative would be reduced to a less than significant level with mitigation, similar to the proposed project.

Conclusions

Development of the project site under this alternative would increase development intensity compared to the proposed project. While this alternative would result in greater impacts related to traffic, air, and noise, it would result in similar impacts to land use, aesthetics, cultural resources, population and housing, geological resources, hazards and hazardous materials, biological resources, hydrology and water quality, public services, and utilities and service systems compared to the proposed project.

This alternative would not meet the project objectives to the same extent as the proposed project. Although this alternative would meet the objectives of the project related to additional

housing, it would not meet objectives related to the provision of student-oriented residential uses with neighborhood-serving retail to support the growing student population. Due to the intensity of development with this alternative, opportunities may be limited to create a pedestrian-friendly environment with community serving commercial uses that support the surrounding educational and commercial/office land uses while accommodating and encouraging connectivity between bikeway, pedestrian, and bus networks.

4.2.3 FOR-SALE RESIDENTIAL/MIXED-USE DEVELOPMENTAL ALTERNATIVE

Description of the Alternative

Under this development scenario, the 6.8-acre project site would be developed with 612 for-sale condominium units, 30,000 sf of commercial/retail uses, and 12,000 sf for the leasing office and recreation centers (the latter for on-site residents). The 612 units would include 205 single-bedroom units, 367 two-bedroom units, and 40 three-bedroom units. Amenities would include two swimming pools, two clubhouses, courtyard areas, and a leasing office. A 2-level podium-style parking structure (1 level below grade and 1 level at grade) would be constructed to serve the project; 1,568 parking spaces would be provided.

As with the proposed project, this alternative would require a General Plan Amendment to change the Commercial (Office) General Plan designation to Residential (High Density), consistent with the remainder of the project site, and add SPD (Specific Plan District) as a Zoning Classification consistent with a General Plan designation of Residential (High Density) and a Zoning Amendment to change the Zoning Classification from R-3 (Multi-Family Residential) and O-P (Office Professional) to SPD (Specific Plan District).

Comparative Analysis of Environmental Impacts

Land Use and Related Planning Programs

This alternative would provide a similar mix of land uses as the proposed project and would be consistent and compatible with the existing uses in the vicinity. This alternative represents an increase in residential units when compared to the proposed project (612 units compared to 375 units). As shown in Exhibit 4-1, For-sale Residential/Mixed-use Development Alternative – Conceptual Site Plan, the retail/commercial uses would be located in approximately the same location as with the proposed project. The parking would span much of the project site with 1 level of at-grade parking, 2 levels of subterranean parking in the eastern portion of the project site, and 1.5 levels on the eastern portion of the site. Four stories of residential uses would be constructed over at-grade retail along East Chapman Avenue and North Commonwealth Avenue. Enhanced streetscapes and open space would be provided under this alternative, similar to the proposed project. In addition, this alternative provides opportunities for integration of existing and proposed uses; however, this alternative would not specifically be oriented to higher education students and does not meet this stated objective of the proposed project. Based on the mix of land uses proposed, this alternative would also require a General Plan Amendment and a zone change. As with the proposed project, no significant land use impacts are anticipated.

Aesthetics

Section 3.2 of this EIR details the aesthetic impacts resulting from the proposed project. As noted, impacts from the proposed project would be less than significant. This alternative would provide the same type of land use development as the proposed project (residential and commercial). As shown in Exhibit 4-1, a majority of the site would be developed with residential

First Level

Second Level

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For-sale Residential/Mixed-use Developement Alternative - Conceptual Site Plan

Exhibit 4-1

Jefferson Commons Specific Plan EIR

Source: Architects Orange 2007

BonTerra CONSULTING

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and commercial uses. Podium parking would be provided in 1.5 and 2 levels across a majority of the site.

This alternative would result in similar building heights as the proposed project. The residential buildings would be four stories over at-grade retail along East Chapman Avenue and North Commonwealth Avenue. The physical massing of this alternative would also be similar to the proposed project and it would therefore result in similar visual changes as the proposed project. Similarly, this alternative would be reviewed by the City of Fullerton Redevelopment Design Review Committee (RDRC) in addition to the Planning Commission and City Council and would not result in significant aesthetic impacts.

Traffic and Circulation

Table 4-1 compares the AM and PM peak hour trip generation associated with this alternative to existing land uses and the proposed project. This alternative represents an increase in AM and PM peak hour trips when compared to existing land uses and the proposed project.

TABLE 4-1
FOR-SALE RESIDENTIAL MIXED-USE DEVELOPMENT ALTERNATIVE TRIP GENERATION

Land Use	Quantity	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Existing Land Uses							
Residential	-79 du	-8	-32	-40	-31	-17	-48
General Office	-103,515 sf	-141	-19	-160	-26	-128	-154
For Sale Residential Mixed-Use Development Alternative							
Residential	612 du	62	250	312	247	133	379
Commercial/Retail	30,000 sf	46	30	76	136	147	283
	Total Trips	**-40**	**228**	**188**	**325**	**135**	**460**
Proposed Land Uses							
Residential	375 du	38	153	191	151	81	233
Commercial/Retail	30,000 sf	46	30	76	136	147	283
	Total Trips	**-65**	**132**	**67**	**229**	**83**	**313**

du: Dwelling Unit
sf: Square Feet

Source: Albert Grover & Associates 2007.

Table 4-2 identifies intersection LOS for opening day “without” and “with” project alternative conditions. As shown in the table, the intersection of State College Boulevard/Orangethorpe Avenue operates at LOS F “without project alternative” during the AM peak hour and remains at LOS F “with project alternative” during the AM peak hour. Impact significance for this intersection is determined for the Year 2025 future buildout conditions by determining whether or not this alternative would result in a traffic exceedance of ten percent of the total traffic growth by Year 2025. This alternative contributes less than ten percent of the traffic growth at the intersection of State College Boulevard/Orangethorpe Avenue; therefore, no significant impact would occur and no mitigation is required.

TABLE 4-2
FOR-SALE RESIDENTIAL/MIXED-USE DEVELOPMENT ALTERNATIVE
YEAR 2010 INTERSECTION LEVELS OF SERVICE SUMMARY

Intersection		Without Project Alternative						With Project Alternative					
		AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour		
East/West Street	North/South Street	ICU	Delay[b]	LOS	ICU	Delay[b]	LOS	ICU	Delay[b]	LOS	ICU	Delay[b]	LOS
1. Nutwood Ave	State College Blvd	0.80	28.0	C	0.78	29.0	C	0.82	29.0	C	0.81	30.0	C
2. Chapman Ave	State College Blvd	0.86	40.0	D	0.90	44.0	D	0.87	42.0	D	0.92	51.0	D
3. Commonwealth Ave	State College Blvd	0.63	22.0	C	0.64	28.0	C	0.65	22.0	C	0.66	28.0	C
4. Orangethorpe Ave[a]	State College Blvd[a]	**1.05**	**58.0**	**F**	0.80	33.0	C	**1.06**	**59.0**	**F**	0.81	34.0	C
5. Nutwood Ave	Commonwealth Ave	0.18	16.0	B	0.26	11.0	B	0.18	15.0	B	0.26	12.0	B
6. Nutwood Ave	Folino (East Campus Dr)	0.52	25.0	C	0.46	20.0	B	0.52	25.0	C	0.46	20.0	B
7. Nutwood Ave	SR-57 Southbound Ramps	0.53	25.0	C	84.0	33.0	C	0.53	25.0	C	0.84	34.0	C
8. Nutwood Ave	SR-57 Northbound Ramps	0.74	28.0	C	0.48	23.0	C	0.74	28.0	C	0.50	24.0	C
9. Nutwood Ave	Placentia Ave	0.77	19.0	B	0.71	26.0	C	0.77	19.0	B	0.71	26.0	C
10. Chapman Ave	Commonwealth Ave	0.56	18.0	B	0.78	25.0	C	0.57	17.0	B	0.79	26.0	C
11. Chapman Ave	SR-57 Southbound Ramps	0.66	20.0	B	0.87	26.0	C	0.70	21.0	C	0.93	28.0	C
12. Chapman Ave[a]	SR-57 Northbound Ramps[a]	0.94	37.0	D	**1.06**	**53.0**	**F**	**0.98**	**43.0**	**E**	**1.09**	**55.0**	**F**
13. Chapman Ave	Placentia Ave	0.73	33.0	C	0.79	38.0	D	0.73	33.0	C	0.79	38.0	D
14. Orangethorpe Ave	Placentia Ave	0.61	33.0	C	0.66	36.0	D	0.61	33.0	C	0.66	36.0	D

[a] Intersections operating at Level of Service (LOS) **E** or **F** are in **Bold**.
[b]Delay is in seconds.

Source: Albert Grover & Associates 2007.

The intersection of Chapman Avenue/SR-57 northbound ramps degrades from an acceptable LOS D "without project alternative" to an unacceptable LOS E "with project alternative" during the AM peak hour. During the PM peak hour, this intersection operates at LOS F "without project alternative" and remains at LOS F "with project alternative." Because the level of service at this intersection worsens with this alternative from LOS D to LOS E during the AM peak hour, a significant impact would occur in 2010.

With implementation of mitigation, this impact would be mitigated to level considered less than significant. Mitigation required to reduce this impact are as follows:

- Provide a pro-rata contribution to construct the necessary improvements to widen the eastbound approach to provide dual left-turn lanes.

- Provide a pro-rata contribution to construct the necessary improvement to widen the north leg to receive eastbound dual left-turn traffic.

Based on the trip generation and trip distribution for this alternative, project trips were added to the future conditions (Year 2025) "without project alternative" volumes to get "with project alternative" volumes. As shown in Table 4-3, under future conditions (Year 2025) "with project alternative," all intersections that operated at LOS D or better "without project alternative" would continue to operate at LOS D or better "with project alternative" during the AM and PM peak hours. The six intersections that operate at LOS E or LOS F "without project alternative" remain unchanged in their level of service "with project alternative." Analysis was also conducted to determine if this alternative would contribute ten percent or more of the total future traffic growth at these six intersections. As shown in Table 4-4, the project alternative contributes at least ten percent or more of the total traffic growth during the PM peak hour at three of the six intersections. This would be a significant impact.

2. Chapman Avenue/State College Boulevard/
11. Chapman Avenue/SR-57 Southbound Ramps
12. Chapman Avenue/SR-57 Northbound Ramps

With implementation of the mitigation below, impacts would be reduced to less than significant:

2. Chapman Avenue/State College Boulevard

    - Restripe the northbound approach to provide dual left-turn lanes
    - Remove and replace the exclusive northbound right-turn land with a shared through/right-turn lane to provide three through lanes

11. Chapman Avenue/SR-57 Southbound Ramps

    - A pro-rata contribution to construct the necessary improvements to widen the eastbound approach to provide dual left-turn lanes.

12. Chapman Avenue/SR-57 Northbound Ramps

    - Provide a pro-rata contribution to construct the necessary improvements to widen the eastbound approach to provide dual left-turn lanes.
    - Provide a pro-rata contribution to construct the necessary improvements to widen the north leg to receive eastbound dual left-turn traffic.

TABLE 4-3
FOR-SALE RESIDENTIAL/MIXED-USE DEVELOPMENT ALTERNATIVE
YEAR 2025 INTERSECTION LEVELS OF SERVICE SUMMARY

Intersection		Without Project Alternative						With Project Alternative					
		AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour		
East/West Street	North/South Street	ICU	Delay[b]	LOS	ICU	Delay[b]	LOS	ICU	Delay[b]	LOS	ICU	Delay[b]	LOS
1. Nutwood Ave	**State College Blvd**	**1.00**	**40.0**	**F**	0.93	35.0	C	**1.00**	**41.0**	**F**	0.94	36.0	D
2. Chapman Ave	**State College Blvd**	**0.97**	**54.0**	**E**	**1.10**	**70.0**	**F**	**0.98**	**57.0**	**E**	**1.10**	**73.0**	**F**
3. Commonwealth Ave.	State College Blvd	0.71	24.0	C	0.73	31.0	C	0.72	24.0	C	0.74	33.0	C
4. Orangethorpe Ave[a]	**State College Blvd[a]**	**1.13**	**89.0**	**F**	0.90	39.0	D	**1.14**	**92.0**	**F**	0.90	39.0	D
5. Nutwood Ave	Commonwealth Ave	0.21	17.0	B	0.32	11.0	B	0.21	17.0	B	0.33	12.0	B
6. Nutwood Ave	Folino (East Campus Dr)	0.65	28.0	C	0.53	21.0	C	0.65	28.0	C	0.53	21.0	C
7. Nutwood Ave	**SR-57 Southbound Ramps**	0.65	36.0	D	**0.98**	**43.0**	**E**	0.65	36.0	D	**0.98**	**45.0**	**E**
8. Nutwood Ave	SR-57 Northbound Ramps	0.91	37.0	D	0.57	25.0	C	**0.91**	**37.0**	**D**	**0.59**	**25.0**	**C**
9. Nutwood Ave	Placentia Ave	0.86	20.0	B	0.85	26.0	C	**0.86**	**20.0**	**B**	**0.85**	**26.0**	**C**
10. Chapman Ave	Commonwealth Ave	0.67	20.0	B	0.94	33.0	C	**0.68**	**19.0**	**B**	**0.96**	**37.0**	**D**
11. Chapman Ave	**SR-57 Southbound Ramps**	0.76	22.0	C	**1.04**	**40.0**	**F**	0.80	21.0	C	**1.09**	**56.0**	**F**
12. Chapman Ave[a]	**SR-57 Northbound Ramps[a]**	**1.06**	**54.0**	**F**	**1.19**	**85.0**	**F**	**1.10**	**68.0**	**F**	**1.22**	**94.0**	**F**
13. Chapman Ave	Placentia Ave	0.83	36.0	D	0.88	44.0	D	0.83	36.0	D	0.88	42.0	D
14. Orangethorpe Ave	Placentia Ave	0.68	35.0	C	0.74	39.0	D	0.68	35.0	C	0.74	39.0	D

[a] Intersections operating at Level of Service (LOS) **E** or **F** are in **Bold**.
[b] Delay is in seconds.

Source: Albert Grover & Associates 2007.

TABLE 4-4
YEAR 2025 SIGNIFICANT IMPACT ANALYSIS
FOR-SALE RESIDENTIAL/MIXED-USE DEVELOPMENT ALTERNATIVE

Intersection		LOS				Total Future Trips (+ Growth)		Total Future Traffic		Total Existing Traffic		Project Alternative Trips		Percentage of Project Alternative Trips to Future Trips		Significant Impact	
		Without Alternative		With Alternative													
East/West Street	**North/South Street**	**AM**	**PM**	**AM**	**PM**	**AM**	**PM**	**AM**	**PM**	**AM**	**PM**	**AM**	**PM**	**AM**	**PM**	**AM**	**PM**
1. Nutwood Ave	State College Blvd	**F**	C	**F**	**D**	1,028	1,052	6,039	5,518	5,011	4,466	-31	57	**-3%**	5%	No	No
2. Chapman Ave	**State College Blvd**	**E**	**F**	**E**	**F**	1,376	1,668	7,321	7,622	5,945	5,954	23	198	**2%**	**12%**	No	**Yes**
4. Orangethorpe Ave	State College Blvd	**F**	**D**	**F**	**D**	1,115	1,031	8,015	6,073	6,900	5,042	44	65	**4%**	6%	No	No
7. Nutwood Ave	SR-57 Southbound Ramps	**D**	**E**	**D**	**E**	968	1,023	4,220	3,998	3,252	2,975	13	68	1%	**7%**	No	No
11. Chapman Ave	**SR-57 Southbound Ramps**	C	**F**	C	**F**	1,060	1,368	4,232	5,295	3,172	3,927	151	214	14%	**16%**	No	**Yes**
12. Chapman Ave	**SR-57 Northbound Ramps**	**F**	**F**	**F**	**F**	916	1,132	4,279	5,722	3,363	4,590	68	114	**7%**	**10%**	No	**Yes**

Note: Intersections operating at Level of Service (LOS) **E** or **F** are in **Bold**.

Source: Albert Grover & Associates 2007.

TABLE 4-5
YEAR 2025 WITH PROPOSED MITIGATION
FOR-SALE RESIDENTIAL/MIXED-USE DEVELOPMENT ALTERNATIVE

Intersection		Future Year 2025 Without Alternative Conditions						Future Year 2025 With Alternative						Future Year 2025 With Alternative With Proposed Mitigation					
		AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour		
East/West Street	**North/South Street**	**ICU**	**Delay[b]**	**LOS**	**ICU**	**Delay[b]**	**LOS**	**ICU**	**Delay**	**LOS**	**ICU**	**Delay[b]**	**LOS**	**ICU**	**Delay**	**LOS**	**ICU**	**Delay[b]**	**LOS**
2. Chapman Ave	**State College Blvd**	**0.97**	**54.0**	**E**	**1.10**	**70.0**	**F**	**0.98**	**57.0**	**E**	**1.10**	**73.0**	**F**	**0.96**	**57.0**	**E**	**0.99**	**53.0**	**E**
11. Chapman Ave	**SR-57 Southbound Ramps**	0.76	22.0	C	**1.04**	**40.0**	**F**	0.80	21.0	C	**1.09**	**56.0**	**F**	0.69	17.0	B	0.96	29.0	C
12. Chapman Ave[a]	**SR-57 Northbound Ramps[a]**	**1.06**	**54.0**	**F**	**1.19**	**85.0**	**F**	**1.10**	**68.0**	**F**	**1.22**	**94.0**	**F**	**1.02**	**52.0**	**F**	**1.13**	**73.0**	**F**

[a] Intersections operating at Level of Service (LOS) **E** or **F** are in **Bold**.
[b]Delay is in seconds

Source: Albert Grover & Associates 2007.

As shown in Table 4-6, the residential units would include 205 single-bedroom units, 367 two-bedroom units, and 40 three-bedroom units. This alternative assumes the provision of 1,568 parking spaces consistent with the City's code requirement. Therefore, adequate on-site parking would be provided under this alternative. The proposed project exceeds the City's code requirement resulting in a net surplus of 33 parking spaces.

TABLE 4-6
FOR-SALE RESIDENTIAL/MIXED-USE DEVELOPMENT ALTERNATIVE PARKING SUMMARY

Land Use	Quantity	Spaces
Residential:		
Single Bedroom Unit	205 du	410 Spaces
Two-Bedroom Unit	367 du	918 Spaces
Three-Bedroom Unit	40 du	120 Spaces
Total Units	**612 du**	**1,448 Spaces**
Commercial/Retail:	30,000 sf	120 Spaces
Total Parking Spaces Required		**1,568 Spaces**
Total Parking Spaces Available		**1,568 spaces**
Net Parking Space Surplus or (Deficit)		**0 Spaces**

du: dwelling units
sf: square feet

Source: Albert Grover & Associates 2007.

Air Quality

This alternative would require the same amount of demolition as the proposed project. In addition, grading and earth movement would also occur over the entire project site, similar to the proposed project. Therefore, grading and demolition activities under this alternative could result in significant short-term PM10 impacts and would be expected to result in significant short-term NOx impacts, similar to the proposed project. According to the *Air Quality Assessment for the Jefferson Commons* project, VOC emission thresholds are expected to be exceeded during the application of architectural coatings under this alternative (Mestre Greve Associates 2007a). Similar to the proposed project, sensitive receptors could be affected by these emissions increases. These short-term impacts would be reduced with proposed mitigation, but not to a level considered less than significant.

The results of the CALINE4 CO modeling for the For-sale Residential/Mixed-use Development Alternative are summarized in Table 4-7. The CO modeling results are shown for future 1hour and 8-hour CO concentration levels with and without the project alternative. The pollutant levels are expressed in parts per million (ppm) for each receptor. The carbon monoxide levels are composites of the background levels of carbon monoxide coming into the area plus those generated by the local roadways.

TABLE 4-7
WORST-CASE PROJECTIONS OF CARBON MONOXIDE CONCENTRATIONS FOR THE FOR-SALE RESIDENTIAL/MIXED-USE DEVELOPMENT ALTERNATIVE

Intersection	Modeled CO Concentration (ppm)				
	Existing	2010 Without Alternative	2010 With Alternative	2025 Without Alternative	2025 With Alternative
Modeled 1-Hour Average Concentration					
Nutwood/State College Blvd	9.4	7.5	7.5	6.8	6.8
Chapman/State College Blvd	9.8	7.9	7.9	6.8	6.8
State Standard	**20**	**20**	**20**	**20**	**20**
No. of Exceedances	0	0	0	0	0
Modeled 8-Hour Average Concentration					
Nutwood/State College Blvd	6.5	5.2	5.2	4.7	4.7
Chapman/State College Blvd	6.8	5.5	5.5	4.7	4.7
State Standard	**9**	**9**	**9**	**9**	**9**
No. of Exceedances	0	0	0	0	0

Note: The CO concentrations include the ambient concentrations (5.8 ppm for 1-hour levels and 3.9 ppm for 8-hour levels).
Source: Mestre Greve 2007a.

As shown in Table 4-7, CO concentrations under this alternative would not exceed the State ambient air quality standards. This alternative would increase the local traffic slightly, but the increase in CO emissions is not noticeable. Because the concentrations are projected to remain below the air quality standards, this alternative would not result in a significant local air quality impact.

Table 4-8 shows that the total emissions under this alternative would exceed the SCAQMD regional significance thresholds for VOC and NOx. As with the proposed project, this alternative would result in a significant regional air quality impact. Implementation of mitigation measures identified in Section 3.4, Air Quality, would reduce this impact, but not to a level considered less than significant. It should be noted that VOC and NOx emissions exceed the SCAQMD thresholds and would be considered significant and unavoidable for the proposed project and for this alternative.

TABLE 4-8
TOTAL EMISSIONS
FOR-SALE RESIDENTIAL/MIXED USE DEVELOPMENT ALTERNATIVE

Source	Pollutant Emissions (lbs/day)				
	CO	VOC	NOx	PM10	SOx
Vehicular Trips	431.0	54.7	263.9	11.1	0.6
Natural Gas Consumption	1.7	0.5	7.0	0.0	0.0
Consumer Product Usage	0.0	31.4	0.0	0.0	0.0
Project Emissions	**438.9**	**86.6**	**270.9**	**11.1**	**0.6**
Significance Threshold	**550**	**55**	**55**	**150**	**150**
Exceed Threshold?	No	**Yes**	**Yes**	No	No

Source: Mestre Greve Associates 2007a.

Noise

Short-term Construction-related Traffic

This alternative would involve similar construction activities as the proposed project and the development of similar land uses. Construction and demolition activities would result in temporary increases in ambient noise levels during the various phases of construction and have the potential to expose persons to or generate noise levels from construction equipment in excess of standards established in the City's Noise Ordinance. However, all construction activities would be conducted in compliance with the City's Noise Ordinance, including hours/days that construction occurs. No impact would occur.

Traffic Noise

As shown in Table 4-9, most of the noise increase that would occur along roadways adjacent to the site in 2025 would be due to cumulative growth in traffic independent of the proposed project or this alternative. The increase in noise in 2025 over the noise levels in 2006 are not expected to be greater than 1.1 decibels (dB), as is shown in the second column below. This increase would not result in a significant impact.

TABLE 4-9
TRAFFIC NOISE CNEL LEVEL INCREASES IN 2025
FOR-SALE RESIDENTIAL/MIXED-USE DEVELOPMENT ALTERNATIVE

Roadway Segment	Increase Due to Alternative[a]	Increase Over Existing Conditions
State College Blvd		
Dorothy Ln to E. Chapman Ave	0.0	1.0
E. Chapman Ave to N. Commonwealth Ave	0.1	0.8
N. Commonwealth Ave to Orangethorpe Ave	0.1	0.7
Orangethorpe Ave to South City Limits	0.0	0.9
Placentia Ave		
Madison Ave to E. Chapman Ave	0.0	0.6
E. Chapman Ave to Orangethorpe Ave	0.0	0.7
Nutwood Ave		
State College Blvd to N. Commonwealth Ave	0.1	0.8
N. Commonwealth Ave to Placentia Ave	0.0	1.0
E. Chapman Ave		
Acacia Ave to State College Blvd	0.1	0.9
State College Blvd to SR-57 Freeway	0.1	1.0
N. Commonwealth Ave		
Acacia Ave to State College Blvd	0.0	0.6
State College Blvd to E. Chapman Ave	0.0	0.9
E. Chapman Ave to Nutwood Ave	-0.1	1.1
Orangethorpe Ave		
Raymond Ave to State College Blvd	0.0	0.6
State College Blvd to Placentia Ave	0.0	0.6

[a] From roadway centerline

Source: Mestre Greve Associates 2007b.

The noise increase would only be 0.10 dB or less under this alternative, similar to the proposed project. The road segment along North Commonwealth Avenue between East Chapman Avenue and Nutwood Avenue would actually decrease in noise levels under both the proposed project and this alternative. This decreased noise level is to due the smaller projected traffic volumes. Table 4-8 shows that the project would not result in a substantial noise increase (i.e., increases greater than 3 dB) along any of the roadway segments. Project-related traffic noise would not result in significant impacts to off-site sensitive receptors.

Impacts to Surrounding Uses Resulting from On-site Activities

The Conceptual Site Plan for this alternative (Exhibit 4-1) shows some uses that are potential noise generators; specifically, the retail establishments located along East Chapman Avenue and North Commonwealth Avenue and air conditioning units. In the eastern portion of the site, four stories of residential units would be over ground floor retail uses. Additionally, off-site residential uses are located to the north, south, and east of the project site.

Similar to the proposed project, the number of truck deliveries and the time of day that unloading would occur is not known. However, all loading areas are located on the first floor of the parking structure. Delivery trucks would approach the site on public roadways, drive a short distance into the first level of the parking structure from the North Commonwealth Avenue entrance, and park in a loading area. No significant impacts are anticipated from delivery truck and loading dock noise.

New heating, ventilation, and air conditioning system (HVAC) equipment for the type of land uses proposed under this alternative are usually located on the roof of the buildings. The type, size, and number of mechanical equipment are not known at this time. If the equipment is located on the roof, parapet walls are often used to control the noise from the equipment. Different equipment with the same function can generate substantially different noise levels. As a part of the design, the mechanical equipment would be chosen so that it does not generate noise levels that would exceed Noise Ordinance limits and adversely affect the nearest sensitive receptors. Similar to the proposed project, without mitigation, impacts could occur.

On-site Traffic Noise Exposure

Distances to future (2025) community noise equivalent level (CNEL) noise contours are presented in Table 4-10. Exhibit 3.5-5 in Section 3.5, Noise, shows the on-site noise exposure contours for the project site. It should be noted that the proposed project and this alternative produce virtually the same noise contour profile. The contours do not include the shielding effects of buildings, topography, or sound barriers that would lower the noise levels. Exhibit 3.5-5 shows that residential areas along East Chapman Avenue and North Commonwealth Avenue would be exposed to noise levels greater than 60 CNEL. The City indicates that exterior noise levels are not “unacceptable” until the noise level exceeds 75 CNEL. This alternative includes exterior residential balconies along East Chapman Avenue, North Commonwealth Avenue and East College Place, as well as interior to the project. As with the proposed project, residential balconies are not included in the alternative’s private open space assumptions. As such, similar to the proposed project, the exterior noise levels are not applicable to balconies. No significant noise impacts associated with the recreational amenities (e.g., swimming pools) are anticipated.

TABLE 4-10
YEAR 2025 WITH TRAFFIC NOISE LEVELS
FOR-SALE RESIDENTIAL/MIXED-USE DEVELOPMENT ALTERNATIVE

Roadway Segment	CNEL @ 100'[a]	Distance To CNEL Contour (feet)[a]		
		70 CNEL	65 CNEL	60 CNEL
State College Blvd				
Dorothy Ln to E. Chapman Ave	67.6	69	150	322
E. Chapman Ave to N. Commonwealth Ave	64.4	42	91	197
N. Commonwealth Ave. to Orangethorpe Ave.	64.4	42	92	197
Orangethorpe Ave. to South City Limits	66.7	60	130	280
Placentia Ave				
Madison Ave to E. Chapman Ave	66.2	55	119	257
E. Chapman Ave to Orangethorpe Ave	64.3	42	90	194
Nutwood Ave				
State College Blvd to N. Commonwealth Ave	61.3	26	57	122
N. Commonwealth Ave to Placentia Ave	65.3	49	105	227
E. Chapman Ave				
Acacia Ave to State College Blvd	68.4	79	170	366
State College Blvd to SR-57	65.9	54	116	249
N. Commonwealth Ave				
Acacia Ave to State College Blvd	63.6	37	80	173
State College Blvd to E. Chapman Ave	61.6	28	59	128
E. Chapman Ave to Nutwood Ave	56.5	13	27	58
Orangethorpe Ave				
Raymond Ave to State College Blvd	67.4	67	145	313
State College Blvd to Placentia Ave	67.3	66	142	305

[a] From roadway centerline.

Source: Mestre Greve Associates 2007b.

Parking Structure

Unlike the proposed project, the parking structure will be located entirely below the on-site residences. With this podium parking design, parking lot related activities could generate less noise than the proposed project's maximum sound levels as high as 84 A-weighted decibels (dBA). The parking structure is not subject to the City's Noise Ordinance because it would be on the same parcel as the surrounding proposed residential units. However, the Noise Ordinance does provide indoor limits for short-term noise events such as those that would be generated by the parking structure. The Noise Ordinance's maximum noise limits (Lmax) are 75 dBA during the day and 65 dBA at night. To achieve an Lmax of 65 dBA, the residential building must provide an outdoor-to-indoor noise reduction of 19 dB. This can be achieved since the units do not have any windows facing the parking structure. Because windows do not face the parking structure in this podium design, it is not anticipated that this alternative would result in significant impacts.

Cultural Resources

Under both this alternative and the proposed project, the potential to encounter unknown subsurface cultural resources during grading activities represents significant impacts. With implementation of the mitigation measures identified for the proposed project in Section 3.6, potential impacts to archaeological and paleontological resources would be reduced to a level considered less than significant, similar to the proposed project. The site does not contain significant historical resources.

Population, Housing, and Employment

This alternative would generate an approximate 872 net increase in new residents to the project site and it would add 30,000 sf of retail/commercial use to the project site. This alternative would result in fewer new residents to the project site as compared with the project and is consistent with regional and local population and housing projections. Similar to the proposed project, this alternative would have a beneficial effect on housing in the northeastern portion of the city. The number of displaced dwelling units and office space would be exactly the same as the proposed project. No significant impacts are anticipated.

Geology and Soils

Development of this alternative is anticipated to require grading and earth movement over the entire project site, similar to the proposed project. As with the proposed project, this alternative would include one level of subterranean parking. Geology and soil impacts associated with the proposed project and this alternative would be similar and can be mitigated to a level considered less than significant.

Hazards and Hazardous Materials

As with the proposed project, this alternative would not involve the use, handling, storage, transport, or disposal of hazardous materials that would cause potentially significant impacts. Similar to the proposed project, there is a potential to encounter unidentified hazardous materials during construction. With mitigation, impacts related to hazards and hazardous materials would be reduced to a level considered less than significant.

Biological Resources

Development under this alternative is anticipated to require grading and earth movement over the entire project site. Therefore, potentially significant impacts related to tree removal during nesting season identified for the proposed project (prior to mitigation) would occur under this alternative. This impact can be fully mitigated with implementation of the mitigation program defined in Section 3.10, Biological Resources.

Hydrology and Water Quality

As with the proposed project, all runoff would be required to be treated by pre- and post-construction BMPs prior to discharge into the storm drain system. Additionally, similar to the proposed project, this alternative would comply with all applicable local, State, and federal requirements for water quality. Impacts can be mitigated to a less than significant level with implementation of the mitigation program defined in Section 3.11, Hydrology and Water Quality.

Public Services

Similar to the proposed project, this alternative would increase the demand for public services. It

is anticipated that service providers would be able to handle the additional demand. Potential impacts to public services would be less than significant.

Utilities and Service Systems

As with the proposed project, this alternative would increase the demand for utilities and service systems. It is anticipated that service providers would be able to handle the additional demand. As with the proposed project, a water line upgrade is assumed. In accordance with CEQA Guidelines §15083.5, because this alternative would include more than 500 dwelling units, a Water Supply Assessment would be required. The Water Supply Assessment would need to determine whether the proposed project alternative was included in its last urban water management plan and assess whether its total projected water supplies available during normal, single-dry, and multiple-dry water years as included in the 20-year projection contained in its urban water management plan would meet the projected water demand associated with the proposed project, in addition to the system's existing and planned future uses. If the lead agency determines that water supplies will not be sufficient, the lead agency must include that determination in its findings for the project pursuant to CEQA Guidelines §§ 15091 and 15093.

Conclusions

Development of the project site under this alternative assumes more residential units but slightly fewer residents because the units offer fewer bedrooms. The retail/commercial development would have the same amount of square footage as the proposed project. While the amount of residential development would be increased, compared to the proposed project, this alternative would result in similar impacts related to land use, aesthetics, cultural resources, noise, population and housing, geological resources, biological resources, public services, and utilities and service systems. This alternative would result in greater impacts related to traffic. Air quality impacts associated with the proposed project as well as this alternative would remain significant after implementation of the mitigation program and would require adoption of a Statement of Overriding Considerations.

This alternative would not meet the project objectives to the same extent as the proposed project. Although this alternative would provide additional housing, it would not meet objectives related to the provision of student-oriented residential uses. The internal pedestrian connectivity with surrounding land uses would not be achieved to the same extent as with the proposed project. While enhanced streetscapes would be provided under this alternative, less internal open space areas limit the opportunities for integration of existing and proposed uses. While these are not environmental impacts, they are land use issues to be considered.

4.2.4 COMBINATION OF STUDENT-ORIENTED HOUSING AND FOR-SALE RESIDENTIAL/MIXED-USE DEVELOPMENT ALTERNATIVE

Description of the Alternative

This development alternative assumes that both student-oriented rental apartments and for-sale condominiums would be provided along with commercial/retail uses. As a part of this alternative scenario, 209 apartment units, 270 for-sale condominium units, 30,000 sf of retail development and 12,000 sf for the leasing office and recreation centers (the latter for the on-site residences) would be provided. The total 479 units includes 108 single-bedroom units, 180 two-bedroom units, 18 three-bedroom units, and 173 four-bedroom units. Student-oriented units would be located in the western portion of the project site and the condominiums in the eastern portion of the site. Recreational amenities include two swimming pools in addition to the recreation centers and courtyard areas.

Two parking structures would be provided. A 7-level, 634-space parking structure would be provided in the western portion of the site for the student-oriented housing units. A 2-level podium-style parking structure (one level below grade and one level at grade) would be constructed to in the eastern portion of the site to serve the condominium units and retail uses (639 parking spaces for condominium residents and 120 retail spaces). A total of 1,393 parking spaces would be provided on the site. This alternative would also require a General Plan Amendment and zone change like the proposed project.

Comparative Analysis of Environmental Impacts

Land Use and Related Planning Programs

This alternative would provide a similar mix of land uses as the proposed project and would be consistent and compatible with the surrounding land uses. This alternative would result in 479 residential units (209 student-oriented apartment units and 270 condominium units), as well as 30,000 sf of commercial/retail uses. Public and private parking would be provided, similar to the proposed project. As shown in Exhibit 4-2, Combination of Student Housing and For-sale Residential/Mixed-use Development – Conceptual Site Plan, the Conceptual Site Plan divides the site into two distinct areas. Site 1, located on the eastern portion of the project site would include conventional for-sale condominium units. These would be four stories in height and located over the at-grade retail uses. Two levels of podium parking are provided in Site 1. The retail/commercial uses would be located in approximately the same location as the proposed project (along East Chapman Avenue and North Commonwealth Avenue). Site 2, located in the western portion of the project site, would include student-oriented apartment units and a seven-level parking garage. The parking garage would be located in the southwestern portion of the site. A portion of the four-story apartment units would front East Chapman Avenue while the majority of the apartment units would be located to the north of the parking structure. Enhanced streetscapes and open space would be provided under this alternative, similar to the proposed project.

Based on the mix of land uses proposed, this alternative would also require a General Plan Amendment and a zone change. As with the proposed project, no significant land use impacts are anticipated.

Aesthetics

Section 3.2 of this EIR notes that no significant aesthetic impacts are anticipated with the proposed project. This alternative would provide the same type of land use development as the project (residential and commercial) (Exhibit 4-2). Parking would be provided in two separate parking garages with a maximum height of seven levels (Site 2). Similar to the proposed project, the parking structures would be higher than the proposed residential and commercial uses; however, the parking structures are set back on-site and would be located behind the residential and commercial uses. Therefore, the parking structures would be partially shielded from view.

This alternative would result in a different site plan but it would result in similar building heights and physical massing on the project site; therefore, it would result in similar visual changes as the proposed project. Because the site is within a redevelopment area, this alternative would be reviewed by the City of Fullerton RDRC in addition to the Planning Commission and City Council. No significant aesthetic impacts are expected.

PROJECT SUMMARY:

SITE 1 - CONVENTIONAL APARTMENTS / 4-STORY OVER PODIUM"

SITE 2 - STUDENT-ORIENTED APARTMENTS + PARKING GARAGE".

First Level

Second Level

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Combination of Student Housing and For-sale Residential/Mixed-use Development - Conceptual Site Plan

Exhibit 4-2

Jefferson Commons Specific Plan EIR

Source: Architects Orange 2007

BonTerra CONSULTING

R:/Projects/Fullert/J003/Graphics/Ex4-2_CSP2_072407.pdf

Traffic and Circulation

Table 4-11 compares the AM and PM peak hour trip generation associated with this alternative to existing land uses and the proposed project. This alternative represents an increase in AM and PM peak hour trips when compared to existing land uses and the proposed project.

TABLE 4-11
COMBINATION OF STUDENT-ORIENTED HOUSING AND FOR-SALE RESIDENTIAL/MIXED-USE DEVELOPMENT ALTERNATIVE TRIP GENERATION

Land Use	Quantity	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Existing Land Uses							
Residential	-79 du	-8	-32	-40	-31	-17	-48
General Office	-103,515 sf	-141	-19	-160	-26	-128	-154
Student-Oriented and For-Sale Mixed-Use Development Alternative							
Apartments	209 du	21	86	107	84	46	130
Condominiums	270 du	22	100	122	95	45	140
Commercial/Retail	30,000 sf	46	30	76	136	147	283
	Total Trips	**-60**	**165**	**105**	**258**	**93**	**351**
Proposed Land Uses							
Residential	375 du	38	153	191	151	81	233
Commercial/Retail	30,000 sf	46	30	76	136	147	283
	Total Trips	**-65**	**132**	**67**	**229**	**83**	**313**

du: Dwelling Unit
sf: Square Feet

Source: Albert Grover & Associates 2007.

Table 4-12 identifies intersection LOS for opening day “without” and “with” project alternative conditions. As shown on the table, under this alternative scenario, two intersections: State College Boulevard/Orange Avenue and Chapman Avenue/SR-57 Northbound Ramp operate at LOS F “without project” during the PM peak hour and remain at LOS F “with project” during the PM peak hour. It should be noted that these two intersections currently operate at a deficient level of service.

For these two intersections, impact significance was determined for the Year 2025 (future buildout) conditions by determining whether this alternative would generate traffic exceeding ten percent of the total traffic growth by 2025. As noted in the table, this alternative scenario would contribute less than ten percent of the traffic growth at this intersection. The impact is less than significant.

Table 4-13 identifies future conditions (Year 2025) with and without the project alternative. The table shows that the “with project alternative” conditions projects that all intersections that operated at LOS D or better “without project alternative” continue to operate at LOS D or better “with project alternative” during the AM and PM peak hours. The six intersections that operate at LOS E or LOS F “without project alternative” remain unchanged in their level of service “with project alternative.” The analysis was also conducted to see if this alternative would contribute ten percent or more of the total future traffic growth at these six intersections. As noted in Table 4-14, this alternative contributes at least ten percent or more of the total traffic growth during the PM peak hour at two of the six intersections. This is a significant impact.

2. Chapman Avenue/State College Boulevard
11. Chapman Avenue/SR-57 Southbound Ramps

TABLE 4-12
YEAR 2010 INTERSECTION LEVELS OF SERVICE SUMMARY
COMBINATION OF STUDENT-ORIENTED HOUSING AND FOR-SALE RESIDENTIAL MIXED-USE DEVELOPMENT ALTERNATIVE

Intersection		Without Project						With Project					
		AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour		
East/West Street	North/South Street	ICU	Delay[b]	LOS	ICU	Delay[b]	LOS	ICU	Delay[b]	LOS	ICU	Delay[b]	LOS
1. Nutwood Ave	State College Blvd	0.80	28.0	C	0.78	29.0	C	0.82	29.0	C	0.81	30.0	C
2. Chapman Ave	State College Blvd	0.86	40.0	D	0.90	44.0	D	0.87	41.0	D	0.92	51.0	D
3. Commonwealth Ave	State College Blvd	0.63	22.0	C	0.64	28.0	C	0.64	22.0	C	0.65	28.0	C
4. Orangethorpe Ave[a]	**State College Blvd[a]**	**1.05**	**58.0**	**F**	0.80	33.0	C	**1.05**	**60.0**	**F**	0.80	34.0	C
5. Nutwood Ave	Commonwealth Ave	0.18	16.0	B	0.26	11.0	B	0.18	15.0	B	0.26	11.0	B
6. Nutwood Ave	Folino (East Campus Dr)	0.52	25.0	C	0.46	20.0	B	0.52	25.0	C	0.46	20.0	B
7. Nutwood Ave	SR-57 Southbound Ramps	0.53	25.0	C	84.0	33.0	C	0.53	25.0	C	0.84	34.0	C
8. Nutwood Ave	SR-57 Northbound Ramps	0.74	28.0	C	0.48	23.0	C	0.74	28.0	C	0.49	23.0	C
9. Nutwood Ave	Placentia Ave	0.77	19.0	B	0.71	26.0	C	0.77	19.0	B	0.71	26.0	C
10. Chapman Ave	Commonwealth Ave	0.56	18.0	B	0.78	25.0	C	0.56	17.0	B	0.79	26.0	C
11. Chapman Ave	SR-57 Southbound Ramps	0.66	20.0	B	0.87	26.0	C	0.69	20.0	B	0.91	26.0	C
12. Chapman Ave[a]	**SR-57 Northbound Ramps[a]**	0.94	37.0	D	**1.06**	**53.0**	**F**	0.97	41.0	D	**1.08**	**54.0**	**F**
13. Chapman Ave	Placentia Ave	0.73	33.0	C	0.79	38.0	D	0.73	33.00	C	0.79	38.0	D
14. Orangethorpe Ave.	Placentia Ave	0.61	33.0	C	0.66	36.0	D	0.61	33.0	C	0.66	35.0	C

[a] Intersections operating at Level of Service (LOS) **E** or **F** are in **Bold**.
[b]Delay is in seconds.

Source: Albert Grover & Associates 2007.

TABLE 4-13
YEAR 2025 INTERSECTION LEVELS OF SERVICE SUMMARY
COMBINATION OF STUDENT-ORIENTED HOUSING AND FOR-SALE RESIDENTIAL MIXED-USE DEVELOPMENT ALTERNATIVE

Intersection		Without Project						With Project					
		AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour		
East/West Street	North/South Street	ICU	Delay[b]	LOS	ICU	Delay[b]	LOS	ICU	Delay[b]	LOS	ICU	Delay[b]	LOS
1. Nutwood Ave	**State College Blvd**	**1.00**	**40.0**	**F**	0.93	35.0	C	**1.00**	**40.0**	**F**	0.94	36.0	D
2. Chapman Ave	**State College Blvd**	**0.97**	**54.0**	**E**	**1.10**	**70.0**	**F**	**0.98**	**57.0**	**E**	**1.08**	**71.0**	**F**
3. Commonwealth Ave	State College Blvd	0.71	24.0	C	0.73	31.0	C	0.72	24.0	C	0.74	33.0	C
4. Orangethorpe Ave[a]	**State College Blvd[a]**	**1.13**	**89.0**	**F**	0.90	39.0	D	**1.14**	**91.0**	**F**	0.90	39.0	D
5. Nutwood Ave	Commonwealth Ave	0.21	17.0	B	0.32	11.0	B	0.21	17.0	B	0.33	12.0	B
6. Nutwood Ave	Folino (East Campus Dr)	0.65	28.0	C	0.53	21.0	C	0.65	28.0	C	0.53	21.0	C
7. Nutwood Ave	**SR-57 Southbound Ramps**	0.65	36.0	D	**0.98**	**43.0**	**E**	0.65	36.0	D	**0.98**	**44.0**	**E**
8. Nutwood Ave	SR-57 Northbound Ramps	0.91	37.0	D	0.57	25.0	C	0.91	37.0	D	0.58	25.0	C
9. Nutwood Ave	Placentia Ave	0.86	20.0	B	0.85	26.0	C	0.86	20.0	B	0.85	26.0	C
10. Chapman Ave	Commonwealth Ave	0.67	20.0	B	0.94	33.0	C	0.67	19.0	B	0.95	35.0	C
11. Chapman Ave	**SR-57 Southbound Ramps**	0.76	22.0	C	**1.04**	**40.0**	**F**	0.79	21.0	C	**1.08**	**50.0**	**F**
12. Chapman Ave[a]	**SR-57 Northbound Ramps[a]**	**1.06**	**54.0**	**F**	**1.19**	**85.0**	**F**	**1.09**	**63.0**	**F**	**1.21**	**92.0**	**F**
13. Chapman Ave	Placentia Ave	0.83	36.0	D	0.88	44.0	D	0.83	36.0	D	0.88	42.0	D
14. Orangethorpe Ave	Placentia Ave	0.68	35.0	C	0.74	39.0	D	0.68	35.0	C	0.74	39.0	D

[a] Intersections operating at Level of Service (LOS) **E** or **F** are in **Bold**.
[b] Delay is in seconds.

Source: Albert Grover & Associates 2007.

TABLE 4-14
YEAR 2025 SIGNIFICANT IMPACT ANALYSIS
COMBINATION OF STUDENT-ORIENTED HOUSING AND FOR-SALE RESIDENTIAL MIXED-USE DEVELOPMENT ALTERNATIVE

Intersection		LOS				Total Future Trips (+ Growth)		Total Future Traffic		Total Existing Traffic		Project Trips		Percentage of Project Trips to Future Trips		Significant Impact	
		Without Project		With Project													
East/West Street	**North/South Street**	**AM**	**PM**	**AM**	**PM**	**AM**	**PM**	**AM**	**PM**	**AM**	**PM**	**AM**	**PM**	**AM**	**PM**	**AM**	**PM**
1. Nutwood Ave	State College Blvd	**F**	C	**F**	**D**	1026	1049	6037	5515	5011	4466	**-34**	54	**-3%**	5%	No	No
2. Chapman Ave	State College Blvd	**E**	**F**	**E**	**F**	1342	1626	7287	7580	5945	5945	**-11**	**156**	**-1%**	**10%**	No	**Yes**
4. Orangethorpe Ave	State College Blvd	**F**	**D**	**F**	**D**	1099	1011	7999	6053	6900	5042	**29**	46	**3%**	5%	No	No
7. Nutwood Ave	SR-57 Southbound Ramps	**D**	**E**	**D**	**E**	962	1003	4214	3978	3252	2975	7	**48**	1%	**5%**	No	No
11. Chapman Ave	SR-57 Southbound Ramps	C	**F**	C	**F**	1010	1304	4182	5231	3172	3927	101	**150**	10%	**12%**	No	**Yes**
12. Chapman Ave	SR-57 Northbound Ramps	**F**	**F**	**F**	**F**	891	1100	4254	5690	3363	4590	**43**	**82**	**5%**	**7%**	No	No

Note: Intersections operating at Level of Service (LOS) **E** or **F** are in **Bold**.

Source: Albert Grover & Associates 2007.

Implementation of the following mitigation measures would help to reduce the overall intersection delay and overall intersection volume-to-capacity ratio to levels closer to Year 2025 "without project alternative" conditions for both intersections during the PM peak hour. Implementation of mitigation for Chapman Avenue/State College Boulevard would improve the intersection's level of service from LOS F to LOS E. In the case of the Chapman Avenue/SR-57 Southbound Ramp, mitigation measures improve the intersection's level of service from LOS F to LOS C.

With implementation of mitigation, as identified in Table 4-15, impacts to Chapman Avenue/State College Boulevard intersection would remain significant after implementation of mitigation. With implementation of mitigation, Chapman Avenue/SR-57 Southbound Ramp would be reduced to less than significant.

With implementation of the mitigation below, impacts would be reduced to less than significant.

2. State College Boulevard/Chapman Avenue:

    - Restripe the northbound approach to provide dual left-turn lanes.
    - Remove and replace the exclusive northbound right-turn lane with a shared through/right-turn lane to provide three through lanes.

11. Chapman Avenue/SR-57 Southbound Ramps:

    - Provide a pro-rata contribution to construct the necessary improvements to widen the westbound approach to provide dual left-turn lanes.

This alternative development scenario includes 479 residential units, including 108 single-bedroom units, 180 two-bedroom units, 18 three-bedroom units, and 173 four-bedroom units. As identified in Table 4-16, this alternative would provide 1,393 parking spaces. The City's code requirement of 1,359 parking spaces would be exceeded by 34 parking spaces (Table 4-16).

TABLE 4-15
YEAR 2025 WITH PROPOSED MITIGATION
COMBINATION OF STUDENT-ORIENTED HOUSING AND FOR-SALE RESIDENTIAL MIXED-USE DEVELOPMENT ALTERNATIVE

Intersection		Future Year 2025 Without Alternative Conditions						Future Year 2025 With Alternative						Future Year 2025 With Alternative Plus Mitigation					
		AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour		
East/West Street	**North/South Street**	**ICU**	**Delay[b]**	**LOS**	**ICU**	**Delay[b]**	**LOS**	**ICU**	**Delay[b]**	**LOS**	**ICU**	**Delay[b]**	**LOS**	**ICU**	**Delay[b]**	**LOS**	**ICU**	**Delay[b]**	**LOS**
2. Chapman Ave	**State College Blvd**	**0.97**	**54.0**	**E**	**1.10**	**70.0**	**F**	**0.98**	**57.0**	**E**	**1.08**	**71.0**	**F**	**0.96**	**56.0**	**E**	**0.98**	**53.0**	**E**
11. Chapman Ave	**SR-57 Southbound Ramps**	0.76	22.0	C	**1.04**	**40.0**	**F**	0.79	21.0	C	**1.08**	**50.0**	**F**	0.68	17.0	B	0.94	27.0	C

[a] Intersections operating at Level of Service (LOS) **E** or **F** are in **Bold**.
[b] Delay is in seconds

Source: Albert Grover & Associates 2007.

TABLE 4-16
COMBINATION OF STUDENT-ORIENTED HOUSING AND FOR-SALE RESIDENTIAL MIXED-USE DEVELOPMENT ALTERNATIVE PARKING ANALYSIS

Land Use	Quantity	Spaces
Residential:		
Single Bedroom Unit	108 du	216 spaces
Two-Bedroom Unit	180 du	450 spaces
Three-Bedroom Unit	18 du	54 spaces
Four-Bedroom Unit	173 du	519 spaces
Total Units	**479 du**	**1,239 spaces**
Commercial/Retail:	30,000 sf	120 spaces
Total Parking Spaces Required		**1,359 spaces**
Total Parking Spaces Available		**1,393 spaces**
Net Parking Space Surplus or (Deficit)		**34 spaces**

du: dwelling units
sf: square feet

Source: Albert Grover & Associates 2007.

Air Quality

This alternative would require the same amount of demolition and excavation as the proposed project. In addition, grading and earth movement would also occur over the entire project site, similar to the proposed project. Therefore, grading and demolition activities under this alternative could result in significant short-term PM10 impacts and would be expected to result in significant short-term NOx impacts, similar to the proposed project. According to the *Air Quality Assessment for Jefferson Commons*, VOC emission thresholds are expected to be exceeded during the application of architectural coatings under this alternative (Mestre Greve 2007a). Sensitive receptors could be affected by these emissions increases. These short-term impacts would be reduced with proposed mitigation, but not to a level considered less than significant. Additionally, CO concentrations under this alternative would not exceed the State ambient air quality standards and this alternative would not result in a significant local air quality impact.

Table 4-17 shows that the total emissions under this alternative would exceed the SCAQMD regional significance thresholds for VOC and NOx. Therefore, this alternative would result in a significant regional air quality impact. Implementation of mitigation measures identified in Section 3.4, Air Quality, would reduce this impact, but not to a level considered less than significant. It should be noted that VOC and NOx emissions exceed the SCAQMD thresholds and would be considered significant and unavoidable for the proposed project as well as this alternative.

TABLE 4-17
COMBINATION OF STUDENT-ORIENTED HOUSING AND FOR-SALE RESIDENTIAL MIXED-USE DEVELOPMENT ALTERNATIVE TOTAL EMISSIONS

Source	Pollutant Emissions (lbs/day)				
	CO	VOC	NOx	PM10	SOx
Vehicular Trips	350.6	43.9	211.6	8.9	0.5
Natural Gas Consumption	1.3	0.3	5.4	0.0	0.0
Consumer Product Usage	0.0	20.5	0.0	0.0	0.0
Project Emissions	**351.9**	**64.7**	**217.0**	**8.9**	**0.5**
Significance Threshold	**550**	**55**	**55**	**150**	**150**
Exceed Threshold?	No	**Yes**	**Yes**	No	No
Source: Mestre Greve Associates 2007a.					

Noise

Short-term Construction-related Traffic

This alternative would involve similar construction activities as the proposed project and the development of similar land uses. Construction and demolition activities would result in temporary increases in ambient noise levels during the various phases of construction and have the potential to expose persons to or generate noise levels from construction equipment in excess of standards established in the City's Noise Ordinance. However, similar to the proposed project, all construction activities under this alternative would be conducted in compliance with the City's Noise Ordinance, including hours and days that construction occurs. No impacts would occur.

Traffic Noise

As shown in Table 4-18, most of the noise increase that would occur along roadways adjacent to the project site in Year 2025 would be due to cumulative growth in traffic independent of the proposed project or this alternative. The increase in noise levels in 2025 over the noise levels in 2006 are not expected to be greater than 1.1 dB,as is shown in the second column of Table 4-18. This increase would not result in a significant impact.

The noise increase would only be 0.10 dB or less under this alternative, similar to the proposed project. The road segment along North Commonwealth Avenue between East Chapman Avenue and Nutwood Avenue would actually decrease in noise levels under both the proposed project and this alternative. This decreased noise level is to due the smaller projected traffic volume that will occur with the project. This project alternative would not result in a substantial noise increase (i.e., increases greater than 3 dB) along any of the roadway segments. This alternative's related traffic noise would not result in significant impacts to off-site sensitive receptors.

Impacts to Surrounding Uses Resulting from On-site Activities

The Conceptual Site Plan (Exhibit 4-2) shows some uses that are potential noise generators; specifically the retail establishments located along East Chapman Avenue and North Commonwealth Avenue and air conditioning units. In the eastern portion of the site, four stories of residential units would be over ground floor retail uses. Additionally, off-site residential uses are located to the north, south, and east of the project site.

TABLE 4-18
TRAFFIC NOISE CNEL LEVEL INCREASES IN 2025
COMBINATION OF STUDENT-ORIENTED HOUSING AND FOR-SALE RESIDENTIAL MIXED-USE DEVELOPMENT ALTERNATIVE

Roadway Segment	Increase Due to Alternative[a]	Increase Over 2006[a]
State College Blvd		
Dorothy Ln to E. Chapman Ave	0.0	1.0
E. Chapman Ave to N Commonwealth Ave	0.0	0.8
N. Commonwealth Ave to Orangethorpe Ave	0.0	0.7
Orangethorpe Ave to South City Limits	0.0	0.9
Placentia Ave		
Madison Ave to E. Chapman Ave	0.0	0.6
E. Chapman Ave to Orangethorpe Ave	0.0	0.7
Nutwood Ave		
State College Blvd to N Commonwealth Ave	0.1	0.8
N Commonwealth Ave to Placentia Ave	0.0	1.0
E. Chapman Ave		
Acacia Ave to State College Blvd	0.0	0.9
State College Blvd to SR-57 Freeway	0.1	1.0
N. Commonwealth Ave		
Acacia Ave to State College Blvd	0.0	0.6
State College Blvd to E. Chapman Ave	0.0	0.9
E. Chapman Ave to Nutwood Ave	-0.1	1.1
Orangethorpe Ave		
Raymond Ave to State College Blvd	0.0	0.6
State College Blvd to Placentia Ave	0.0	0.6

[a] From roadway centerline

Source: Mestre Greve Associates 2007b.

Similar to the proposed project, the number and time of truck deliveries and unloading is not known. However, all loading areas are located on the first floor of the parking structure. Delivery trucks would approach the site on public roadways, drive a short distance into the first level of the parking structure from the North Commonwealth Avenue entrance, and park in a loading area. No significant noise impacts are anticipated.

As with the proposed project, HVAC equipment for these type of land uses are usually located on the roof of the buildings. If the equipment is located on the roof, often parapet walls are used to control the noise from the equipment. Different equipment with the same function can generate substantially different noise levels. As a part of the design, the mechanical equipment would be chosen so that it does not generate noise levels that would exceed Noise Ordinance limits and adversely affect the nearest sensitive receptors. Similar to the proposed project, without mitigation, impacts could occur.

On-site Traffic Noise Exposure

Distances to future (2025) CNEL noise contours are presented in Table 4-19. The noise contours for this alternative and the proposed project produce virtually the same noise contour profile. As noted for the proposed project, residential areas along East Chapman Avenue and North Commonwealth Avenue would be exposed to noise levels greater than 60 CNEL. This

alternative includes exterior residential balconies along East Chapman Avenue, North Commonwealth Avenue and East College Place, as well as interior to the project. The project alternative's residential balconies are not included in the project's private open space assumptions. As with the proposed project, the exterior noise levels are not applicable to balconies. On-site recreational amenities are not expected to result in significant noise impacts.

TABLE 4-19
YEAR 2025 WITH TRAFFIC NOISE LEVELS
COMBINATION OF STUDENT-ORIENTED HOUSING AND FOR-SALE RESIDENTIAL MIXED-USE DEVELOPMENT ALTERNATIVE

Roadway Segment	CNEL @ 100'[a]	Distance To CNEL Contour (feet)[a]		
		70 CNEL	65 CNEL	60 CNEL
State College Blvd				
Dorothy Ln to E. Chapman Ave	67.6	69	150	322
E. Chapman Ave to North Commonwealth Ave	64.4	42	91	196
N. Commonwealth Ave to Orangethorpe Ave	64.4	42	91	197
Orangethorpe Ave to South City Limits	66.7	60	130	279
Placentia Ave				
Madison Ave to E. Chapman Ave	66.2	55	119	257
E. Chapman Ave to Orangethorpe Ave	64.3	42	90	194
Nutwood Ave				
State College Blvd to N. Commonwealth Ave	61.3	26	57	122
North Commonwealth Ave to Placentia Ave	65.3	49	105	227
E. Chapman Ave				
Acacia Avenue to State College Blvd	68.4	79	169	365
State College Blvd to SR-57	65.9	53	115	248
North Commonwealth Avenue				
Acacia Ave to State College Blvd	63.6	37	80	173
State College Blvd to E. Chapman Ave	61.6	28	59	128
E. Chapman Ave to Nutwood Ave	56.5	13	27	58
Orangethorpe Ave				
Raymond Ave to State College Blvd	67.4	67	145	313
State College Blvd to Placentia Ave	67.3	66	142	305

[a] From roadway centerline.

Source: Mestre Greve Associates 2007b.

Parking Structure

Similar to the proposed project, the parking structure would be approximately ten feet away from the nearest on-site residences located on the southwestern portion of the project site. At this reduced distance, parking lot related activities could generate significant noise levels with maximum sound levels could be as high as 84 dBA. As noted for the proposed project, the parking structure would not be subject to the City's Noise Ordinance because it would be on the same parcel as the surrounding proposed residential units. However, the Noise Ordinance does

provide indoor limits for short-term noise events such as those that would be generated by the parking structure. Because windows are provided facing the parking structure, this alternative may result in significant impacts. With implementation of the mitigation program in Section 3.5, Noise, impacts can be mitigated to a less than significant level.

Cultural Resources

Under both this alternative and the proposed project, the potential to encounter unknown subsurface cultural resources during grading activities represents significant impacts. With implementation of the mitigation measures identified for the proposed project, potential impacts to archaeological and paleontological resources would be reduced to a level considered less than significant, similar to the proposed project. The site does not contain significant historical resources.

Population, Housing, and Employment

The proposed project would generate an approximate 1,027 net increase in new residents to the project site and it would add 30,000 sf of retail/commercial use to the project site. This alternative would result in slightly fewer new residents as compared with the project and is consistent with regional and local population and housing projections. Similar to the proposed project, this alternative would have a beneficial effect on housing in the northeastern portion of the city. However, it would not supply as much student-oriented housing in the northeastern portion of the City as the proposed project. The number of displaced dwelling units and office space would be exactly the same as the proposed project. The loss of existing office and residential units was not identified for the proposed project as a significant impact.

Geology and Soils

Development of this alternative is anticipated to require grading and earth movement over the entire project site, similar to the proposed project. This alternative would include subsurface excavation for parking. Geology and soils impacts associated with the proposed project and this alternative can be mitigated to a level considered less than significant.

Hazards and Hazardous Materials

Similar to the proposed project, this alternative would not involve the use, handling, storage, transport, or disposal of hazardous materials that would cause potentially significant impacts. This alternative would not result in the potential impacts related to the use, handling, storage, transport, and disposal of hazardous materials. There is a potential to encounter unidentified hazardous materials during construction and to expose construction workers to lead and ACM. With mitigation, impacts related to hazards and hazardous materials would be reduced to a level considered less than significant.

Biological Resources

Similar to the proposed project, development under this alternative is anticipated to require grading and earth movement over the entire project site. As with the proposed project, potential impacts to nesting birds would be mitigated to a level considered less than significant with implementation of the mitigation program identified in Section 3.10, Biological Resources.

Hydrology and Water Quality

Development would occur over the entire project site; landscaping and open space areas would be provided. The total open space areas (permeable surface area) would be less than the

proposed project due to the reduction in size of the courtyard areas. However, all runoff would be required to be treated by pre- and post-construction BMPs prior to discharge into the storm drain system. Additionally, similar to the proposed project, this alternative would comply with all applicable local, state, and federal requirements for water quality.

Public Services

As with the proposed project, this alternative would increase the demand for public services. It is anticipated that service providers would be able to handle the additional demand. Similar to the proposed project, potential impacts to public services would be less than significant.

Utilities and Service System

As with the proposed project, this alternative would increase the demand for utilities and service systems. It is anticipated that service providers would be able to handle the additional demand. It is expected that this alternative would also require the upgrade of the six-inch water main line to an eight-inch line. Similar to the proposed project, potential impacts to utilities and service systems would be mitigated to a less than significant level.

Conclusions

Development of the project site under this alternative assumes more residential units but slightly fewer residents because the units offer fewer bedrooms. The retail/commercial development would be the same amount of square footage as the proposed project. Compared to the proposed project, this alternative would result in similar impacts related to land use, aesthetics, cultural resources, noise, population and housing, geological resources, biological resources, public services, and utilities and service systems. This alternative would result in greater impacts related to traffic. Air quality impacts associated with the proposed project as well as this alternative would remain significant after implementation of the mitigation program and would require adoption of a Statement of Overriding Considerations. This alternative would meet project objectives associated with the provision of a mix of land uses on the project site. Fewer student-oriented housing units would be provided. Due to the intensity of development with this alternative there may be fewer opportunities to create a pedestrian-friendly environment with community serving commercial that supports the surrounding educational and commercial/offices land uses and accommodate and encourage connectivity between bikeway, pedestrian, and bus networks.

4.2.5 REDUCED DEVELOPMENT STUDENT-ORIENTED HOUSING/MIXED-USE DEVELOPMENT ALTERNATIVE

Description of the Alternative

This alternative assumes a reduction in student-oriented housing units on the 6.8-acre site. Under this development scenario, the project site would be developed with the same number of units (375) as the proposed project but with fewer bedrooms (a reduction of 162 bedrooms; 1,138 total bedrooms compared to 1,300 bedrooms for the proposed project). This reduced density alternative includes 30,000 sf of commercial/retail uses, and 12,000 sf for the leasing office and recreation centers (the latter for the on-site residences). All parking would be provided in an aboveground 7-level parking structure with 1,087 parking spaces, including 967 parking spaces for residents and 120 spaces for retail uses. As with the proposed project, this alternative would require a General Plan Amendment and zone change.

Comparative Analysis of Environmental Impacts

Land Use and Related Planning Programs

This alternative would provide a very similar mix of land uses as the proposed project and would be consistent and compatible with the existing uses in the project area. As with the proposed project, this alternative would require a General Plan Amendment and zone change. The project would accomplish many of the same objectives of the proposed project regarding mixed-use development. However, this alternative would create slightly less student-oriented housing.

Aesthetics

The reduction in bedrooms associated with this alternative would not change the visual appearance of the development when compared to the proposed project. Both this alternative and the proposed project would result in visual changes to the project site. However, these changes are not considered adverse. This alternative would be reviewed by the City of Fullerton RDRC in addition to the Planning Commission and City Council.

Traffic and Circulation

The reduction in bedrooms would not change the trip generation associated with this alternative. This alternative would generate the similar amount of short-term (construction) and long-term (operational) traffic as the proposed project. Traffic impacts from the proposed project and this alternative can be mitigated to a less than significant level.

The reduction in bedrooms (by 162) correlates to a reduced parking requirement. All parking would be provided in an aboveground 7-level parking structure with 1,087 parking spaces, including 967 parking spaces for residents and 120 spaces for retail uses. Adequate parking would be provided on the site.

Air Quality

This alternative would require the same amount of demolition and excavation as the proposed project. In addition, grading and earth movement would also occur over the entire project site. Therefore, grading and demolition activities under this alternative could result in significant short-term PM10 impacts and would be expected to result in significant short-term NOx impacts, similar to the proposed project. According to the *Air Quality Assessment for Jefferson Commons*, VOC emission thresholds are expected to be exceeded during the application of architectural coatings (Mestre Greve 2007a). Sensitive receptors could be affected by these emissions increases. These short-term impacts would be reduced with proposed mitigation, but not to a level considered less than significant. Additionally, CO concentrations under this alternative would not exceed the State ambient air quality standards and this alternative would not result in a significant local air quality impact.

Total emissions would exceed the SCAQMD regional significance thresholds for VOC and NOx. Therefore, this alternative would result in a significant regional air quality impact. Implementation of mitigation measures identified in Section 3.4, Air Quality, would reduce this impact, but not to a level considered less than significant. It should be noted that VOC and NOx emissions currently exceed the SCAQMD thresholds and would be considered significant and unavoidable for the proposed project as well as this alternative.

Noise

This alternative would involve similar construction activities as the proposed project and the development of similar land uses. It is anticipated that the duration of construction noise would be the same as the proposed project. Because the project alternative would generate the similar amount of vehicular traffic as the proposed project, the long-term noise impacts would be the same as the proposed project. It should be noted that noise impacts from the proposed project were determined to be less than significant with incorporation of the mitigation program, and it is anticipated that potential noise impacts related to this alternative would also be reduced to less than significant levels.

Cultural Resources

Under both this alternative and the proposed project, the potential to encounter unknown subsurface cultural resources during grading activities represents a significant impact. With implementation of mitigation measures identified for the proposed project, potential impacts to archaeological and paleontological resources would be reduced to a level considered less than significant. The project site does not contain significant historical resources.

Population, Housing, and Employment

This project alternative could generate slightly fewer residents than the proposed project due to the reduction in bedrooms (by 162) within the 375 student-oriented housing units. This alternative would be consistent with regional and local population and housing projections. While this alternative would add student-oriented housing in the northeastern portion of the City, it would provide fewer student-housing opportunities than the proposed project. Similar to the proposed project, this alternative would have a beneficial effect on housing; however, not to the same extent as the proposed project since there would be fewer bedrooms.

Geology and Soils

Development of this alternative is anticipated to require the same amount of grading and earth movement as the proposed project. This alternative would expose fewer people to potential geologic hazards of seismic activity. However, geology and soils impacts from the proposed project were determined to be less than significant with incorporation of the mitigation program.

Hazards and Hazardous Materials

This alternative would not result in potential impacts related to the use, handling, storage, transport, and disposal of hazardous materials that would cause potentially significant impacts. As with the proposed project, there is a potential to encounter unidentified hazardous materials during construction. With mitigation, impacts related to hazards and hazardous materials would be reduced to a level considered less than significant.

Biological Resources

Site development would require grading and earth movement over the entire site. Potentially significant impacts related to tree removal during nesting season would be mitigated to a level considered less than significant with implementation of the mitigation program identified in Section 3.10, Biological Resources.

Hydrology and Water Quality

As with the proposed project, the entire site would be developed with buildings and would include landscaping and open space areas. All runoff would be required to be treated by pre- and post-construction BMPs prior to discharge into the storm drain system. Additionally, similar to the proposed project, this alternative would comply with all applicable local, State, and federal requirements for water quality.

Public Services

This alternative would create similar demands for public services as the proposed project. Both the proposed project and this alternative would not result in significant impacts.

Utilities and Service Systems

This alternative would create similar demands on local utility providers as the proposed project. Potential impacts from the proposed project were determined to be less than significant with incorporation of the mitigation program and it is assumed that impacts related to this alternative would also be reduced to less than significant levels with implementation of the mitigation mentioned in Section 3.13.

Conclusions

Development of the project site under this alternative would result in slightly less development compared to the proposed project. While the amount of housing development would be reduced, this alternative would result in the same or similar impacts related to land use, aesthetics, traffic, noise, cultural resources, population and housing, geological resources, biological resources, hydrology and water quality, public services, and utilities and service systems as the proposed project. Air quality impacts would remain significant and unavoidable. This alternative would meet project objectives associated with the provision of a mix of land uses. However, it would not meet objectives to the same extent as the proposed project.

4.2.6 REDUCED DENSITY COMBINATION OF STUDENT-ORIENTED HOUSING AND FOR-SALE RESIDENTIAL/MIXED-USE DEVELOPMENT ALTERNATIVE

Description of the Alternative

This alternative assumes a reduction in the proposed residential uses on the 6.8-acre project site. Under this alternative scenario, 479 housing units would be constructed. Of the 479 units, 209 units would be student-oriented and 270 units would be for-sale condominiums. The total number of bedrooms would be 1,110 compared to 1,300 bedrooms for the proposed project and 1,214 for the Combination Student-oriented Housing and For-sale Residential/Mixed-use Development Alternative. This reduced density alternative includes 30,000 sf of commercial/retail uses and 12,000 sf for the leasing office and recreation centers (the latter for the on-site residents). Student-oriented units would be located in the western portion of the project site and the condominiums in the eastern portion of the site. Two parking structures would be provided. A 7-level, 546-space parking structure would be provided in the western portion of the site for the student-oriented housing units. A 2-level podium-style parking structure (1 level below grade and 1 level at grade) would be constructed to in the eastern portion of the site to serve the condominium units and retail uses (639 parking spaces for condominium residents and 120 retail spaces). A total of 1,305 parking spaces would be provided on the project site. The provision of mixed-use development on the site would also require a General Plan Amendment and zone change.

Comparative Analysis of Environmental Impacts

Land Use and Related Planning Programs

This alternative would provide a similar mix of land uses as the proposed project and the Mixed-use Alternative. This reduced density and would be consistent and compatible with the existing uses in the vicinity as is the proposed project. This alternative would require a General Plan Amendment and zone change. This alternative would accomplish many of the same objectives of the proposed project regarding mixed-use development. Specifically, it would meet the City's goal of providing additional housing. However, this alternative would create less student-oriented housing due to the reduction in overall residential housing as well as the reduction in student-oriented housing.

Aesthetics

The reduction in bedrooms associated with this alternative would not change the visual appearance of the development when compared to the proposed project. Both this alternative and the proposed project would result in visual changes to the project site. However, these changes are not considered adverse. This alternative would be reviewed by the City of Fullerton RDRC in addition to the Planning Commission and City Council.

Traffic and Circulation

The reduction in bedrooms would not change the trip generation associated with this alternative. This alternative represents an increase in AM and PM peak hour trips when compared to existing land uses and the proposed project.

In 2010, two intersections: State College Boulevard/Orangethorpe Avenue and Chapman Avenue/SR-57 Northbound Ramp would operate at a deficient LOS F without and with this project alternative. It should be noted that these two intersections currently operate at a deficient level of service. This alternative would contribute less than ten percent of the traffic growth at these intersections. The impact is less than significant.

In 2025 under this alternative, all intersections that operated at LOS D or better "without project alternative" continue to operate at LOS D or better "with project alternative" during the AM and PM peak hours. The six intersections that operate at LOS E or LOS F "without project alternative" remain unchanged in their level of service "with project alternative." This alternative contributes at least ten percent or more of the total traffic growth during the PM peak hour at two of the six intersections. This is a significant impact. The intersections are:

2. Chapman Avenue/State College Boulevard
11. Chapman Avenue/SR-57 Southbound Ramps

Implementation of mitigation would help to reduce the overall intersection delay and overall intersection volume-to-capacity ratio to levels closer to Year 2025 "without project alternative" conditions for both intersections during the PM peak hour. Implementation of mitigation for Chapman Avenue/State College Boulevard would improve the intersection's level of service from LOS F to LOS E. In the case of Chapman Avenue/SR-57 Southbound Ramp, mitigation measures improve the intersection's level of service from LOS F to LOS C. Even with implementation of mitigation, impacts to the Chapman Avenue/State College Boulevard intersection would remain significant. Significant impacts to the intersection of Chapman Avenue/SR-57 Southbound Ramp would be reduced to less than significant. This alternative would provide 1,305 parking spaces. Adequate parking would be provided.

Air Quality

This alternative would require the same amount of demolition and excavation as the proposed project. In addition, grading and earth movement would also occur over the entire project site. Therefore, grading and demolition activities under both this alternative and the proposed project could result in significant short-term PM10 impacts and would be expected to result in significant short-term NOx impacts. VOC emissions thresholds are expected to be exceeded during the application of architectural coatings. Sensitive receptors could be affected by these emissions increases. These short-term impacts would be reduced with proposed mitigation, but not to a level considered less than significant. Diesel particulate matter emissions would be less than significant. Additionally, CO concentrations under this alternative would not exceed the State ambient air quality standards and this alternative would not result in a significant local air quality impact.

Total emissions would exceed the SCAQMD regional significance thresholds for VOC and NOx. Therefore, this alternative would result in a significant regional air quality impact. Implementation of mitigation measures identified in Section 3.4, Air Quality, would reduce this impact, but not to a level considered less than significant. It should be noted that VOC and NOx emissions exceed the SCAQMD thresholds and would be considered significant and unavoidable for both the proposed project and this alternative.

Noise

This alternative would involve similar construction activities as the proposed project and the development of similar land uses. It is anticipated that the duration of construction noise would be the same as the proposed project. Because the project alternative would generate the same amount of vehicular traffic as the proposed project, the long-term noise impacts would be the same as the proposed project. It should be noted that noise impacts from the proposed project were determined to be less than significant with incorporation of the mitigation program and it is anticipated that potential noise impacts related to this alternative would also be reduced to less than significant levels.

Cultural Resources

Under both this alternative and the proposed project, the potential to encounter unknown subsurface cultural resources during grading activities represents a significant impact. With implementation of mitigation measures identified for the proposed project, potential impacts to archaeological and paleontological resources would be reduced to a level considered less than significant. The site does contain significant historical resources.

Population, Housing, and Employment

This reduced development alternative would be expected to generate fewer residents than the proposed project. As with the proposed project, this alternative is consistent with regional and local population and housing projections. While this alternative would add student-oriented housing in the northeastern portion of Fullerton, fewer student-oriented housing opportunities would be provided. Similar to the proposed project, this alternative would have a beneficial effect on housing.

Geology and Soils

Development of this alternative is anticipated to require the same amount of grading and earth movement as the proposed project. This alternative would expose fewer people to potential geologic hazards of seismic activity. However, geology and soils impacts from the proposed

project were determined to be less than significant with incorporation of the mitigation program. The same would be true under this alternative with implementation of the mitigation program from Section 3.8, Geology and Soils.

Hazards and Hazardous Materials

This alternative would not result in the potential impacts related to the use, handling, storage, transport, and disposal of hazardous materials that would cause potentially significant impacts. As with the proposed project, there is a potential to encounter unidentified hazardous materials during construction and expose construction workers to lead and ACM. With implementation of the mitigation program identified in Section 3.9, impacts related to hazards and hazardous materials would be reduced to a level considered less than significant.

Biological Resources

Site development would require grading and earth movement over the entire site. Potentially significant impacts related to tree removal during nesting season would be mitigated to a level considered less than significant with implementation of the mitigation program identified for the proposed project in Section 3.10, Biological Resources.

Hydrology and Water Quality

As with the proposed project, the entire site would be developed and would include landscaping and open space areas. All runoff would be required to be treated by pre- and post-construction BMPs prior to discharge into the storm drain system. Additionally, similar to the proposed project, this alternative would comply with all applicable local, State, and federal requirements for water quality.

Public Services

This alternative would create similar demands for public services as the proposed project. Both the proposed project and this alternative would not result in significant impacts.

Utilities and Service Systems

This alternative would create similar demands on local utility providers as the proposed project. Potential impacts from the proposed project were determined to be less than significant with incorporation of the mitigation program, and it is assumed that impacts related to this alternative would also be reduced to less than significant levels with implementation of the mitigation described in Section 3.13.

Conclusions

Development of the project site under this alternative would result in fewer bedrooms associated with the housing units. While this alternative would have a reduction in housing opportunities, compared to the proposed project, this alternative would result in the same or similar impacts related to land use, aesthetics, traffic, noise, cultural resources, population and housing, geology, biological resources, hydrology and water quality, public services, and utilities and service systems. As with the proposed project, air quality impacts would be significant and unavoidable. This alternative would meet project objectives associated with the provision of a mix of land uses, but not to the same extent as the proposed project.

4.3 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

CEQA requires the identification of an environmentally superior alternative. CEQA Guidelines §15126.6(e)(2) states that if the No Project Alternative is the environmentally superior alternative, then the EIR shall also identify an environmentally superior alternative among the other alternatives.

Based on the alternatives evaluated in this section, the No Project/No Development Alternative would be considered the environmentally superior alternative. When considering the other alternatives evaluated, the Reduced Density Student-oriented Housing/Mixed-use Development Alternative would be environmentally superior. As identified in Section 3.4, Air Quality, implementation of the proposed project would result in short-term, construction-related and long-term, operational air quality emissions generated from the project that would exceed SCAQMD significance thresholds for VOC and NOx. This alternative would have fewer residential units than the proposed project. The reduced density would result in slightly reduce significant impacts as compared with the proposed project. However, this alternative does not meet all the project's objectives to maximize student-oriented housing opportunities.