7. Alternatives to the Proposed Project

7.1 INTRODUCTION

7.1.1 Purpose and Scope

The California Environmental Quality Act (CEQA) requires that an Environmental Impact Report (EIR) include a discussion of reasonable project alternatives that would "feasibly attain most of the basic objectives of the project, but would avoid or substantially lessen any significant effects of the project, and evaluate the comparative merits of the alternatives" (CEQA Guidelines Section 15126.6). This chapter identifies potential alternatives to the proposed project and evaluates them, as required by CEQA.

Key provisions of the CEQA Guidelines on alternatives (Section 15126.6[a] through [f]) are summarized below to explain the foundation and legal requirements for the alternatives analysis in the EIR.

- "The discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly" (15126.6[b]).

- "The specific alternative of 'no project' shall also be evaluated along with its impact" (15126.6[e][1]).

- "The no project analysis shall discuss the existing conditions at the time the Notice of Preparation (NOP) is published, and at the time the environmental analysis is commenced, as well as what would reasonably be 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. If the environmentally superior alternative is the 'no project' alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives" (15126.6[e][2]).

- "The range of alternatives required in an EIR is governed by a 'rule of reason' that requires the EIR to set forth only those alternatives necessary to permit a reasoned choice. The alternatives shall be limited to ones that would avoid or substantially lessen any of the significant effects of the project" (15126.6[f]).

- "Among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries, and whether the proponent can reasonably acquire, control or otherwise have access to the alternative site (or the site is already owned by the proponent)" (15126.6[f][1]).

- "For alternative locations, "only locations that would avoid or substantially lessen any of the significant effects of the project need be considered for inclusion in the EIR" (15126.6[f][2][A]).

- "An EIR need not consider an alternative whose effect cannot be reasonably ascertained and whose implementation is remote and speculative" (15126.6[f][3]).

For each development alternative, this analysis:

- Describes the alterative,
- Analyzes the impact of the alternative as compared to the proposed project,
- Identifies the impacts of the project that would be avoided or lessened by the alternative,
- Assesses whether the alternative would meet most of the basic project objectives, and
- Evaluates the comparative merits of the alternative and the project.

Per the CEQA Guidelines Section 15126.6(d), additional significant effects of the alternatives are discussed in less detail than the significant effects of the project as proposed.

7.1.2 Project Objectives

As described in Section 3.2, the following goals and objectives for the City of Hope Campus Plan project will aid decision makers in their review of potential associated environmental impacts:

1. Allow for the flexible, long-term development and enhancement of the entire City of Hope campus in order to augment hospital, outpatient services, research uses, office space and support services and meet the evolving needs of the community, while minimally disrupting the surrounding neighborhood.

2. Facilitate the replacement and/or enhancement of existing medical buildings and support facilities in order to accommodate the projected increase in regional demand for outpatient services through 2035.

3. Maximize the creation of construction jobs and new permanent jobs in the Cities of Duarte and Irwindale and the surrounding community through the long-term expansion and enhancement of the campus, such that at full project buildout there is a jobs-housing balance in the City of Duarte at the top end of the desirable range of jobs to housing (between 1.3:1 and 1.7:1) recommended by the American Planning Association so that Duarte remains a regional employment center with a multitude of jobs in the health care industry that reinforces Duarte's brand as the "City of Health."

4. Develop enhanced and expanded open space on the campus to serve the needs of City of Hope patients, employees and visitors, while concentrating development footprints.

5. Provide a modern, cohesive and contemporary design complemented by landscaping and public art, to create a dynamic relationship between existing and new buildings.

6. Modernize or replace obsolete or outdated buildings and facilities with more efficient development that meets the needs of City of Hope patients, physicians, researchers and other employees.

7. Reinforce public investment in and encourage use of public transit, and maximize employee density in proximity to public transit, including the Gold Line station at Duarte/City of Hope and regional bus lines.

8. Improve and streamline multimodal transportation and access throughout the campus, including by foot, bicycle, car, and shuttle.

9. Maximize employee density in proximity to public transit while reducing or mitigating all net new greenhouse gas emissions from construction and operation to zero.

10. Incorporate sustainable design elements to the maximum extent possible throughout the campus, including compliance with green building standards, water and energy efficient design elements, electricity generation, adaptive reuse of buildings, and minimization of solid waste generation.

11. Support proximate parking for patients, visitors and employees, between parking structures and surface lots, and the variety of buildings intended to serve campus populations.

12. Upgrade and expand utilities and infrastructure necessary to support campus growth, while minimizing impacts to the greater community.

13. Augment site improvements, signage and wayfinding to foster a more accessible campus for all populations.

7.2 SIGNIFICANT AND UNAVOIDABLE IMPACTS

Pursuant to CEQA Guidelines Section 15126.6[b], alternatives to the proposed project include those that are capable of avoiding or substantially lessen any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly. Therefore, based on the analysis contained in Chapter 5, *Environmental Analysis*, the proposed Campus Plan would result in significant environmental effects prior to mitigation on the topics of air quality, biological resources, cultural resources, hazards and hazardous materials, tribal cultural resources, and utilities and service systems. Following mitigation, however, impacts to these three topical areas would be avoided or reduced to less than significant levels. Even with mitigation measures, however, the proposed Campus Plan would have significant and unavoidable environmental impacts related to greenhouse gas (GHG) emissions, noise (construction), and transportation and traffic.

7.3 ALTERNATIVES CONSIDERED AND REJECTED DURING THE SCOPING/PROJECT PLANNING PROCESS

The following is a discussion of the land use alternatives considered during the scoping and planning process and the reasons why they were not selected for detailed analysis in this Draft EIR.

7.3.1 Alternative Development Areas

CEQA requires that the discussion of alternatives focus on alternatives to the project or its location that are capable of avoiding or substantially lessening any significant effects of the project. The key question and first step in the analysis is whether any of the significant effects of the project would be avoided or substantially lessened by putting the project in another location. Only locations that would avoid or substantially lessen any of the significant effects of the project need be considered for inclusion in the EIR (Guidelines Sec. 15126[5][B][1]). In general, any development of the size and type proposed by the project would have substantially the same impacts on air quality, noise, transportation and traffic, and utilities and service systems. Without a site-specific analysis, impacts on aesthetics, biological resources, cultural resources, hazards and hazardous materials, and hydrology/water quality cannot be evaluated. The proposed Campus Plan area is already developed; infill development and redevelopment on the project site would result in fewer impacts than development on an alternate undeveloped vacant property. Furthermore, the site contains adequate infrastructure for future development to connect to; therefore an alternative site is not likely to reduce impacts related to hydrology, public services, and utilities.

Furthermore, City of Hope does not own other properties similar to the size of the City of Hope campus and cannot likely be expected to acquire, control, or have access to another site that could accommodate the campus plan. The general area that would be conducive to the type and intensity of institutional uses proposed by the project is either developed or planned to be developed in near future, and thus not available. Due to lack of viable and comparable sites in the general area that would allow for development of the project in a manner that would avoid or substantially lessen the project's potentially significant impacts, development of the project on an alternative site has been eliminated from consideration.

7.4 ALTERNATIVES SELECTED FOR FURTHER ANALYSIS

Based on the criteria listed above, the following three alternatives have been determined to represent a reasonable range of alternatives which have the potential to feasibly attain most of the basic objectives of the project but which may avoid or substantially lessen any of the significant effects of the project. These alternatives are analyzed in detail in the following sections.

- No Project/No Development
- No Project/Existing General Plan Alternative
- Reduced Intensity Alternative

An EIR must identify an "environmentally superior" alternative, and where the No Project Alternative is identified as environmentally superior, the EIR is then required to identify as environmentally superior an alternative from among the others evaluated. Each alternative's environmental impacts are compared to the proposed project and determined to be environmentally superior, neutral, or inferior. However, only impacts found significant and unavoidable are used in making the final determination of whether an alternative is environmentally superior or inferior to the proposed project. Only the impacts involving GHG emissions, noise, and traffic were found to be significant and unavoidable. Section 7.8 identifies the environmentally superior alternative.

Table 7-1 provides a summary of square footage and employment buildout figures for each of the three alternatives and the proposed project. This table was developed as a tool to better understand the differences between the proposed project and the alternatives.

Table 7-1 Alternatives Comparison

	Proposed Campus Plan	No Project/No Development Alternative	No Project/Existing General Plan Alternative[1]	Reduced Intensity Alternative
Square Footage	2,639,350	1,600,850	2,944,670	2,243,448
Employment	6,474	3,633	7,223	5,559
Population[2]	9,393	6,448	10,479	8,374

1. Buildout of the existing general plan was calculated based on the assumption that: 1) For Duarte: 1.5 FAR is allowed with a height limit of 75 feet; 50 percent of the site is developable; and the FAR excludes parking structures (2,874,960 sf); 2) For Irwindale, assumed the existing square footage (69,709 sf); and 3) employees prorated based on square feet.
2. Population includes all persons traveling to the project site: employees, patients, visitors, contractors, physicians, and residents.

7.5 NO PROJECT/NO DEVELOPMENT ALTERNATIVE

This alternative evaluates what would occur if the project is not approved, and is based upon existing conditions and available infrastructure. The project site is developed with 1,600,850 square feet of medical and research facilities, landscaped gardens, open spaces, two-lane roadways, drive aisles, and associated parking. Under this alternative, City of Hope would make minor fixes and modification to its aging buildings and support facilities, including repairing outdated utility and service systems over time. Many of the City of Hope buildings are more than 50 years old and reaching the end of their expected life span for this type of construction and use. The electrical, mechanical, and plumbing systems have surpassed a reasonably expected 30-year life span and are costly and difficult to maintain. Under this alternative, no demolition of existing buildings or construction of new medical and research facilities would occur. Compared to the project, this alternative would result in a reduction of 1,038,500 square feet of medical and research uses and 2,841 employees.

7.5.1 Aesthetics

Under the No Project/No Development Alternative, no new development would occur within in the project site. Therefore, the existing visual character and resources would remain as is. However, the various visual improvements that would be introduced throughout the project site under the proposed Campus Plan (e.g., landscaping, building form and architectural design, and public art) would not occur under this alternative. Additionally, the proposed project's aesthetic and visual resource impacts were determined to be less than significant. No favorable impact to aesthetics would occur under this alternative, and impacts under this alternative would be greater compared to the proposed project but remain less than significant.

7.5.2 Air Quality

Under this alternative, no new development would occur, and no new construction or demolition activities would occur. Therefore, the proposed project's potentially significant construction-related emissions impact requiring mitigation would be eliminated under this alternative.

Since the No Project/No Development Alternative would not increase traffic, associated air emissions would remain as is (that is, no impact would occur) and less than the proposed project. Although the proposed project would not result in any significant and unavoidable air quality impacts, air quality impacts under this alternative would be reduced compared to the proposed project and be less than significant.

7.5.3 Biological Impacts

The No Project/No Development Alternative would not result in any new development, and indirect construction-noise impacts to biological resources would be eliminated. No impact would occur under this alternative, and impacts would be reduced compared to the proposed project.

7.5.4 Cultural Resources

Under the No Project/No Development Alternative, no new development would occur within the project site; this alternative would not result in the potential to impact historical resources or encounter paleontological and archaeological during grading activities. Since no development would occur, there would be no potential to damage cultural resources, and impacts would be reduced compared to the proposed project.

7.5.5 Geology and Soils

No new construction activities, including demolition and grading, would occur under the No Project/No Development Alternative. Therefore, there would be no potential for additional workers, buildings, and structures to experience seismic ground shaking, or other geologic hazard. However, the proposed project's impacts to geology and soils were determined to be less than significant provided that existing regulations and standard conditions are implemented prior to and during building construction.

Although seismic risks to older buildings that were constructed under older and less conservative building code requirements would not be corrected under this alternative, it also would not involve any major grading or excavation that could cause unstable subsurface geologic conditions or significant erosion impact. Therefore, impacts to geology and soils would be reduced compared to the proposed project.

7.5.6 Greenhouse Gas Emissions

The No Project/No Development Alternative assumes the project area is completely built out and no new development would occur. The proposed project would replace older buildings with energy-efficient building designs. This alternative would generate 48,080 metric tons of CO_2 equivalent per year ($MTCO_2e$/year) or 7.4 $MTCO_2e$ per service population (SP) per year compared to the proposed project, which would generate 67,078 $MTCO_2e$/year or 7.1 $MTCO_2e$ per service population. This alternative would result in a reduction of GHG emissions; however the recent long-term GHG reductions goals under Executive Orders S-3-05 and B-30-15 would still not be met without major advancements in technology. Therefore, impacts under this alternative would be reduced compared to the proposed project and less than significant since no new development would occur. This alternative would eliminate a significant unavoidable impact.

7.5.7 Hazards and Hazardous Materials

Under this alternative, the project site is assumed to be completely built out, and no new development would occur. The potential for asbestos-containing materials and lead-based paint to be released during the demolition of buildings and structures under the proposed project would not occur, since no development would occur under this alternative. Furthermore, existing hazardous emissions or uses would remain as is and would be required to continue complying with existing state and local regulations. Therefore, impacts of this alternative would be less than significant and would be reduced compared to the proposed project.

7.5.8 Hydrology and Water Quality

Existing water quality conditions, groundwater supplies, drainage patterns, and runoff amounts would remain as is under this alternative since no new development would occur. This alternative would not introduce new sources of water pollutants to the project area (from either construction or operations phases of development projects). Additionally, this alternative would not require the water supply infrastructure improvements that would be required under the proposed project. However, this alternative would not include the development of new low-impact development, source control, site design, and treatment control best management practices (BMPs) to minimize runoff and water pollution. These BMPs are required measures that would occur under the proposed project and have a beneficial impact on stormwater quality. Overall, hydrology and water quality impacts would be slightly greater under this alternative and less than significant.

7.5.9 Land Use and Planning

Given that the proposed Specific Plan would not be adopted, this alternative would not require a general plan amendment and zone change. The existing zoning designations on the project site would remain (H: Hospital in Duarte and A-1: Agricultural, M-1: Light Manufacturing, and C-2: Heavy Commercial in Irwindale). However, this alternative would not allow new development to enhance the campus, establish a sense of place, or provide community amenities. New development standards and design guidelines to enhance the character, mobility, and connectivity of the project site would also not be implemented. Additionally, the proposed project's impacts to land use and planning were determined to be less than significant. Overall, land use impacts of the No Project/No Development Alternative would be less than significant and similar to those of the proposed project.

7.5.10 Noise

Under this alternative, no new development would occur. Therefore, this alternative would eliminate the proposed project's significant and unavoidable noise impacts related to construction activities. Additionally, no new operational noises would be generated because no new development would occur; however, no significant operational noise impacts were identified with the project. Therefore, no impact would occur under this alternative and impacts would be reduced as compared to the proposed project.

7.5.11 Population and Housing

Employment growth would not occur under the No Project/No Development Alternative because no new businesses, roads, or other infrastructure would be constructed. Population (employees, patients, visitors) on the project site would remain as is under this alternative, resulting in no impact to population and housing. However, the proposed project was determined to be within the growth projections for the area, and impacts to population and housing were determined to be less than significant. Therefore, population and housing impacts would be similar, and less than significant, under this alternative compared to the proposed project.

7.5.12 Public Services

The Los Angeles County Fire Department (LACFD) currently provides fire protection services to the project site. Although there would be less building area under this alternative compared to the proposed project, the new buildings would be constructed to meet the latest building and fire codes and equipped with better fire sprinkler and hydrant systems than the current aging structures. Therefore, impacts to fire services would not change significantly under this alternative compared to the proposed project. The onsite police protection services are provided by the Los Angeles County Sherriff Department (LACSD) and the Irwindale Police Department. LACSD indicated that they may need to expand their police facilities to accommodate buildout of the proposed project; therefore, the reduction in building square footage and on site population would reduce impacts to LACSD. There are no direct demands for school or library services by the City of Hope campus, and the indirect public services demands from the existing staffing would not change at the project site. Overall, impacts related to fire, police, school, and library services would be similar to the proposed project. As under the proposed project, public service impacts were determined to the less than significant.

7.5.13 Recreation

Under the No Project/No Development Alternative, no new employees would be introduced to the project area, which would slightly reduce impacts resulting from additional demand on parks and recreational facilities in the Cities of Duarte and Irwindale. However, the proposed project's impacts on parks and recreational facilities were determined to be less than significant. Overall, impacts to parks and recreational facilities would be similar under this alternative compared to the proposed project, and less than significant.

7.5.14 Transportation and Traffic

The proposed project would result in significant impacts to two freeway segments: 1) westbound I-210 west of I-605 and 2) southbound I-605 south of I-210 as well as six intersections after implementation of mitigation measures, as follows:

- 1. Live Oak Avenue & Arrow Highway (AM peak hour)
- 6. Avenida Barbosa & Arrow Highway (AM peak hour)
- 8. I-605 Northbound Off-Ramp & Live Oak Avenue (both peak hours)
- 13. Buena Vista Street & Evergreen Street (PM peak hour)

- 15. Buena Vista Street & Duarte Road (both peak hours)
- 17. I-210 Westbound Off-Ramp & Central Avenue (both peak hours)

Under the No Project/No Development Alternative, no new building square footage or employees would be introduced on to the project site. Existing daily trips would remain similar to current conditions, and all roadway segments and intersections would maintain existing levels of service. This alternative would not generate 4,753 additional daily trips associated with the proposed project, and no impact would occur.

As detailed in Table 8 of the Transportation Impact Study in Appendix J1 of this DEIR, 17 intersections operate at a deficient LOS during one or more peak hours under future no project conditions.

- 1. Live Oak Avenue & Arrow Highway (AM peak hour)
- 3. Mountain Avenue & Evergreen Street (PM peak hour)
- 6. Avenida Barbosa & Arrow Highway (AM peak hour)
- 7. I-605 Southbound On-Ramp & Live Oak Avenue (PM peak hour)
- 8. I-605 Northbound Off-Ramp & Live Oak Avenue (both peak hours)
- 9. I-605 Southbound Off-Ramp & Arrow Highway (AM peak hour)
- 10. Buena Vista Street & Huntington Drive (PM peak hour)
- 13. Buena Vista Street & Evergreen Street (PM peak hour)
- 14. Buena Vista Street & Three Ranch Road (PM peak hour)
- 15. Buena Vista Street & Duarte Road (both peak hours)
- 16. Buena Vista Street & Village Road (PM peak hour)
- 17. I-210 Westbound Off-Ramp & Central Avenue (both peak hours)
- 18. Cinco Robles Drive & Duarte Road (both peak hours)
- 19. Village Road & Duarte Road (both peak hours)
- 22. Circle Road & Duarte Road (PM peak hour)
- 25. Highland Avenue & Evergreen Street (AM peak hour)
- 27. Mt. Olive Drive/I-605 Ramps & Huntington Drive (both peak hours

As shown in Table 16 of Appendix J1, during the AM peak hour, all of the westbound analyzed segments on I-210 and I-10 operate at a congested LOS F. During the PM peak hour, both the eastbound and westbound segments on I-210, the eastbound segments on I-10, and the northbound segments on I-605 operate at LOS F. Since this alternative would not add any new trips to the site, it would eliminate the proposed project's significant and unavoidable traffic impacts, including all six intersections and two freeway mainline traffic impacts of the project, identified above.

7.5.15 Tribal Cultural Resources

Under this alternative no ground disturbances would occur. Therefore, no tribal cultural resources impacts would occur. Tribal cultural resources impacts of this alternative would be reduced compared to the proposed

project. However, tribal cultural resources are not a significant and unavoidable impact of the proposed project.

7.5.16 Utilities and Service Systems

The existing campus is served by existing infrastructure and existing utilities and service systems are expected to continue to operate adequately. Due to the increase in land use intensity onsite under the proposed project, it would require improvements and upgrades to existing utilities and service systems, such as establishing a new well for additional water supply source, and upgrading/extending water, wastewater and storm drain pipes and fixtures to tie into off-site connections. The proposed project would also increase demand for natural gas and electricity given the substantial increase in nonresidential development. Therefore, this alternative would reduce impacts to all utility services, including water, wastewater, storm drains, solid waste compared to the proposed project.

7.5.17 Energy

Under this alternative, no demolition of existing buildings or construction of new medical and research facilities would occur. Therefore, energy demand for electricity and natural gas would remain as is. Compared to the proposed project, impacts on energy would be reduced and remain less than significant.

7.5.18 Conclusion

Ability to Reduce Environmental Impacts

As summarized in Table 7-2, *Summary of No Project/No Development Alternative Impacts*, the No Project Alternative would lessen environmental impacts in the areas of air quality, biological resources, cultural resources, geology and soils, GHG emissions, hazards, noise, public services, transportation and traffic, tribal cultural resources, and energy; have greater environmental impacts related to aesthetics, hydrology and water quality,; and have similar impact in the area of land use/planning, population and housing, public services, and recreation. Additionally, this alternative would eliminate the proposed project's significant and unavoidable impacts to GHG emissions, construction noise, and traffic. Therefore, overall this alternative is considered environmentally superior when compared to the proposed project.

Table 7-2 Summary of No Project/No Development Alternative Impacts

Environmental Issue	Potential Significance of Proposed Project's Impact	Potential Significance of Alternative's Impact	Comparison
Aesthetics	Less Than Significant	Less Than Significant	Greater than project
Air Quality	Less Than Significant with Mitigation Measures	Less Than Significant	Less than project
Biological Resources	Less Than Significant with Mitigation Measures	Less Than Significant	Less than project
Cultural Resources	Less Than Significant with Mitigation Measures	Less Than Significant	Less than project
Geology and Soils	Less Than Significant	Less Than Significant	Less than project
Greenhouse Gas Emissions	**Significant and Unavoidable**	Less Than Significant*	Less than project
Hazards and Hazardous Materials	Less Than Significant with Mitigation Measures	Less Than Significant	Less than project
Hydrology and Water Quality	Less Than Significant	Less Than Significant	Greater than project
Land Use and Planning	Less Than Significant	Less Than Significant	Similar to project
Noise	**Significant and Unavoidable**	Less Than Significant*	Less than project
Population and Housing	Less Than Significant	Less Than Significant	Similar to project
Public Services	Less Than Significant	Less Than Significant	Less than project
Recreation	Less Than Significant	Less Than Significant	Similar to project
Transportation and Traffic	**Significant and Unavoidable**	Less Than Significant*	Less than project
Tribal Cultural Resources	Less Than Significant with Mitigation Measures	Less Than Significant	Less than project
Utilities and Service Systems	Less Than Significant with Mitigation Measures	Less Than Significant	Less than project
Energy	Less Than Significant	Less Than Significant	Less than project

* Indicates elimination of a significant and unavoidable impact.

Ability to Achieve Project Objectives

Implementation of the No Project/No Development Alternative would ultimately stop any new development from occurring within in the project site beyond what is already on the ground. Therefore, none of the project objectives would be achieved under this alternative.

The No Project/No Development Alternative would not provide any of the project benefits that would occur with adoption of the Specific Plan, including enhancement of character and design, improved mobility and connectivity, water quality enhancement, creation of place, sustainable development and design, and economic revitalization.

7.6 NO PROJECT/EXISTING GENERAL PLAN ALTERNATIVE

Section 15126.6(e) of the CEQA Guidelines requires that an EIR evaluate and analyze the impacts of the "No-Project" Alternative. When the project is the revision of an existing land use or regulatory plan, policy,

or ongoing operation, the no-project alternative is the continuation of the plan, policy, or operation into the future. Therefore, under the No Project/Existing General Plan Alternative, the current general plan land uses and zoning would remain in effect. All proposed changes to land uses and boundaries in the Campus Plan area would not occur. Development in accordance with the existing zoning would continue to occur, allowing for a total of 2,944,670 square feet of hospital uses and 7,223 employees. This represents an increase of 305,320 total nonresidential square feet and 749 employees compared to the proposed project. Buildout of the existing general plan was calculated based on the assumption that: 1) For Duarte: 1.5 FAR is allowed with a height limit of 75 feet; 50 percent of the site is developable; and the FAR excludes parking structures (2,874,960 sf); 2) For Irwindale, assumed the existing square footage (69,709 sf); and 3) employees prorated based on square feet (see Table 7-1 footnote).

The area of the project site within Duarte (89.5 acres) is designated as Hospital (encompasses the majority of the project site), Single-Family Residential, Medium-Density Residential, High-Density Residential, Research and Development, and Public Facilities in the general plan and zoned H (Hospital), R-1 (One-Family Residential), R-2 (Two-Family Residential), R-4 (Multiple Family Residential High Density), and O (Open Space). The area of the project site within Irwindale (26.5 acres) is designated as Industrial/Business Park (IBP), Open Space/Easements (OSE), and Commercial in the general plan and zoned A-1 (Agricultural), M-1 (Light Manufacturing), and C-2 (Heavy Commercial).

7.6.1 Aesthetics

This alternative would not implement the development standards and design guidelines included in the proposed Specific Plan that are intended to develop an established identity and sense of place and a cohesive and contemporary design character for the campus–including protections for several existing visual resources on the campus, and guidelines requiring installation of public art (see Section 5.1, *Aesthetics*, of this DEIR for further description). This alternative would not include a Cultural Amenity District including the two significant historical structures on campus, the Visitors Center and the House of Hope. Thus, aesthetics impacts of this alternative would be greater than those of the proposed project; impacts would be less than significant in both scenarios.

7.6.2 Air Quality

This alternative would permit development of up to about 305,000 square feet and 749 employees more than the Campus Plan would. Therefore, air quality impacts would be increased in this alternative both from construction and from operation (from transportation; area sources such as consumer products, cleaning supplies, and paints; and natural gas use). Impacts would be less than significant after mitigation for both scenarios.

7.6.3 Biological Impacts

The campus is nearly built out; vacant land onsite—comprising about 10 percent of the site—consists of disturbed area that is periodically cleared and 1.9 acre of ruderal vegetation at the south end of the site. Construction under the existing general plans could occur anywhere on the campus. Biological resources

impacts of the proposed project would be less than significant after implementation of one mitigation measure protecting nesting migratory birds. Direct onsite impacts of this alternative would also be less than significant after implementation of such mitigation measure, and would be similar to those of the proposed project.

Potential indirect impacts of this alternative to the Santa Fe Flood Control Basin would be generally similar to those of the proposed project, and less than significant, as permitted development intensity under this alternative would be about 10 percent greater than that of the proposed project. Overall, impacts would be similar to those of the proposed project.

7.6.4 Cultural Resources

Development under this alternative could alter the historical significance of two buildings on campus that were identified as significant historical resources—the Visitors Center and House of Hope buildings, both in the north-central part of the campus. Under the proposed project no construction is proposed on or near the sites of either building. Thus, historical resources impacts of this alternative could be greater than those of the proposed project.

This alternative would permit development anywhere on the campus; the proposed project would permit development on the whole campus except for the Cultural Amenity District in the north-central part of the site containing the two above-mentioned historical buildings. Thus, potential impacts of this alternative to buried archaeological and paleontological resources would be similar to those of the proposed project, that is, less than significant after mitigation.

7.6.5 Geology and Soils

This alternative would permit development on the entire campus at maximum intensity about 10 percent greater than the proposed project. The proposed project would permit development on nearly the entire campus. Thus, geology and soils impacts of this alternative would be similar to the proposed project and less than significant for both scenarios.

7.6.6 Greenhouse Gas Emissions

GHG emissions impacts of this alternative would be increased compared to those of the proposed project due to the increased permitted development intensity in this alternative, which would result in increased construction emissions and increased operational emissions from both stationary and mobile sources. The three sectors, respecting both the proposed project and this alternative, generating the largest GHG emissions are building energy use, on-road transportation, and solid waste disposal. Therefore, impacts under GHG emissions impacts would be increased in this alternative and significant and unavoidable.

7.6.7 Hazards and Hazardous Materials

The amounts of hazardous materials that could be used and hazardous wastes generated would be slightly increased in this alternative compared to the proposed project due to the increased development intensity.

The types and severities of hazards involved (chemical hazards, biohazards, and radiological hazards) would be similar in both scenarios. Overall, hazards and hazardous materials would be slightly greater for this alternative and would be less than significant after mitigation for both scenarios.

7.6.8 Hydrology and Water Quality

Hydrology and water quality impacts would be greater for this alternative compared to the proposed project. While the development footprints and types of water contaminants would be similar, the proposed project would implement a comprehensive stormwater runoff program. In comparison, this alternative may implement piecemeal stormwater improvements on a project-by-project basis. Thus, impacts would be greater under this scenario, but would remain less than significant by complying with Los Angeles County Department of Public Works and stormwater pollution prevent plan (SWPPP) requirements.

7.6.9 Land Use and Planning

Land use impacts of this alternative would be greater than those of the proposed project. In this alternative, development onsite would conform with the general plans and zoning codes of the cities of Duarte and Irwindale and would not require any general plan amendments and zone changes. However, development restrictions imposed on City of Hope under the proposed project provide a substantially greater amount of regulation on the campus than under existing zoning. Thus, impacts would be greater than the proposed project although remain less than significant.

7.6.10 Noise

Noise impacts of this alternative would be slightly greater than those of the proposed project due to the increases in permitted building intensity and workers. Thus, construction noise; operational noise from stationary sources such as HVAC systems, loading docks, parking lot activities; and operational vehicle noise would all be increased somewhat by this alternative. Construction noise impacts would be significant and unavoidable in both scenarios. Operational noise impacts would be less than significant in both scenarios.

7.6.11 Population and Housing

The proposed increase in employment onsite under the proposed project would not be an adverse impact, as the jobs-housing ratios for the City of Duarte and the San Gabriel Valley are currently balanced—that is, between 1.3 and 1.7—and would remain so under proposed project buildout. The net increase in employment onsite under this alternative compared to the proposed project—749 workers—would not cause an adverse impact. The proposed project could displace up to 10 residences; there are sufficient vacant residences in the project region to absorb any displaced residents. The residences onsite are in an area designated for residential uses in the City of Duarte General Plan; thus, no displacement of onsite housing would be required under this alternative for General Plan conformance. The proposed project does not propose development of new residences. This analysis assumes that land use onsite under this alternative would continue to be focused on health care and research. Overall, population and housing impacts would be similar and less than significant under the two scenarios.

7.6.12 Public Services

This alternative could generate slightly increased demands fire and police services compared to the proposed project due to the increases in permitted development intensity and workers. This alternative would not affect demands for schools, parks, and libraries, as demands for those facilities are generated by the populations in the facilities' service areas, and this alternative is not expected to increase population onsite. Public services impacts would be slightly increased by this alternative and would be less than significant in both scenarios.

7.6.13 Recreation

This alternative would not affect demands for parkland compared to the proposed project, as this alternative would not increase population onsite or in the project region. Recreation impacts would be similar, and less than significant, in both scenarios.

7.6.14 Transportation and Traffic

Transportation impacts of this alternative would be increased compared to the proposed project due to the increase of 749 workers, or about 26 percent of the net increase of approximately 2,841 jobs that would be generated by the proposed project; and by the increased numbers of patients and visitors generated by the increase of about 305,000 square feet in this alternative compared to the proposed project. This alternative would exacerbate significant and unavoidable traffic impacts, including 3 intersection impacts and two freeway mainlines. Impacts would be significant and unavoidable for the proposed project and this alternative.

7.6.15 Tribal Cultural Resources

Impacts to tribal cultural resources would be similar for this alternative as for the proposed project, as the development footprint would be similar—and less than significant—for the two scenarios.

7.6.16 Utilities and Service Systems

Utility demands onsite are proportional to the service population, that is, the combined numbers of workers, patients, and visitors. Utilities and service system impacts would increase under this alternative due to the increases in building area and workers compared to the proposed project.

7.6.17 Energy

This alternative would allow approximately 305,320 additional square feet of medical and research use and increase population and employment by 1,086 and 749, respectively. This would increase energy demand for electricity and natural gas during construction and operational activities. Although impacts would remain less than significant, impacts would be greater under this alternative compared to that of the proposed project.

7.6.18 Conclusion

Ability to Reduce Environmental Impacts

As summarized in Table 7-3, *Summary of No Project/Existing General Plan Alternative Impacts*, the No Project Alternative would have greater environmental impacts related to aesthetics, air quality, GHG emissions, hazards and hazardous materials, hydrology and water quality, land use and planning, noise, public services, transportation and traffic, utilities and service systems, and energy; and have similar impact in the areas of biological resources, cultural resources, geology and soils, population and housing, recreation, and tribal cultural resources. Notably, this alternative would result in a new significant and unavoidable impact to GHG emissions and would still have significant and unavoidable impacts to construction noise, traffic and water supply. Therefore, overall this alternative is considered environmentally inferior when compared to the proposed project.

Table 7-3 Summary of No Project/Existing General Plan Alternative Impacts

Environmental Issue	Potential Significance of Proposed Project's Impact	Potential Significance of Alternative's Impact	Comparison
Aesthetics	Less Than Significant	Less than Significant	Greater than project
Air Quality	Less Than Significant with Mitigation Measures	Less Than Significant with Mitigation Measures	Greater than project
Biological Resources	Less Than Significant with Mitigation Measures	Less Than Significant with Mitigation Measures	Similar to project
Cultural Resources	Less Than Significant with Mitigation Measures	Less Than Significant with Mitigation Measures	Similar to project
Geology and Soils	Less Than Significant	Less than Significant	Similar to project
Greenhouse Gas Emissions	**Significant and Unavoidable**	**Significant and Unavoidable**	Greater than project
Hazards and Hazardous Materials	Less Than Significant with Mitigation Measures	Less Than Significant with Mitigation Measures	Greater than project
Hydrology and Water Quality	Less Than Significant	Less than Significant	Greater than project
Land Use and Planning	Less Than Significant	Less than Significant	Greater than project
Noise	**Significant and Unavoidable**	**Significant and Unavoidable**	Greater than project
Population and Housing	Less Than Significant	Less than Significant	Similar to project
Public Services	Less Than Significant	Less than Significant	Greater than project
Recreation	Less Than Significant	Less than Significant	Similar to project
Transportation and Traffic	**Significant and Unavoidable**	**Significant and Unavoidable**	Greater than project
Tribal Cultural Resources	Less Than Significant with Mitigation Measures	Less Than Significant with Mitigation Measures	Similar to project
Utilities and Service Systems	Less Than Significant with Mitigation Measures	Less Than Significant with Mitigation Measures	Greater than project
Energy	Less Than Significant	Less Than Significant	Greater than project

Ability to Achieve Project Objectives

Implementation of this alternative would not achieve objective 5 (a modern, cohesive and contemporary design complemented by landscaping and public art), 11 (proximate parking), and 13 (wayfinding). Implementation of the No Project/Existing General Plan Alternative would achieve project objectives 1 through 3 involving campus development, outpatient health care capacity, employment generation, and city revenues (see Section 7.6). Implementation of this alternative would partially or wholly achieve objectives 4 (open space), 6 (modernize/replace buildings), 7 and 8 (public transit and active transportation on and off campus), 9 and 10 (sustainability regarding GHG emissions, water- and energy-efficient designs, and minimizing solid waste generation), and 12 (expansion of infrastructure). Objectives 5, 7, 8, 9, 10, and 11 are all consistent with the existing City of Duarte General Plan, as described in Section 5.9, Land Use, of this DEIR.

7.7 REDUCED INTENSITY ALTERNATIVE

This Reduced Intensity Alternative was selected to avoid or substantially lessen significant unavoidable impacts related to GHG emissions, noise (construction), and traffic. In order to eliminate a significant and unavoidable transportation impact an approximate 25 percent reduction in daily trips would be required, a net increase of 3,565 trips. Based on the trip generation rates established in the traffic analysis (see Appendix J1), the campus population generates 1.85 daily trips per person, which translates to an allowable net increase of 1,926 population (an approximate 35 percent reduction in population compared to the proposed project) (see Table 7-1). This reduction in trips and population would result in a proportional decrease in building square footage of 15 to 25 percent, which would occur proportionally across the campus. This reduction in building square footage and overall intensity would also reduce impacts related to GHG emissions and noise. Implementation of the Specific Plan provisions would still apply.

7.7.1 Aesthetics

Impacts associated with the Reduced Intensity Alternative would be similar to the proposed project because it would result in a similar development area and would require compliance with the provisions of the proposed Campus Plan. Although buildout intensity would be reduced, heights, setbacks, building forms, and other development standards and design guidelines would still apply. Therefore, impacts would be less than significant, similar to the proposed project.

7.7.2 Air Quality

The Reduced Intensity Alternative would reduce regional air quality impacts by approximately 15 to 25 percent. With approximately 395,902 fewer square feet of building area, this alternative would reduce regional construction emissions by approximately 15 to 25 percent, although it was determined that the project's daily construction emissions did not exceed SCAQMD's thresholds and mitigation would reduce construction-related $PM_{2.5}$ impacts to less than significant.

The maximum daily operational phase regional emissions would also be reduced by approximately 15 to 25 percent, due to the 25 percent reduction in vehicle trips and associated vehicle miles traveled. However,

project operational impacts would not exceed SCAQMD's threshold levels. This alternative would slightly reduce the air quality impacts which would be less than significant after mitigation in each scenario.

7.7.3 Biological Impacts

The Reduced Intensity Alternative would result in similar impacts to biological resources as the proposed project (less than significant after mitigation) since the development area would be the same. The reduction in development intensity would reduce indirect noise impacts to potential sensitive resources in areas surrounding the project site. Indirect impacts would be slightly reduced, although indirect impacts would be mitigated to less than significant under the proposed project.

7.7.4 Cultural Resources

Similar to the proposed project, implementation of the Reduced Intensity Alternative would cover the same development area and could uncover cultural resources during grading activities or result in impacts to historical resources. Thus, impacts would be the same as the proposed project and be reduced to less than significant upon implementation of mitigation measures.

7.7.5 Geology and Soils

Under this alternative, like the proposed project, existing buildings would be removed and graded and required to comply with the most recent building and seismic codes and regulations. Geology and soils impacts of this alternative would be less than significant, similar to the proposed project.

7.7.6 Greenhouse Gas Emissions

The Reduced Intensity Alternative would result in a reduction of nonresidential square footage and would decrease vehicle trips compared to the proposed project. Therefore, this alternative would result in a reduction in construction and operational GHG emissions. As with the proposed project, Mitigation Measures GHG-1 and GHG-2 would reduce GHG emissions. However, impacts related to GHG emissions would remain significant and unavoidable, since additional statewide measures would be necessary to reduce GHG emissions to meet the long-term GHG reduction goals under Executive Order S-03-05 (80 percent of 1990 levels by 2050) and Executive Order B-30-15 (identify goal to reduce GHG emissions for 2030). Currently, there is no plan past 2020 that achieves the long-term GHG reduction goal established under Executive Order S-03-05 or the new Executive Order B-30-15. As identified by the California Council on Science and Technology, the state cannot meet the 2050 goal without major advancements in technology (CCST 2012). Since no additional statewide measures are currently available, impacts would remain significant and unavoidable.

7.7.7 Hazards and Hazardous Materials

Similar to the proposed project, buildout of the Reduced Intensity Alternative would involve the use of hazardous materials during construction and could expose construction workers to hazardous materials during demolition from asbestos-containing materials or grading from contaminated soils. However,

construction materials such as fuels, paints, and solvents would be used in limited quantities and would not pose a significant safety hazard. Any remediation and or demolition would be required to comply with the appropriate state standards, guidelines, and responsible agencies.

Similar to the proposed project, new development would increase patient care and research land uses and increase the amount of hazardous materials that would be used at City of Hope. Similar to the proposed project, this alternative would be required to comply with City of Hope plans, policies, and procedures governing the use, storage, and disposal of hazardous wastes and hazardous materials, including emergency operations plan, safe handling of hazardous medications and waste, spill management assistance response team, receiving and handling radioactive materials, and the radiation safety manual. City of Hope operations under this alternative would still be subject to the regulations and guidelines of federal, state, and local agencies for the use, handling, storage, and transport of hazardous materials. Impacts would be less than significant after mitigation for this alternative and for the proposed project.

7.7.8 Hydrology and Water Quality

The project site is already developed and runoff is conveyed by surface streets or local storm drains to regional storm drainage facilities. Like the proposed project, this alternative is anticipated to reduce peak flow rates by implementing low-impact development features and providing a treatment/infiltration system that reduces runoff volumes conveyed to the drainage system. Therefore, it is anticipated that this alternative and the proposed project would have a beneficial impact on area hydrology and water quality at completion. Similar to the proposed project, implementation of this alternative would result in compliance with the National Pollutant Discharge Elimination System Construction General Permit requirements and implementation of various BMPs to reduce water quality impacts. Therefore, hydrology and water quality impacts of this alternative would be similar to the proposed project and would not be significant.

7.7.9 Land Use and Planning

The Reduced Intensity Alternative would allow for a similar mix of land uses with less development intensity than the proposed project. This alternative would require amendments to the general plans and zoning codes of Duarte and Irwindale. Similar to the proposed project, this alternative would be consistent with the goals and policies of the cities' general plan and the Southern California Association of Governments' (SCAG's) 2016-2040 Regional Transportation Plan / Sustainable Communities Strategy (RTP/SCS) and result in similar less than significant impacts as the proposed project.

7.7.10 Noise

Reduction in building development intensity would slightly reduce the length of project-related construction noise impacts, but not peak construction noise volumes. Construction would also occur over an extended length of time (several years). Due to the peak construction noise volumes and length of construction activities this alternative would be less than the proposed project, but remain significant and unavoidable.

The reduction in vehicle trips would slightly reduce the operational traffic-related noise impacts. However, no significant operational-related noise impacts were identified for the proposed project. Noise impacts of this alternative would be reduced compared to the proposed project and less than significant.

7.7.11 Population and Housing

Under the Reduced Intensity Alternative, buildout would result in an approximate 35 percent reduction in population on site, including visitors, employees, and patients. Under this alternative, the population, housing, and employment at buildout would be consistent with the cities' growth projections identified in SCAG's RTP/SCS. However, growth associated with the proposed project was also within growth projections. The Reduced Intensity Alternative would provide fewer regional employment opportunities and activity center in a high quality transit area. Overall, impacts to population and housing would remain less than significant with this alternative and similar to the proposed project.

7.7.12 Public Services

Like the proposed project, this alternative would comply with the California Fire Code, and implementation of existing regulations and standard conditions would ensure that impacts related to fire service are not substantially different from that of the proposed project. As part of the proposed project, public service providers were contacted to determine whether development of the proposed Campus Plan would adversely impact existing and future planned levels of service and resources. Police, fire, school and library service providers determined the project would not result in any adverse impacts to their services and resources. As with the proposed project, public service impacts would be less than significant.

7.7.13 Recreation

Under the Reduced Intensity Alternative, the demands on existing recreational facilities would be slighting reduced due to the reduction in overall population (i.e. employees, patients, and visitors). However, the proposed project's impacts on parks and recreational facilities were determined to be less than significant. Overall, impacts to parks and recreational facilities would be similarly less than significant under this alternative compared to the proposed project.

7.7.14 Transportation and Traffic

Under this alternative, vehicle trips would be reduced by 25 percent as compared to the proposed project. This would reduce the project's traffic impact at two intersections under the existing plus project scenario, nine intersections under the future plus project scenario, and two freeway mainline segments. The proposed project would result in a significant and unavoidable impact at Buena Vista Street and Evergreen Street (#13) with a 77 percent increase in net population, which would be eliminated under this alternative. Therefore, operational traffic impacts would be less under this alternative compared to the proposed project; however, significant and unavoidable traffic impacts would remain.

7.7.15 Tribal Cultural Resources

Similar to the proposed project, this alternative would replace existing buildings with new buildings and result in ground disturbances due to grading. Therefore, potential tribal cultural resources impacts would be similar to the proposed project, that is, less than significant after mitigation

7.7.16 Utilities and Service Systems

Under this alternative, building square footage would be reduced by 15 percent and there would be approximately 35 percent fewer employees under this alternative compared to the proposed project. Therefore, this alternative would generate less wastewater and consume less water. The solid waste, electricity, and gas demands would also be reduced. Utilities and service systems impacts of this impact would be reduced compared to the proposed project and less than significant after mitigation.

7.7.17 Energy

Under this alternative, allowable building square footage would be reduced and the associated energy demand would also be reduced. Construction and operational activities associated with this alternative would have reduced energy demand. Impacts would remain less than significant.

7.7.18 Conclusion

Ability to Reduce Environmental Impacts

As summarized in Table 7-4, *Summary of Reduced Intensity Alternative Impacts*, the Reduced Intensity Alternative would lessen environmental impacts in the areas of air quality, biological resources, GHG emissions, noise, transportation and traffic, utilities and service systems, and energy; and have similar impacts in the area of aesthetics, cultural resources, geology and soils, hazards and hazardous materials, hydrology and water quality, land use and planning, population and housing, public services, recreation, and tribal cultural resources. One significant and unavoidable traffic impact would be eliminated. However, significant and unavoidable impacts to GHG emissions, construction noise, and traffic would remain. Overall, this alternative is considered environmentally superior when compared to the proposed project.

7. Alternatives to the Proposed Project

Table 7-4 Summary of Reduced Intensity Alternative Impacts

Environmental Issue	Potential Significance of Proposed Project's Impact	Potential Significance of Alternative's Impact	Comparison
Aesthetics	Less Than Significant	Less Than Significant	Similar to the project
Air Quality	Less Than Significant with Mitigation Measures	Less Than Significant with Mitigation Measures	Less than project
Biological Resources	Less Than Significant with Mitigation Measures	Less Than Significant with Mitigation Measures	Less than project
Cultural Resources	Less Than Significant with Mitigation Measures	Less Than Significant with Mitigation Measures	Similar to the project
Geology and Soils	Less Than Significant	Less Than Significant	Similar to the project
Greenhouse Gas Emissions	**Significant and Unavoidable**	**Significant and Unavoidable**	Less than project
Hazards and Hazardous Materials	Less Than Significant with Mitigation Measures	Less Than Significant with Mitigation Measures	Similar to the project
Hydrology and Water Quality	Less Than Significant	Less Than Significant	Similar to the project
Land Use and Planning	Less Than Significant	Less Than Significant	Similar to the project
Noise	**Significant and Unavoidable**	**Significant and Unavoidable**	Less than project
Population and Housing	Less Than Significant	Less Than Significant	Similar to the project
Public Services	Less Than Significant	Less Than Significant	Similar to the project
Recreation	Less Than Significant	Less Than Significant	Similar to the project
Transportation and Traffic	**Significant and Unavoidable**	**Significant and Unavoidable***	Less than project
Tribal Cultural Resources	Less Than Significant with Mitigation Measures	Less Than Significant with Mitigation Measures	Similar to the project
Utilities and Service Systems	Less Than Significant with Mitigation Measures	Less Than Significant with Mitigation Measures	Less than project
Energy	Less Than Significant	Less Than Significant	Less than project

* Indicates elimination of one significant and unavoidable impact; Buena Vista Street and Evergreen Street (#13).

Ability to Achieve Project Objectives

Under the Reduced Intensity Alternative, most of the proposed project's objectives would be achieved but to a lesser extent as compared to the proposed project. For example, this alternative would allow for the flexible, long-term development and enhancement of the City of Hope campus; facilitate the replacement/enhancement of existing buildings and support facilities; develop enhanced and expanded open space on the campus; provide a modern, cohesive and contemporary design; modernize/replace outdated buildings; reinforce public investment in and encourage use of public transit; improve and streamline multimodal transportation and access throughout the campus; and incorporate sustainable design elements to the maximum extent possible throughout the campus (objectives 1, 2, 5, 6, 7, 8, 9 and 11). However, these objectives would be achieved to a lesser extent given the 15-25 percent reduction in development intensity and 35 percent reduction in employees and population on site. For example, this alternative would not maximize the creation of construction jobs (objective 3) or replace/enhance as many existing building and facilities that may need renovations due to aging infrastructure (objective 6). The reduced development potential may also limit the streamlining efforts for multimodal transportation and access to the campus and

may not encourage as much public transit use with less development on the campus (objective 8). The reduced development would not incorporate as much sustainable design (objective 10).

Additionally, with the reduction in development intensity, this alternative would not be able to maximize the creation of construction and new permanent jobs; or accommodate the projected increase in regional demand for outpatient services through 2035 (objectives 3, 4 and 10) to the proposed project's extent.

7.8 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

CEQA requires a lead agency to identify the "environmentally superior alternative" and, in cases where the "No Project" Alternative is environmentally superior to the proposed project, the environmentally superior development alternative must be identified. Table 7-5 summarizes the impacts for the alternatives and how they compare to the proposed project. The No Project/No Development Alternative is environmentally superior to the proposed project because it results in the elimination of three significant unavoidable adverse impacts: GHG emissions, Noise (Construction), and Traffic.

Since the environmentally superior alternative is the No Project/No Development Alternative, a development alternative was selected, as required by CEQA. The Reduced Intensity Alternative is environmentally superior to the proposed project because it results in the greatest reductions to the significant and unavoidable project impacts.

In summary, the Reduced Intensity Alternative would lessen environmental impacts in the areas of air quality, biological resources, GHG emissions, noise, transportation and traffic, and utilities and service systems; and have similar impacts in the area of aesthetics, cultural resources, geology and soils, hazards and hazardous materials, hydrology and water quality, land use and planning, population and housing, public services, recreation, and tribal cultural resources. Although significant and unavoidable impacts to GHG emissions, construction noise, and traffic, this alternative overall is considered environmentally superior when compared to the proposed project.

Under the Reduced Intensity Alternative, most of the proposed project's objectives would be achieved but to a lesser extent as compared to the proposed project. For example, this alternative would allow for the flexible, long-term development and enhancement of the City of Hope campus; facilitate the replacement/enhancement of existing buildings and support facilities; develop enhanced and expanded open space on the campus; provide a modern, cohesive and contemporary design; modernize/replace outdated buildings; reinforce public investment in and encourage use of public transit; improve and streamline multimodal transportation and access throughout the campus; and incorporate sustainable design elements to the maximum extent possible throughout the campus (objectives 1, 2, 5, 6, 7, 8, 9 and 11). However, these objectives would be achieved to a lesser extent given the 15-25 percent reduction in development intensity and 35 percent reduction in employees and population on site. For example, this alternative would not maximize the creation of construction jobs (objective 3) or replace/enhance as many existing building and facilities that may need renovations due to aging infrastructure (objective 6). The reduced development potential may also limit the streamlining efforts for multimodal transportation and access to the campus and

may not encourage as much public transit use with less development on the campus (objective 8). The reduced development would not incorporate as much sustainable design (objective 10).

Additionally, with the reduction in development intensity, this alternative would not be able to maximize the creation of construction and new permanent jobs; or accommodate the projected increase in regional demand for outpatient services through 2035 (objectives 3, 4 and 10) to the proposed project's extent.

Table 7-5 Summary of Impacts of Alternatives Compared to the Proposed Project

Topic	Proposed Project	No Project/No Development Alternative	No Project/Existing General Plan Alternative	Reduced Intensity Alternative
Aesthetics	LTS	Greater than project LTS	Greater than project LTS	Similar to the project LTS
Air Quality	LTS/M	Less than project LTS	Greater than project LTS/M	Less than project LTS/M
Biological Resources	LTS/M	Less than project LTS	Similar to project LTS/M	Less than project LTS/M
Cultural Resources	LTS/M	Less than project LTS	Similar to project LTS/M	Similar to the project LTS/M
Geology and Soils	LTS	Less than project LTS	Similar to project LTS	Similar to the project LTS
Greenhouse Gas Emissions	**SU**	Less than project* LTS	Greater than project **SU**	Less than project **SU**
Hazards and Hazardous Materials	LTS/M	Less than project LTS	Greater than project LTS/M	Similar to the project LTS/M
Hydrology and Water Quality	LTS	Greater than project LTS	Greater than project LTS	Similar to the project LTS
Land Use and Planning	LTS	Similar to project LTS	Greater than project LTS	Similar to the project LTS
Noise	**SU**	Less than project* LTS	Greater than project **SU**	Less than project **SU**
Population and Housing	LTS	Similar to project LTS	Similar to project LTS	Similar to the project LTS
Public Services	LTS	Less than project LTS	Greater than project LTS	Similar to the project LTS
Recreation	LTS	Similar to project LTS	Similar to project LTS	Similar to the project LTS
Transportation and Traffic	**SU**	Less than project* LTS	Greater than project **SU**	Less than project** **SU**
Tribal Cultural Resources	LTS/M	Less than project LTS	Similar to project LTS/M	Similar to the project LTS/M
Utilities and Service Systems	LTS/M	Less than project LTS	Greater than project LTS/M	Less than project LTS/M
Energy	LTS	Less than project LTS	Greater than project LTS	Less than project LTS

Notes: LTS: Less than Significant; LTS/M: Less than Significant with Mitigation Incorporated; SU: Significant and Unavoidable
* Indicates elimination of a significant and unavoidable impact.
** Indicates elimination of one significant and unavoidable traffic impact; Buena Vista Street and Evergreen Street (#13).