# 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 objectives have been established for the proposed project and will aid decision makers in their review of the project, the project alternatives, and associated environmental impacts:

- Provide for the on-going development of the IBC consistent with the City's General Plan Urban and Industrial land use designations and the City's adopted Vision Plan Goals, which are as follows:
  - Protect the existing job base.
  - Develop mixed-use cores.
  - Provide transportation, pedestrian, and visual connectivity.
  - Create usable open space.
  - Develop safe, well-designed neighborhoods.
- Provide additional housing opportunities in proximity to existing employment centers, consistent with the City's General Plan Land Use and Housing Elements.
- Provide residential uses in close proximity to existing employment centers, retail and entertainment uses, and transportation facilities consistent with the goals of the Southern California Association of Governments' Regional Comprehensive Plan and Compass Blueprint.
- Provide residential development in areas of the IBC where adequate supporting uses and public services and facilities are provided, consistent with the City's General Plan Land Use Element.
- Contribute to the development of mixed-use cores by incorporating residential, office and commercial/retail uses into existing areas of nearby community facilities, retail goods and services, and restaurants to enhance the IBC's overall mixed-use urban character and reduce vehicle miles travelled within the South Coast Air Basin (SoCAB).
- Provide neighborhood level amenities to serve the level of mixed-use development envisioned by the City's General Plan and IBC Vision Plan.
- Incorporate sustainable provisions into implementation of the IBC Vision Plan.
- Identify and pursue opportunities for open space areas that serve the recreational needs of IBC residents and employees.

# 7.2 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 (DEIR).

### 7.2.1 Alternative Sites

CEQA requires that the discussion of alternatives focus on alternatives to the project or its location, which 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. (CEQA Guidelines Section 15126.6(f)(2)(A)). In general, any development of the size and type proposed by the Project would have substantially the same short-term impacts on air quality and noise. The proposed project did not result in any significant unavoidable impacts related to aesthetics, agricultural resources, biological resources, cultural resources, geology/soils, hazards and hazardous materials, hydrology/water quality, land use and planning, mineral resources, population and housing, public services, recreation, utilities and service systems, or global climate change. Given the sites' central location near major employment centers and surrounded by existing infrastructure, it is unlikely that any alternative site would have lesser impacts on air quality, population and housing, land use/planning, traffic, and utilities service systems, and global climate change.

Where a previous document has sufficiently analyzed a range of reasonable alternative locations and environmental impacts for projects with the same basic purpose, the lead agency should review the previous document. The EIR may rely on the previous document to help it assess the feasibility of potential project alternatives to the extent the circumstances remain substantially the same as they relate to the alternative. (CEQA Guidelines Section 15126.6(f)(2)(C)).

The Open Space Initiative and subsequent GPA 16 preserve important conservation and open space resources through a program that consolidates large, contiguous open space areas under public ownership by permitting development to occur in other areas of the City deemed to be of lesser open space value. As a result, the only remaining alternative sites within the jurisdiction of the City are already planned for development, such as PAs 1, 18, and 39 which are entitled for residential uses, or consist of existing or future open space preservation areas (i.e., Implementation Districts), which GPA 16 determined were most appropriate for preservation. Overall, development of these preservation areas would result in significantly greater environmental impacts than the proposed project and would therefore not meet the CEQA criteria for an alternatives analysis. In addition, most of the land within the Implementation Districts are also subject to the Natural Communities Conservation Plan (NCCP)/Habitat Conservation Plan (HCP) for the Central-Coastal Subregion and are not otherwise available for development.

As the California Supreme Court indicated in Citizens of Goleta Valley v. Board of Supervisors, 52 Cal. 3d 553 (1990):

The general plan has been aptly described as the "constitution for all future developments" within the city or county..." [T] he propriety of virtually any local decision affecting land use and development depends upon consistency with the applicable general plan and its elements."... "To be sure, the general plan is not immutable, far from it. But it may not be trifled with lightly, as the limitation on the number of amendments to the general plan in any calendar year attests." (Goleta, at 570-571)

... Moreover, in some circumstances, an EIR may consider alternatives requiring a site-specific amendment of the general plan. However, an EIR is not ordinarily an occasion for the reconsideration or overhaul of fundamental land use policy. (Goleta, at 573)

Consistent with the Supreme Court's interpretation of the role of the General Plan in framing CEQA alternatives analysis, and in consideration of the Open Space Initiative and subsequent GPA 16, and the NCCP/HCP for the Central-Coastal Subregion, no alternative sites within the jurisdiction of the City are considered to be feasible alternatives to the proposed Project, since they would not reduce the environmental impacts associated with the project. In addition, the mixed-use opportunities within the IBC are directly related to its location adjacent to major transportation facilities, including the I-405, SR-55, and John Wayne Airport. In addition, the IBC is currently home to approximately 90,000 jobs, making it one of the largest employment centers in southern California. As a result, the development of high-density residential units in another location would not offer the same reductions in vehicle miles travelled, and the



associated environmental benefits of reduced air quality, noise, and global climate change impacts. Therefore, there are no available alternative sites which could accommodate the proposed project.

# 7.2.2 No-Project/No Development Alternative

The No Project/No Development Alternative would prohibit all new development, restricting urban growth to its current extent. This alternative assumes that no additional development and growth within the Planning Area would occur beyond what is already approved. Buildout of the IBC under this alternative would consist of 9,446 dwelling units and 42,771,000 square feet of non-residential intensity. Total population in the IBC at buildout would be approximately 12,280 residents and employment would remain at existing levels, which is approximately 90,000 jobs. Some minor population and employment growth could occur within the IBC, to the extent that existing residential units or buildings and projects that have already been approved could accommodate additional growth. None of the impacts of the proposed project would result. Future conditions within the IBC, except for the impacts of regional growth, would generally be the same as existing conditions, which were described in the environmental setting section for each environmental topic.

Development under this alternative would not expand mixed use development in the IBC and improve the jobs/housing balance of the region potentially reducing the number of vehicle miles travelled in the South Coast Air Basin. Further, this alternative would not result in the construction of transportation improvements identified in the proposed project. However, regional traffic growth would still occur, resulting in the potential for traffic impacts that would otherwise be mitigated by the proposed project. It should also be noted that this Alternative would not achieve any of the objectives established for the project. In addition, this Alternative eliminates the existing entitlements and allowable development intensity for the IBC and is therefore, not considered feasible. As a result, this Alternative has been rejected from further consideration.

#### 7.2.3 Limited Residential Development Alternative

As described in Section 5.2, the proposed project would result in significant long-term air quality impacts based on exceedance of SCAQMD's threshold criteria. The purpose of the Limited Residential Development Alternative is to avoid potential long-term operational air quality impacts. Using the URBEMIS 2007 Air Quality Computer Model, it was determined that up to 650 condominium/apartment units could be developed in the IBC without exceeding SCAQMD's threshold criteria. No additional nonresidential development could occur under this scenario.

Development under this alternative would not expand mixed-use development in the IBC and would improve the jobs/housing balance of the region, potentially reducing the number of vehicle miles travelled in the South Coast Air Basin. Further, this alternative would not result in the construction of transportation improvements identified in the proposed project. However, regional traffic growth would still occur, resulting in the potential for traffic impacts that would otherwise be mitigated by the proposed project. It should also be noted that this Alternative would not achieve any of the objectives established for the project. In particular, this Alternative would likely preclude the City from achieving their Regional Housing Needs Assessment (RHNA) allocation of 35,660 units for the 2006 to 2014 planning period. The City's proposed Housing Element has identified the IBC as an area for potential very-low, low, and moderate income units, which would be precluded by this Alternative. In addition, this Alternative eliminates the existing entitlements and allowable development intensity for the IBC and is therefore, not considered feasible. As a result, this Alternative has been rejected from further consideration.

#### 7.2.4 Reduced Urban Neighborhood Alternative

The previously released Draft EIR included a Reduced Urban Neighborhood Alternative. Under this alternative, the overall intensity as measured under the current zoning code would remain the same as the proposed project; however, the potential 4,158 residential units would only be located north of I-405. Additionally, all of the 2,587 pending units—except for Martin Street Condominiums project and Irvine Technology Center project, which total 1,082 units—would be located north of I-405. The objective of this Alternative is to reduce potential hazards and hazardous materials impacts

and land use and planning impacts. Since release of the previous Draft EIR, the City of Irvine has revised the proposed project so that the previous Reduced Urban Neighborhood Alternative is now the proposed project as analyzed in this Recirculated Draft EIR. As a result, this alternative has been removed from the alternatives analysis.

### 7.3 ALTERNATIVES SELECTED FOR FURTHER ANALYSIS

Based on the criteria listed above, the following four 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/Existing General Plan Alternative
- Reduced Intensity Alternative
- Increased Residential (20,000 du) Alternative
- Increased Residential (25,000 du) Alternative

The increased residential alternatives were developed so that overall development intensity within the IBC would not be increased. As a result, the increase in residential units was accompanied by a corresponding decrease in non-residential intensity. This was calculated using a conversion factor of 572 square feet of non-residential intensity per unit to determine the non-residential buildout intensity. Also, the increased residential alternatives include the maximum allowable density bonus units pursuant to State law.

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 those 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 air quality, noise, and traffic were found to be significant and unavoidable. Section 7.9 identifies the Environmentally Superior Alternative.

The proposed project is analyzed in detail in Section 5 of this DEIR.



# 7. Alternatives to the Proposed Project

Table 7-1         Summary of Development Alternatives						
Alternative	Description	Basis for Selection and Summary of Analysis				
PROPOSED PROJECT	<u>-</u>	•				
	<ul> <li>17,038 DU (7,583 additional) including density bonus units</li> <li>48,787,662 sf of non-residential (6,016,662 sf remaining buildout potential)</li> <li>3,478 hotel rooms</li> <li>Various neighborhood level amenities throughout the IBC including sidewalks, trails, pedestrian bridges, Creekwalk, etc.</li> <li>Generates a total of 697,308 average daily trips (ADT)</li> </ul>					
PROJECT ALTERNATIVES						
1) No Project/Existing General Plan Alternative	<ul> <li>Existing general plan and zoning designations would remain</li> <li>9,455 dwelling units including density bonus units</li> <li>53,125,389 sf of non-residential (10,354,389 sf remaining buildout potential)</li> <li>3,106 hotel rooms</li> <li>Only includes traffic improvements identified in the existing IBC fee program</li> <li>Does not include various neighborhood level amenities since there would be no funding mechanism</li> <li>Generates a total of 672,309 average daily trips (ADT)</li> </ul>	<ul> <li>Required by CEQA</li> <li>Avoids need for general plan amendment and zone change</li> <li>Reduces potential conflicts with existing key businesses</li> <li>Impedes City's ability to meet RHNA allocation</li> <li>Does not meet the project objectives.</li> </ul>				
2) Reduced Intensity Alternative	<ul> <li>Reduces proposed residential units to only include approved and pending projects</li> <li>Reduces allowable development potential within the IBC</li> <li>11,705 dwelling units (2,250 additional) including density bonus units</li> <li>48,787,662 sf of non-residential (6,016,662 sf remaining buildout potential)</li> <li>3,478 hotel rooms</li> <li>Generates a total of 666,057 average daily trips (ADT)</li> </ul>	<ul> <li>Reduces significant traffic, air quality, land use, and noise impacts</li> <li>Does not avoid significant environmental impacts</li> <li>Meets most of the project objectives but not to the degree of the proposed project</li> </ul>				
3) Increased Residential (20,000 du) Alternative	<ul> <li>Increases residential and reduces non-residential intensity</li> <li>20,000 DU (10,545 additional) including density bonus units</li> <li>46,675,906 sf of non-residential (3,904,906 sf remaining buildout potential)</li> <li>3,478 hotel rooms</li> <li>Generates a total of 688,962 average daily trips (ADT)</li> </ul>	<ul> <li>Reduces vehicle miles travelled and associated air quality impacts</li> <li>Does not avoid significant environmental impacts</li> <li>Meets most of the project objectives</li> </ul>				
4) Increased Residential (25,000 du) Alternative	<ul> <li>Increases residential and reduces non-residential intensity</li> <li>25,000 DU (15,545 additional) including density</li> </ul>	<ul> <li>Reduces vehicle miles travelled and associated air quality impacts</li> <li>Does not avoid significant environmental</li> </ul>				

Table 7-1         Summary of Development Alternatives						
Alternative	Description	Basis for Selection and Summary of Analysis				
	<ul> <li>bonus units</li> <li>43,897,662 sf of non-residential (1,126,662 sf remaining buildout potential)</li> <li>3,478 hotel rooms</li> <li>Generates a total of 703,540 average daily trips (ADT)</li> </ul>	<ul> <li>impacts</li> <li>Meets most of the project objectives</li> </ul>				

Trip generation for each alternative was generated by the Irvine Transportation Area Model (ITAM).

The increased residential alternatives use a conversion factor of 572 square feet of non-residential intensity per unit to determine the non-residential buildout intensity.

<sup>3</sup> The increased residential alternatives include the maximum allowable density bonus units pursuant to State law.

#### 7.3.1 Alternatives Comparison

The following statistical analysis provides a summary of general socioeconomic build-out projections determined by the five project alternatives, including the proposed project. It is important to note that these are not growth projections. The following statistics were developed as a tool to better understand the difference between the alternatives analyzed in the DEIR. Table 7-2 identifies City-wide information regarding dwelling unit, population and employment projections, and also provides the jobs to housing ratio for each of the alternatives.

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Table 7-2           Alternatives Comparison Build-out Statistical Summary							
Alternative	Dwelling Units	Non-Residential Square Footage	Hotel Rooms	Population <sup>1</sup>	Employment <sup>2</sup>	Jobs/ Housing Ratio	
Proposed Project	17,038	48,787,662	3,478	22,149	101,849	5.98	
No-Project/Existing General Plan Alternative	9,455	53,125,389	3,106	12,292	109,999	11.63	
Reduced Intensity Alternative	11,705	48,787,662	3,478	15,217	101,849	8.70	
Increased Residential (20,000 du) Alternative	20,000	46,675,906	3,478	26,000	92,063	4.60	
Increased Residential (25,000 du) Alternative	25,000	43,897,662	3,478	32,500	87,418	3.50	

Notes:

Population generation is based on 1.3 persons per unit consistent with 2000 U.S. Census data for the City of Irvine.

Employment generation is based on 2.0 employees per 1,000 square feet of non-residential square footage consistent with the City's General Plan Land 2 Use Element, Table A-3.

# 7.4 NO PROJECT/EXISTING GENERAL PLAN ALTERNATIVE

According to CEQA Guidelines Section 15126.6(e)(3)(A), when the project is the revision of an existing land use or regulatory plan, such as the proposed project, the "no project" alternative will be the continuation of the existing plan, policy or operation into the future. Typically this is a situation where other projects initiated under the existing plan will continue while the new plan is developed. Thus, the projected impacts of the proposed plan or alternative plans would be compared to the impacts that would occur under the existing plan.

Therefore, the No-Project/Existing General Plan Alternative assumes that the existing General Plan would continue to guide development of the IBC into the future. The current City of Irvine General Plan and Zoning Ordinance designate the area as Urban and Industrial and 5.1 IBC Multi-Use, respectively. Under the No-Project/Existing General Plan Alternative, buildout of the IBC would include a total of 9,455 residential units, 53,125,389 square feet of non-residential uses, and 3,106 hotel rooms, as outlined in Table 7-2. Under the No-Project/General Plan Alternative, only 2,552 additional dwelling units, which have already been approved (see Table 3-1), would be developed. A buildout potential of 10,354,389 square feet of non-residential uses would remain (see Table 3-1). This alternative would only include the traffic improvements identified in the current IBC Fee Program since the proposed update to the IBC Fee Program to include neighborhood level amenities would not occur. Under this alternative, the IBC would have a jobs/housing ratio of 11.63 at buildout.

#### 7.4.1 Aesthetics

Potential impacts associated with scenic vistas, visual quality, obstruction/alteration of scenic resources within a State- or locally-designated scenic highway, and increased light and glare would be similar to the proposed project under this alternative, as the overall character of the IBC at buildout under the existing General Plan would be similar. However, the General Plan has an existing IBC density cap of 52 dwelling units per acre, while the project would have a minimum of 30 units per acre and there would not be a restriction on the maximum density allowed in the IBC. The overall IBC area is located within the height restriction zone of JWA, which limits building heights to a maximum height of 203.68 feet above mean sea level. Although the maximum density requirement will be removed, the maximum height limit will remain the same under the project. As with the proposed project, the No Project/Existing General Plan Alternative would not substantially alter the visual character of the IBC due to the City's General Plan plans and polices which protect visual resources in the City. The No Project Alternative would have potential to generate new light or glare sources. However, any new improvements or developments would be subject to the City of Irvine's Zoning Code that would ensure that light and glare would be minimized. Overall, the aesthetic impacts associated with the No Project Alternative would be similar to the proposed project.

#### 7.4.2 Air Quality

Under the No Project/Existing General Plan Alternative, total trips generated by development within the IBC would decrease slightly from 697,308 per day to 672,309, resulting in similar local air quality impacts. However, according to the Urban Land Institute, mixed-use development can reduce average trip lengths and vehicle miles travelled by approximately 30 percent (Urban Land Institute, 2008). Therefore, from a regional perspective, this Alternative would increase vehicle miles travelled (VMT) and associated air quality impacts within South Coast Air Basin, which is a non-attainment area. VMT estimates have been completed for the project (see Appendix P) and indicate that the No Project/Existing General Plan Alternative would increase VMT within the City from 16,704,433 VMT per day to 16,797,545 VMT per day, for an increase of 93,112 VMT. This alternative would generate similar construction emissions since the reduction in residential units is offset by construction of additional office and commercial square footage. For operational impacts, this alternative would result in greater air quality impacts with respect to regional air quality impacts due to the increase of VMT.

### 7.4.3 Biological Resources

Under the No-Project/Existing General Plan Alternative, the City would continue to function under the direction of the existing General Plan. Although, the current maximum buildout intensity would be the same as the project, the Vision Framework Plan under the proposed project would not be implemented. Under this alternative, impacts associated with biological resources would be less compared to the proposed project, since the pedestrian Creekwalk system and the proposed bike and pedestrian bridges over the San Diego Creek would not be developed. As a result, potential indirect impacts on sensitive species would not occur under this alternative. Therefore, the No-Project/Existing General Plan Alternative would be considered environmentally superior to the proposed project.

#### 7.4.4 Cultural Resources

Under this alternative, the current maximum buildout intensity would be the same as the project and the amount of undeveloped acreage available for development would remain the same, though less residential uses and more commercial/office uses would be developed. As a result, impacts to cultural resources would be expected to be similar to those of the proposed project. Ground-disturbing activities associated with buildout of the existing General Plan would continue to occur in order to accommodate new development. Consequently, the potential of encountering fossil-bearing soils and rock formations and destroying below-ground paleontological or archeological resources would still occur, similar to the proposed project. Development under both the proposed project and this alternative must retain a qualified archaeologist to address the monitoring of site grading for potential archaeological/historical resources. As a result, impacts to cultural resources would be expected to be similar to those of the proposed project, which are considered to be less than significant.

#### 7.4.5 Geology and Soils

Geologic hazards associated with seismic ground shaking would be of similar magnitude under the No Project/Existing General Plan Alternative, as compared to the proposed project because future development would still occur throughout the IBC. Other site-specific geological hazards associated with erosion, loss of topsoil, liquefaction, subsidence, landslides, and expansive soils would also be similar for this alternative relative to the proposed project. New developments under the alternative and the project would be expected to conform to the most recent California Building Codes, which include strict building specifications to ensure structural and foundational stability. In terms of geologic hazards, this alternative would be similar to the project.

#### 7.4.6 Hazards and Hazardous Materials

Under the No Project/No Development Alternative there would be no new residential development within the IBC, restricting growth within the area to its current extent. The remaining buildout of the area would be primarily commercial/industrial with no additional residential land use. Consequently, the following conclusions are made:

- Impacts related to the routine transport, use, or disposal of hazardous materials, as well as those related to reasonably foreseeable upset conditions, would be slightly greater with commercial/industrial land use rather than residential or mixed use, though less than significant.
- Public exposure to soil and/or groundwater contamination would remain the same. Mitigation measures required by regulatory agencies (e.g., DTSC and RWQCB) are appropriate for the designated land use, whether it is industrial or residential.
- Worker exposure to asbestos-containing materials and lead-based paint during renovation or demolition activities would remain the same, regardless of whether the development was industrial or residential. The presence of these materials is related to the age of the structure being demolished and not the land use development.



• Regarding the issue of incompatibility, according to PDF 6-4, the Proposed Overlay Zoning Code would require that the proponents of new residential projects submit sufficient data, as determined by the Director of Community Development for the City, so that the City may evaluate compatibility between industrial and residential land uses. Residential projects would not be exposed to undue hazards as they pertain to hazardous materials and soil/groundwater contamination. There would not be a net benefit or detriment under the No Project/No Development Alternative.

Development under both the proposed project and this alternative would be subject to federal, state and local policies protecting humans and the environment from exposure to hazards. Compliance with the provisions of hazardous material policies in the City's Municipal Code and implementation of the existing regulations related to hazardous materials would reduce impacts to a less-than-significant level. For future developments located on a hazardous materials site, appropriate remediation activities would be required before construction activities would be permitted.

As with the proposed project, implementation of this alternative would not significantly interfere with an adopted emergency response plan or emergency evacuation plan. Therefore, the impact would remain less than significant.

# 7.4.7 Hydrology and Water Quality

Implementation of the No Project/Existing General Plan Alternative would have similar hydrology and water quality impacts to the proposed project. The proposed project would result in minor changes to the existing drainage patterns and peak flows with the minor alterations in impervious surfaces, but in general, the drainage areas, discharge points, and peak flow discharges would be consistent with existing conditions. This alternative would increase the impervious surface groundcover, as industrial sites generally have a greater percentage of impervious surfaces in comparison to residential sites. However, any development would be subject to additional review in order to ensure that the individual projects would not exceed the capacity of the storm drain system. It is therefore expected that the net effect would be less than significant, similar to the proposed project.

Similar to the project, any development prior to the issuance of precise grading permits, shall submit, and the Director of Community Development shall have approved, a Water Quality Management Plan (WQMP) and identify the Best Management Practices (BMPs) that will be used on the site to control predictable pollutant runoff. If necessary, treatment would be employed to remove excess pollutants from runoff during the construction and operational phases of development. In terms of water quality, this alternative would have a similar impact to the project.

The drainage channels within the project have all been designed to protect the surrounding areas from the 100-year flood (1% chance of flooding); however, these conditions may change as a result of any future development activities under the existing General Plan or the proposed project. If identified during process of individual developments that habitable structures may be located within Special Flood Hazard Area (SFHA), the City of Irvine and/or OCFCD will pursue the appropriate FEMA approvals and/or map revisions based on the final improvements to the projects. This would ensure that impacts from flooding under this alternative would be less than significant, and impacts would be similar to the proposed project. This alternative would have less than-significant impacts resulting from exposure to flooding as a result of a levee or dam, or effects of seiche, tsunami, or mudflow, similar to the proposed project.

Hydrology and water quality impacts overall would be similar for this alternative in comparison to the proposed project.

#### 7.4.8 Land Use and Planning

Under the No Project/Existing General Plan Alternative, the existing pattern of land uses would be retained and a general plan amendment and zone change to adopt the IBC Mixed Use Overlay Zone would not occur. While significant impacts would not result, the benefits of providing greater mixed-use opportunities and additional housing opportunities in proximity to existing employment centers in the IBC would not occur. Additionally, the consistency with the goals of the Southern California Association of Government's Regional Comprehensive Plan for integrating land use and

transportation would not occur. However, the decrease in residential development in the IBC would result in fewer potential conflicts with existing and future commercial land uses. As a result, land use impacts under this alternative would be reduced.

#### 7.4.9 Noise

Although the No Project/Existing General Plan Alternative provides 7,583 fewer residential units, the non-residential square footage would increase by 4,337,727 at buildout compared to the proposed project. Therefore, the magnitude of noise and vibration during construction would be similar to the proposed project. Under the No Project/Existing General Plan Alternative, total trips generated by development within the IBC would decrease slightly from 697,308 per day to 672,309, resulting in similar noise impacts, including significant noise impacts at several locations within the IBC. Therefore, this alternative would have similar construction and operational noise impacts than the proposed project, and would not reduce the significant noise impact.

#### 7.4.10 Population and Housing

Under the No-Project/Existing General Plan Alternative, the City would continue to function under the direction of the existing General Plan. As shown on Table 7-2, buildout under the existing General Plan would result in 9,857 fewer residents and 7,583 fewer dwelling units than buildout conditions under the proposed project. Under this Alternative, the jobs/housing balance in the City at buildout would worsen from 5.98 to 11.63 and fewer housing units would be provided near existing employment centers in the IBC. By comparison, the proposed project allows for the development of a wide-range of housing opportunities in close proximity to regional employment and activity centers in the IBC. Therefore, the No-Project/Existing General Plan Alternative is considered environmentally inferior to the proposed project.

#### 7.4.11 Public Services

Under the No Project/Existing General Plan Alternative, development would occur throughout the City as permitted by the existing General Plan. Under this alternative, impacts associated with fire protection, law enforcement, and library services would be less compared to the proposed project, since there would be less residential development at full buildout. Residential land uses result in greater calls for fire and police service as compared to commercial/office development. As a result, this alternative is considered to have a less- impact in terms of the provision of fire, police and library services, although no significant project impacts related to public services were identified.

Under the proposed project, additional students would be generated that would impact school facilities within the City. However, there would be 7,583 fewer units under this Alternative, resulting in fewer new students when compared to the proposed project. However, impacts to school services would be less than significant through provision of SB 50 fees, for both the proposed project and this alternative.

#### 7.4.12 Recreation

Under the No-Project/Existing General Plan Alternative, the City would continue to function under the direction of the existing General Plan. The project population at buildout is less under this alternative as shown in Table 7-2; therefore, less parkland would be required to serve the projected population at buildout under this Alternative. As a result, the demands for recreational facilities would be reduced under this alternative. Therefore, the No-Project/Existing General Plan Alternative would be considered environmentally superior to the proposed project, though compliance with the City's Parkland Dedication Ordinance would mitigate any potential impacts.

#### 7.4.13 Transportation and Traffic

Under the No Project/Existing General Plan Alternative, total trips generated by development within the IBC would decrease slightly from 697,308 per day to 672,309, resulting in similar traffic impacts. When compared to the Post-2030 With Vision Plan Project, there are some minor differences in the total ADT for the arterial segments within the study



area. The No-Project/Existing General Plan Alternative would not significantly change any of the local traffic-related impacts of the proposed project, including impacts at the Jamboree/Michelson intersection. However, the provision of a greater number of homes within the jobs-rich subregion would reduce regional VMT to a greater degree than the No Project/Existing General Plan Alternative. According to the Urban Land Institute, mixed-use development can reduce average trip lengths and vehicle miles travelled by approximately 30 percent. (Urban Land Institute, 2008) VMT estimates have been completed for the project (see Appendix P) which indicate that the No Project/Existing General Plan Alternative would increase VMT within the City from 16,704,433 VMT per day to 16,797,545 VMT per day for an increase of 93,112 VMT. As a result, regional VMT would be greater under this alternative. The No-Project/Existing General Plan Alternative is therefore considered similar to the proposed project with regard to local ADT's, and inferior with respect to regional VMT. However, impacts would remain significant and unavoidable under both alternatives.

# 7.4.14 Utilities and Service Systems

Under the No-Project/Existing General Plan Alternative, the City would continue to function under the direction of the existing General Plan. As shown on Table 7-2, buildout under the existing General Plan would result in 8,150 more jobs, 9,857 fewer residents, and 7,583 fewer dwelling units than buildout conditions under the proposed project. The higher level of population growth projected in the proposed project would result in greater impacts to utilities and service systems in the City to adequately serve a greater number of people than under the existing General Plan. Therefore, while utilities impacts associated with the No-Project/Existing General Plan Alternative would remain less than significant, it would reduce impacts on utilities and service systems compared to the project.

# 7.4.15 Global Climate Change

This alternative would provide 7,583 fewer residential units, while the non-residential square footage would increase by 4,337,727 square feet. The reduction in total units at the site reduces local GHG emissions from vehicle trips but, by reducing the number of homes placed in proximity to existing employment centers, it increases emissions associated with regional VMT. As discussed in Section 5.15, Global Climate Change, the proposed project reduces greenhouse gas emissions by more than 15 percent compared to existing conditions. The provision of a greater number of homes within the jobs-rich subregion would reduce regional VMT to a greater degree than the No Project/Existing General Plan Alternative. According to the Urban Land Institute, mixed-use development can reduce average trip lengths and vehicle miles travelled by approximately 30 percent Urban Land Institute 2008). VMT estimates have been completed for the project (see Appendix P) and indicate that the No Project/Existing General Plan Alternative would increase VMT within the City from 16,704,433 VMT per day to 16,797,545 VMT per day, for an increase of 93,112 VMT. As a result, regional VMT would be greater under this alternative. Furthermore, with implementation of the PPPs, PDFs, and mitigation measures, the proposed project would result in less total GHG emissions at buildout compared to the No Project/Existing General Plan (see Appendix P). According to the GHG emissions analysis conducted by CTG Energetics, buildout of the No Project/Existing General Plan would generate a total of 845,577 MTons of GHG emissions at buildout with PPPs and PDFs; however, buildout of the proposed General Plan would generate 668,671 MTons at buildout with PPPs, PDFs, and mitigation measures. Therefore, the No Project/Existing General Plan Alternative is environmentally inferior to the project, since global climate change impacts under this Alternative would be greater than the project.

# 7.4.16 Conclusion

The No-Project/Existing General Plan Alternative would reduce impacts associated with biological resources, hazards and hazardous materials, land use/planning, public services, recreation, and utilities and services. However, this alternative would have greater air quality, population and housing and global climate change impacts. All other impact categories would generally be the same as the proposed project. Although some impacts would be reduced, this alternative would still result in significant air quality, noise, and traffic impacts. Unlike the proposed project, the need for a general plan amendment and zone change would not be necessary.

Although environmentally superior for some environmental impact categories, this alternative would not meet any of the objectives of the proposed project. It would not provide additional housing opportunities in close proximity to existing

employment centers, retail and entertainment uses, and transportation facilities and would not promote the objectives of the City's long-range goals for the IBC which include development of a dynamic mixed-use environment, additional housing opportunities in proximity to existing employment centers consistent with SCAG's RCP and Compass Blueprint policies, reducing vehicle miles travelled within the South Coast Air Basin (SoCAB), and the provision of neighborhood level amenities to serve the level of mixed-use development envisioned by the City's General Plan and IBC Vision Plan.

# 7.5 REDUCED INTENSITY ALTERNATIVE

This alternative would reduce overall intensity within the project area by limiting future residential growth to approved and pending projects and limiting non-residential square footage to 48,787,662 square feet, the same as the proposed project. As a result, the Reduced Intensity Alternative includes a total of 11,705 dwelling units, 48,787,662 square feet of non-residential uses and 3,478 hotel rooms. Under the Reduced Intensity Alternative there would be a remaining buildout potential of 2,250 dwelling units (in addition to the 9,455 units that are existing, under construction, or approved) and 6,016,662 square feet of non-residential uses. This alternative would result in overall reductions in development intensity within the IBC as compared to the existing General Plan. This Alternative was developed to reduce the air quality, noise, and traffic impacts of the project. All other components of the project would remain the same. Under this alternative, the IBC would have a jobs/housing ratio of 8.70 at buildout.

# 7.5.1 *Aesthetics*

Potential impacts associated with scenic vistas, visual quality, obstruction/alteration of scenic resources within a State- or locally-designated scenic highway, and increased light and glare would be similar to the proposed project under this alternative, as the overall character of the IBC at buildout would be similar. Although, this alternative would result in overall reductions in development intensity within the IBC compared to the proposed project all other components of the project would remain the same. As with the proposed project, the Reduced Intensity Alternative would not substantially alter the visual character of the IBC due to the City's General Plan plans and polices which protect visual resources in the City. The Reduced Intensity Alternative would slightly reduce potential light or glare sources due to the reduction of the amount of residential units. However, any new improvements or developments would be subject to the City of Irvine's Zoning Code and Uniform Security Code to ensure that light and glare would be minimized. Overall, the aesthetic impacts associated with the Reduced Intensity Alternative would be similar to the proposed project.

#### 7.5.2 Air Quality

This alternative would decrease the amount of traffic generated by the project from approximately 697,308 to 666,057 trips per day, as well as associated emissions. This represents an overall reduction of 31,251 trips per day at buildout. Due to the decrease in residential units, this alternative would emit less construction emissions than the proposed project. Due to the relatively balanced nature of this Alternative, regional VMT and associated emissions would be similar to the proposed project. Therefore, this alternative would be considered environmentally superior to the proposed project with respect to air quality impacts.

### 7.5.3 Biological Resources

Potential impacts associated with biological resources would be similar to the proposed project under this alternative, as the overall character of the IBC at buildout would be similar. Although, this alternative would result in overall reductions in development intensity within the IBC compared to the proposed project all other components of the project, including development of the Creekwalk, would remain the same. As with the proposed project, the Reduced Intensity Alternative would allow development adjacent to the San Joaquin Marsh. Therefore, the biological impacts associated with the Reduced Intensity Alternative would be similar to the proposed project.



# 7.5.4 Cultural Resources

Under this alternative, development intensity would be reduced by 4,158 dwelling units; however, the amount of undeveloped acreage available for development would remain the same. As a result, impacts to cultural resources would be expected to be substantially similar to those of the proposed project. Ground-disturbing activities associated with buildout of the Reduced Intensity Alternative would continue to occur in order to accommodate new development. Consequently, the potential of encountering fossil-bearing soils and rock formations and destroying below-ground paleontological or archeological resources would still occur, similar to the proposed project. However, each development proposal received by the City would undergo additional discretionary review and would be subject to the same resource protection requirements as this proposed project. Therefore, implementation of the Reduced Intensity Alternative would result in similar impacts to the proposed project, which is considered to be less than significant.

#### 7.5.5 Geology and Soils

Geologic hazards associated with seismic ground shaking would be of similar magnitude under the Reduced Intensity Alternative, as compared to the proposed project because future development would still occur throughout the IBC. Specific geological hazards associated with erosion, loss of topsoil, liquefaction, subsidence, landslides, and expansive soils would also be similar for this alternative relative to the proposed project. New developments under both alternatives would be expected to conform to the most recent California Building Codes, which include strict building specifications to ensure structural and foundational stability. In terms of geologic hazards, this alternative would have a less than significant impact, similar to the proposed project.

#### 7.5.6 Hazards and Hazardous Materials

This alternative would reduce the proposed residential land use within the IBC to already approved or pending projects (i.e., a total of 2,250 additional residential units as compared to the No Project/Existing General Plan Alternative). However, non-residential uses would be the same as the proposed project. Consequently, the following conclusions are made:

- Impacts related to the routine transport, use, or disposal of hazardous materials, as well as those related to reasonably foreseeable upset conditions would be the same as the proposed project, although the overall impact would be less than significant.
- Public exposure to soil and/or groundwater contamination would remain the same. Mitigation measures required by regulatory agencies (e.g., DTSC and RWQCB) are appropriate for the designated land use, whether it is industrial or residential.
- Worker exposure to asbestos-containing materials and lead-based paint during renovation or demolition activities would remain the same, regardless whether the development was industrial or residential. The presence of these materials is related to the age of the structure being demolished and not the land use development.
- Regarding the issue of incompatibility, according to PDF 6-4, the Proposed Overlay Zoning Code would require that proponents of new residential projects submit sufficient data, as determined by the Director of Community Development for the City, so that the City may evaluate compatibility between industrial and residential land uses. Residential projects would not be exposed to undue hazards as they pertain to hazardous materials and soil/groundwater contamination. There would not be a net benefit or detriment under the Reduced Intensity Alternative.

Development under both the proposed project and this alternative would be subject to federal, state and local policies protecting humans and the environment from exposure to hazards. Compliance with the provisions of hazardous material policies in the City's Municipal Code and implementation of the existing regulations related to hazardous materials

would reduce impacts to a less-than-significant level. For future developments located on a hazardous materials site, appropriate remediation activities would be required before construction activities would be permitted.

Development under both the proposed project and this alternative would be subject to possible review by the Airport Land Use Commission (ALUC). Compliance with any necessary conditions issued by ALUC to ensure compliance with the JWA AELUP would reduce this impact to less than significant. As with the proposed project, implementation of this alternative would not significantly interfere with an adopted emergency response plan or emergency evacuation plan. Therefore, the impact would remain less than significant.

#### 7.5.7 Hydrology and Water Quality

Implementation of the Reduced Intensity Alternative would have similar hydrology and water quality impacts to the proposed project. Although residential intensity would be reduced under this alternative, similar alterations to drainage patterns and alterations to hydrological patterns would occur. Similar to the proposed project, any development prior to the issuance of precise grading permits, shall submit a Water Quality Management Plan (WQMP) that identifies Best Management Practices (BMPs) that would be used on the site to control predictable pollutant runoff. If necessary, treatment would be employed to remove excess pollutants from runoff during the construction and operational phases of development. In terms of water quality, this alternative would have similar hydrology and water quality impacts to the proposed project. Individual development projects would be subject to additional review in order to ensure that they do not exceed the capacity of the storm drain system. It is therefore expected that the net effect would be similar, and individual projects would not exceed the capacity of the storm drain system. These impacts would be less than significant, similar to the proposed project. This alternative would have less than-significant impacts resulting from exposure to flooding as a result of a levee or dam, or effects of seiche, tsunami, or mudflow, similar to the proposed project (see Section 5.7, *Hydrology and Water Quality*).

The drainage channels within the project have all been designed to protect the surrounding areas from the 100-year flood (1 percent chance of flooding); however, these conditions may change as a result of any future development activities under the existing General Plan or the proposed project. If identified during process of individual developments that habitable structures may be located within SFHA, the City of Irvine and/or OCFCD will pursue the appropriate FEMA approvals and/or map revisions based on the final improvements to the projects. This would ensure that impacts from flooding under this alternative would be less than significant, and impacts would be similar to the proposed project. This alternative would have less than-significant impacts resulting from exposure to flooding as a result of a levee or dam, or effects of seiche, tsunami, or mudflow, similar to the proposed project.

Hydrology and water quality impacts overall would be similar for this alternative in comparison to the proposed project.

#### 7.5.8 Land Use and Planning

Under the Reduced Intensity Alternative, 5,333 fewer residential units would be constructed than under the proposed project. However, this alternative would still require a General Plan Amendment and Zone Change to allow for the increase in residential units and the increase in density requirements. However, the decrease in residential development in the IBC would result in fewer potential conflicts with existing and future commercial land uses. As a result, land use impacts under this alternative would be reduced.

#### 7.5.9 Noise

Under the Reduced Intensity Alternative, the maximum buildout intensity would result in 5,333 fewer dwelling units; however the non-residential square footage would remain the same as the proposed project. Under this alternative, the magnitude of noise and vibration during construction would be similar to the project. This alternative would decrease the amount of traffic generated by the project from approximately 697,308 to 666,057 trips per day, as well as associated noise volumes. This Alternative would reduce the significant noise impacts on various streets located within the IBC,



though they are likely to remain significant. However, overall this alternative would have reduced noise impacts as compared to the proposed project.

# 7.5.10 Population and Housing

Under the Reduced Intensity Alternative, the number of jobs would remain the same and 5,333 fewer dwelling units would be allowed under the proposed project as shown on Table 7-2. Under this alternative, the jobs/housing balance in the IBC at buildout would worsen from 5.98 to 8.70. The Reduced Intensity Alternative would provide fewer housing units near the existing employment centers in the IBC. By comparison, the proposed project would allow for the development of mixed-use cores by incorporating residential, office and commercial/retail uses into existing IBC area to increase the overall jobs/housing balance. Therefore, the Reduced Intensity Alternative is not considered environmentally superior to the proposed project with regards to population and housing.

#### 7.5.11 Public Services

Under the Reduced Intensity Alternative, there would be 5,333 fewer dwelling units and 6,932 fewer residents in the IBC. Under this alternative, impacts associated with fire protection, law enforcement, and library services would be slightly less compared to the proposed project, since there would be less development at full buildout. As a result, this alternative would reduce impacts to fire, police and library services.

Similar to the project, school facilities within the City would be impacted from the additional students that would be generated. However, there would be 5,333 fewer units under this alternative, resulting in fewer new students when compared to the proposed project. Impacts to school services would be less than significant through provision of SB 50 fees, though since fewer students would be generated, impacts would be less than under the proposed project.

#### 7.5.12 Recreation

Under the Reduced Intensity Alternative, development intensity would be reduced and 5,333 fewer housing units would be built. Due to the higher level of population predicted under buildout conditions of the project as shown in Table 7-2, less parkland would be required to serve the projected population at buildout. As a result, the demands on existing recreational facilities would be reduced under this alternative.

#### 7.5.13 Transportation and Traffic

The reduction of 5,333 residential units lessens the local traffic-related impacts compared to the proposed project. This alternative would decrease the amount of traffic generated by the project from approximately 697,308 to 666,057 trips per day. However, the fewer number of homes within the jobs-rich subregion slightly increases the regional VMT as compared to the proposed project. As a result, local traffic impacts would be decreased, while regional VMT would be slightly increased under this alternative. The Reduced Intensity Alternative is therefore considered superior to the proposed project with regard to ADT's, and inferior with respect to regional VMT. However, impacts would remain significant and unavoidable under both alternatives.

#### 7.5.14 Utilities and Service Systems

Under the Reduced Intensity Alternative, development intensity would be reduced by 5,333 dwelling units; however, non-residential square footage would remain the same as the proposed project. Therefore, the overall reductions in the maximum buildout intensity within the IBC under this alternative would slightly reduce the impacts to utilities and service systems and the need for facilities upgrades.

### 7.5.15 Global Climate Change

This alternative would provide 5,333 fewer residential units while the non-residential square footage remains the same as the project. The reduction in total units and vehicle trips reduces local GHG emissions. However, reducing the number of homes placed in close proximity to existing employment centers, results in increases to regional VMT. Therefore, based on per capita emissions, the Reduced Intensity Alternative is environmentally inferior to the proposed project with respect to global climate change considerations.

#### 7.5.16 Conclusion

The Reduced Intensity Alternative would reduce impacts associated with air quality, hazards and hazardous materials, land use and planning, noise, public services, recreation, local traffic and utilities and services. However, this alternative would have greater population and housing and global climate change impacts and increase regional VMT. All other impacts would be similar.

Although this alternative would lessen some environmental impacts, it would not avoid the significant environmental impacts to air quality, noise, or transportation/traffic. It would provide less housing opportunities in close proximity to existing employment centers, retail and entertainment uses, and transportation facilities and would not promote the objectives of the City's long-range goals for the IBC to the same extent as the proposed project. Most of the project objectives would be met, but not to the degree of the project. In addition, this alternative reduces overall allowable development intensity within the IBC below what is currently allowed by the existing General Plan and would impact existing entitlements development intensity values assigned to existing parcels.

#### 7.6 INCREASED RESIDENTIAL (20,000) ALTERNATIVE

This alternative would increase residential intensity and reduce non-residential intensity within the project area. As a result, the Increased Residential (20,000 du) Alternative includes a total of 20,000 dwelling units (which would include the maximum allowable density bonus units under state law), 46,675,906 square feet of non-residential uses, and 3,478 hotel rooms. Under the Increased Residential (20,000 du) Alternative there would be a remaining buildout potential of 10,545 dwelling units (including bonus density units) and 3,904,906 square feet of non-residential uses. This alternative would maintain the current maximum buildout intensity within the IBC as measured under the current zoning code, although non-residential intensity would be reduced. The objective of this Alternative is to reduce regional VMT and associated air quality impacts by improving jobs/housing balance within the IBC and Orange County Subregion. All other components of the project would remain the same. Under this alternative, the IBC would have a jobs/housing ratio of 4.60 at buildout.

#### 7.6.1 *Aesthetics*

Under the Increased Residential (20,000 du) Alternative, there would be an additional 2,962 housing units and 2,111,756 fewer non-residential square feet. This alternative would maintain the current maximum buildout intensity within the IBC, although non-residential intensity would be reduced. Consequently, the types of impacts associated with degradation of scenic vistas, decreased visual quality, obstruction/alteration of scenic resources within a State- or locally-designated scenic highway, and increased light and glare would be similar to the project under this alternative, as the overall maximum buildout intensity would be similar. Similar to the project, this alternative would not substantially alter the visual character of the IBC due to the City's General Plan plans and polices which protect visual resources in the City. The Increased Residential (20,000 du) Alternative would create potential light or glare sources; however, any new improvements or developments would be subject to the City of Irvine's Zoning Code and Uniform Security Code to ensure that light and glare would be minimized. Overall, the aesthetic impacts associated with the Increased Residential (20,000 du) Alternative project.



# 7.6.2 *Air Quality*

This alternative would decrease the amount of traffic generated by the project from approximately 697,308 to 688,962 trips per day, for a total decrease of 8,346 trips per day as well as associated emissions. In addition, according to the Urban Land Institute, mixed-use development can reduce average trip lengths and vehicle miles travelled by approximately 30 percent. (Urban Land Institute, 2008) Therefore, from a regional perspective, this Alternative could decrease vehicle miles travelled (VMT) and associated air quality impacts within South Coast Air Basin, which is a non-attainment area. Since overall development intensity would remain the same as the proposed project, construction impacts are likely to be similar. For operational impacts, this alternative would result in slightly reduced local and regional air quality impacts.

# 7.6.3 Biological Resources

Potential impacts associated with biological resources would be similar to the proposed project under this alternative, as the overall character of the IBC at buildout would be similar. Although, this alternative would result in overall reductions in development intensity within the IBC compared to the proposed project all other components of the project, including development of the Creekwalk, would remain the same. As with the proposed project, the Increased Residential (20,000 du) Alternative would allow development adjacent to the San Joaquin Marsh. Therefore, the biological impacts associated with the Increased Residential (20,000 du) Alternative would be similar to the proposed project.

# 7.6.4 Cultural Resources

Under this alternative, the current maximum buildout intensity within the IBC would remain the same, although residential intensity would be increased and non-residential intensity would be reduced. As a result, impacts to cultural resources would be expected to be substantially similar to those of the proposed project. Ground-disturbing activities associated with buildout of the existing General Plan would continue to occur in order to accommodate new development. Consequently, the potential of encountering fossil-bearing soils and rock formations and destroying below-ground paleontological or archeological resources would still occur, similar to the project. However, each development proposal received by the City would undergo additional discretionary review and would be subject to the same resource protection requirements as this proposed project. Therefore, implementation of the Increased Residential (20,000) Alternative would result in impacts similar to the proposed project, which are considered to be less than significant.

#### 7.6.5 Geology and Soils

Geologic hazards associated with seismic ground shaking would be of similar magnitude under the Increased Residential (20,000) Alternative, as compared to the proposed project because the maximum buildout intensity within the IBC would remain the same, although non-residential intensity would be reduced. Other site-specific geological hazards associated with erosion, loss of topsoil, liquefaction, subsidence, landslides, and expansive soils would also be similar for this alternative relative to the proposed project. New developments under both projects would be expected to conform to the most recent California Building Codes, which include strict building specifications to ensure structural and foundational stability. In terms of geologic hazards, this alternative would have similar impacts to the proposed project and would have a less than significant impact.

### 7.6.6 Hazards and Hazardous Materials

Under this alternative, the current maximum buildout intensity within the IBC would remain the same, although residential intensity would be increased and non-residential intensity would be reduced. Consequently, impacts related to the routine transport, use, or disposal of hazardous materials, as well as those related to reasonably foreseeable upset conditions would be decreased since residential uses use less hazardous materials than commercial uses, though they would remain less than significant. However, the increased residential development could result in more conflicts with existing and future commercial land uses. Development under both the proposed project and this alternative would be held to Federal, State and local policies protecting humans and the environment from exposure to hazards. Compliance with the provisions of hazardous materials would reduce this impact to a less-than-significant level. For future developments located on a hazardous materials site, appropriate remediation activities would be required before construction activities would be permitted. Similar to the proposed project, impacts would be less than significant.

Development under both the proposed project and this alternative would be subject to possible review by the Airport Land Use Commission (ALUC). Compliance with any necessary conditions issued by ALUC to ensure compliance with the JWA AELUP would reduce this impact to less than significant. Similar to the proposed project, implementation of this alternative would not significantly interfere with an adopted emergency response plan or emergency evacuation plan. This impact would remain less than significant. Overall, impacts related to hazards and hazardous materials would be increased under this alternative.

# 7.6.7 *Hydrology and Water Quality*

Implementation of the Increased Residential (20,000) Alternative would have similar hydrology and water quality impacts to the proposed project as the current maximum buildout intensity within the IBC would remain the same. Similar alterations to drainage patterns and alterations to hydrological patterns would occur. Similar to the proposed project, runoff would be subject to NPDES permit standards and provisions stipulated in the Drainage Area Management Plan (DAMP). If necessary, treatment would be employed to remove excess pollutants from runoff during the construction and operational phases of development. In terms of water quality, the individual development projects would be required to provide a Water Quality Management Plan (WQMP). This alternative would have a less than significant impact, similar to the proposed project. This alternative would decrease the impervious surface groundcover over existing conditions, and decrease the quantity of runoff discharged into the City storm drain system, slightly less than the proposed project. Individual development projects would be subject to additional review in order to ensure that they do not exceed the capacity of the storm drain system. It is therefore expected that the net effect would be similar, and individual projects would not exceed the capacity of the storm drain system. These impacts would be less than significant, similar to the proposed project.

The drainage channels within the project have all been designed to protect the surrounding areas from the 100-year flood (1% chance of flooding); however, these conditions may change as a result of any future development activities under the existing General Plan or the proposed project. If identified during process of individual developments that habitable structures may be located within SFHA, the City of Irvine and/or OCFCD will pursue the appropriate FEMA approvals and/or map revisions based on the final improvements to the projects. This would ensure that impacts from flooding under this alternative would be less than significant, and impacts would be similar to the proposed project. This alternative would have less than-significant impacts resulting from exposure to flooding as a result of a levee or dam, or effects of seiche, tsunami, or mudflow, similar to the proposed project.

Hydrology and water quality impacts overall would be similar for this alternative in comparison to the proposed project.

#### 7.6.8 Land Use and Planning

Under this alternative, the current maximum buildout intensity within the IBC would remain the same, although residential intensity would be increased and non-residential intensity would be reduced. This alternative would still



require a General Plan Amendment and Zone Change to allow for the increase in residential units and the increase in density. Similar to the proposed project, this alternative provides residential uses in close proximity to existing employment centers, retail and entertainment uses, and transportation facilities consistent with the goals of the Southern California Association of Governments' (SCAG's) Regional Comprehensive Plan (RCP). However, the increase in residential development in the IBC would result in more potential conflicts with existing and future commercial land uses Therefore, land use compatibility impacts may be greater than the proposed project.

# 7.6.9 Noise

Under the Increased Residential (20,000 du) Alternative, maximum buildout intensity within the IBC would result in an increase of 2,962 housing units and 2,111,756 fewer non-residential square feet. However, the magnitude of noise and vibration during construction would be the same as project. This alternative would decrease the amount of traffic generated by the project from approximately 697,308 to 688,962 trips per day, for a total decrease of 8,346 trips per day. However, this decrease would have little effect on roadway noise volumes. Therefore, with regard to operational noise impacts, impacts would be similar to the proposed project.

# 7.6.10 Population and Housing

Under this alternative, the current maximum buildout intensity within the IBC would remain the same, although nonresidential intensity would be reduced. As shown in Table 7-2, buildout under this alternative would result in 9,786 fewer jobs and an increase of 3,851 people within the IBC. Therefore, the jobs/housing balance in the IBC at buildout would increase from 5.98 to 4.60. By comparison, the Increased Residential (20,000 du) Alternative allows for more residential development in close proximity existing employment centers in the IBC. Therefore, the Increased Residential (20,000 du) Alternative is considered environmentally superior to the project.

#### 7.6.11 Public Services

Under this alternative, impacts associated with fire protection, law enforcement, and library services would be greater, since there would be more residential development at full buildout. Residential land uses result in greater calls for fire and police service as compared to commercial/office development. As a result, this alternative is considered to have greater impacts to fire, police and library services, although no significant project impacts related to public services were identified.

Under, this alternative, there would be an additional 2,962 housing units and an additional 3,851 more population at buildout. Therefore, more students would be generated by this Alternative when compared to the proposed project. Impacts to school services would be less than significant through provision of SB 50 fees under the proposed project or this Alternative. However, since more students would be generated, more school facilities would be required and impacts would be greater than under the proposed project.

#### 7.6.12 Recreation

Under the Increased Residential (20,000 du) Alternative, the buildout population would increase by 3,851 people as shown in Table 7-2. As a result, a greater amount of parkland would be required to serve the projected population at buildout, which would increase impacts on recreational facilities. However, under this Alternative and the proposed project, future residential development would be required to submit a Park Plan to establish park dedication requirements, the amount of in-lieu fees, if any, and the allocation of those fees. As a result, impacts would remain less than significant though greater than the proposed project.

# 7.6.13 Transportation and Traffic

Under the Increased Residential (20,000 du) Alternative, maximum buildout intensity within the IBC would result in an increase of 2,962 housing units and 2,111,756 fewer non-residential square feet. This alternative would slightly decrease

the amount of traffic generated by the project from approximately 697,308 to 688,962 trips per day, for a total decrease of 8,346 trips per day. Therefore, the Increased Residential (20,000 du) Alternative is therefore expected to have similar traffic impacts and would remain significant and unavoidable.

#### 7.6.14 Utilities and Service Systems

Under this alternative, the current maximum buildout intensity within the IBC would remain the same, although residential intensity would be increased and non-residential intensity would be reduced. Since residential uses typically use more water and generate more wastewater, the increase in residential units would result in increased water demand and waste-water treatment requirements. Under this alternative and the proposed project, future project applicants within the IBC shall enter into agreement or agreements as necessary with IRWD to establish the appropriate financial fair share costs to be borne by the project proponent. Fair share costs may include, but are not limited to, those associated with the preparation of studies and infrastructure expansion necessary to analyze and serve the project. Additionally, under both the proposed project and this Alternative, each redevelopment project in the IBC must provide a fire flow analysis in accordance with IRWD requirements and is responsible for any water system improvements associated with the development project. Although, the demand on utilities and service systems may be slightly greater under this alternative, the impact would remain less than significant.

#### 7.6.15 Global Climate Change

This alternative would decrease the amount of traffic generated by the project from approximately 697,308 to 688,962 trips per day, for a total decrease of 8,346 trips per day as well as associated emissions. However, according to the Urban Land Institute, mixed-use development can reduce average trip lengths and vehicle miles travelled by approximately 30 percent. (Urban Land Institute, 2008) Therefore, from a regional perspective, this Alternative could decrease vehicle miles travelled (VMT) and associated air quality impacts within South Coast Air Basin, which is a non-attainment area. Consequently, the per capita emissions under this alternative would be lower as a result of the lower VMT. Therefore, based on per capita emissions the Increased Residential (20,000 du) Alternative would be environmentally superior to the project with respect to global climate change considerations.

#### 7.6.16 Conclusion

The Increased Residential (20,000 du) Alternative would reduce impacts associated with air quality, population and housing, and global climate change. However, this alternative would have greater impacts to hazards and hazardous materials, land use and planning, public services, recreation, transportation/traffic, and utilities and service systems. In addition, this alternative does not avoid any significant environmental impacts.

This alternative would provide greater housing opportunities in close proximity to existing employment centers, retail and entertainment uses, and transportation facilities and would promote the objectives of the City's long-range goals for the IBC. Most of the project objectives would be met under this alternative. However, this Alternative would not protect the existing job base of the IBC to the same extent as the proposed project.

#### 7.7 INCREASED RESIDENTIAL (25,000) ALTERNATIVE

This alternative would convert nearly all of the remaining development intensity in the IBC to residential uses. Some non-residential intensity would remain to accommodate approved and pending non-residential projects. As a result, the Increased Residential (25,000 du) Alternative includes a total of 25,000 dwelling units (which would include the maximum allowable density bonus units under state law), 43,897,662 square feet of non-residential uses, and 3,478 hotel rooms. Under the Increased Residential (25,000 du) Alternative there would be a remaining buildout potential of 15,545 dwelling units (including density bonus units) and 1,126,662 square feet of non-residential uses. This alternative would maintain the current maximum buildout intensity within the IBC as measured by the current zoning code, although non-residential intensity would be reduced. The objective of this Alternative is to reduce regional VMT and associated air



quality impacts. All other components of the project would remain the same. Under this alternative, the IBC would have a jobs/housing ratio of 3.50 at buildout.

#### 7.7.1 *Aesthetics*

Under the Increased Residential (25,000 du) Alternative, there would be an additional 7,962 housing units and 4,890,000 fewer square feet of non-residential uses than under the proposed project. This alternative would maintain the current maximum buildout intensity within the IBC, although non-residential intensity would be reduced. Consequently, the types of impacts associated with degradation of scenic vistas, decreased visual quality, obstruction/alteration of scenic resources within a State- or locally-designated scenic highway, and increased light and glare would be similar to the project under this alternative, as the overall maximum buildout intensity would be similar. Similar to the project, this alternative would not substantially alter the visual character of the IBC due to the City's General Plan plans and polices which protect visual resources in the City. The Increased Residential (25,000 du) Alternative would create potential light or glare sources; however, any new improvements or developments would be subject to the City of Irvine's Zoning Code and Uniform Security Code to ensure that light and glare would be minimized. Overall, the aesthetic impacts associated with the Increased Residential (25,000 du) Alternative would be similar to the project.

#### 7.7.2 *Air Quality*

This alternative would increase the amount of traffic generated by the project from approximately 697,308 to 703,540 trips per day, for a total increase of 6,232 trips per day as well as associated emissions. However, according to the Urban Land Institute, mixed-use development can reduce average trip lengths and vehicle miles travelled by approximately 30 percent. (Urban Land Institute, 2008) Therefore, from a regional perspective, this Alternative could decrease vehicle miles travelled (VMT) and associated air quality impacts within South Coast Air Basin, which is a non-attainment area. Since overall development intensity would remain the same as the proposed project, construction impacts are likely to be similar. For operational impacts, this alternative would result in slightly higher local air quality impacts though regional air quality impacts would be less.

#### 7.7.3 Biological Resources

Potential impacts associated with biological resources would be similar to the proposed project under this alternative, as the overall character of the IBC at buildout would be similar. Although, this alternative would result in overall reductions in development intensity within the IBC compared to the proposed project all other components of the project, including development of the Creekwalk, would remain the same. As with the proposed project, the Increased Residential (25,000 du) Alternative would allow development adjacent to the San Joaquin Marsh. Therefore, the biological impacts associated with the Increased Residential (25,000 du) Alternative would be similar to the proposed project.

#### 7.7.4 *Cultural Resources*

Under this alternative, the current maximum buildout intensity within the IBC would remain the same, although nonresidential intensity would be reduced. As a result, impacts to cultural resources would be expected to be substantially similar to those of the project. Ground-disturbing activities associated with buildout of the existing General Plan would continue to occur in order to accommodate new development. Consequently, the potential of encountering fossil-bearing soils and rock formations and destroying below-ground paleontological or archeological resources would still occur, similar to the project. However, each development proposal received by the City would undergo additional discretionary review and would be subject to the same resource protection requirements as this proposed project. Therefore, implementation of the Increased Residential (25,000 du) Alternative would result in impacts similar to the proposed project, which are considered to be less than significant.

# 7.7.5 Geology and Soils

Geologic hazards associated with seismic ground shaking would be of similar magnitude under the Increased Residential (25,000) Alternative, as compared to the project because the maximum buildout intensity within the IBC would remain the same. Other site-specific geological hazards associated with erosion, loss of topsoil, liquefaction, subsidence, landslides, and expansive soils would also be similar for this alternative relative to the project. New developments under both projects would be expected to conform to the most recent California Building Codes, which include strict building specifications to ensure structural and foundational stability. In terms of geologic hazards, this alternative would have a less than significant impact.

#### 7.7.6 Hazards and Hazardous Materials

Under this alternative, the current maximum buildout intensity within the IBC would remain the same, although residential intensity would be increased and non-residential intensity would be reduced. Consequently, impacts related to the routine transport, use, or disposal of hazardous materials, as well as those related to reasonably foreseeable upset conditions would be decreased since residential uses use less hazardous materials than commercial uses, though they would remain less than significant. However, the increased residential development could result in more conflicts with existing and future commercial land uses. Development under both the proposed project and this alternative would be held to Federal, State and local policies protecting humans and the environment from exposure to hazards. Compliance with the provisions of hazardous material policies in the City's Municipal Code and implementation of the existing regulations related to hazardous materials site, appropriate remediation activities would be required before construction activities would be permitted. Similar to the proposed project, impacts would be less than significant.

Development under both the proposed project and this alternative would be subject to possible review by the Airport Land Use Commission (ALUC). Compliance with any necessary conditions issued by ALUC to ensure compliance with the JWA AELUP would reduce this impact to less than significant. Similar to the proposed project, implementation of this alternative would not significantly interfere with an adopted emergency response plan or emergency evacuation plan. This impact would remain less than significant. Overall, impacts related to hazards and hazardous materials would be increased under this alternative.

#### 7.7.7 Hydrology and Water Quality

Implementation of the Increased Residential (25,000 du) Alternative would have similar hydrology and water quality impacts to the proposed project, as the current maximum buildout intensity within the IBC would remain the same. Similar alterations to drainage patterns and alterations to hydrological patterns would occur as the current maximum buildout intensity within the IBC would remain the same. Similar to the proposed project, runoff would be subject to NPDES permit standards and provisions stipulated in the Drainage Area Management Plan (DAMP). If necessary, treatment would be employed to remove excess pollutants from runoff during the construction and operational phases of development. In terms of water quality, the individual development projects would be required to provide a Water Quality Management Plan (WQMP).this alternative would have a less than significant impact, similar to the proposed project. This alternative would decrease the impervious surface groundcover over existing conditions, and decrease the quantity of runoff discharged into the City storm drain system, less than the project. Individual development projects would be subject to additional review in order to ensure that they do not exceed the capacity of the storm drain system. It is therefore expected that the net effect would be similar, and individual projects would not exceed the capacity of the storm drain system. These impacts would be less than significant, similar to the project.

According to the Irvine Business Complex Master Drainage Study, several portions of the channels were found to be insufficient for containing the 100-year storm flows based on the updated Orange County Hydrology Manual methodologies, indicating that some locations may be located in a SFHA. Therefore, the elevations of any proposed habitable spaces within a SFHA will need to be placed above the 100-year flood elevations and be verified by FEMA.



This would ensure that impacts from flooding under this alternative would be less than significant, and impacts would be similar to the proposed project.

This alternative would have less than-significant impacts resulting from exposure to flooding as a result of a levee or dam, or effects of seiche, tsunami, or mudflow, similar to the proposed project (see Section 5.7, *Hydrology and Water Quality*).

Hydrology and water quality impacts overall would be similar for this alternative in comparison to the proposed project.

#### 7.7.8 Land Use and Planning

Under this alternative, the current maximum buildout intensity within the IBC would remain the same, although residential intensity would be increased and non-residential intensity would be reduced. This alternative would still require a General Plan Amendment and Zone Change to allow for the increase in residential units and the increase in density. Similar to the proposed project, this alternative provides residential uses in close proximity to existing employment centers, retail and entertainment uses, and transportation facilities consistent with the goals of the Southern California Association of Governments' (SCAG's) Regional Comprehensive Plan (RCP). However, the increase in residential development in the IBC would result in more potential conflicts with existing and future commercial land uses. Therefore, land use compatibility impacts would be greater than the proposed project.

#### 7.7.9 Noise

Under the Increased Residential (25,000 du) Alternative, maximum buildout intensity within the IBC would result in an increase of 7,962 housing units and a reduction of 4,890,000 fewer square feet of non-residential uses. However, the magnitude of noise and vibration during construction would be the same as project since development intensity would be similar. This alternative would increase the amount of traffic generated by the project from approximately 697,308 to 703,540 trips per day, for a total increase of 6,232 trips per day as well as associated noise volumes. However, this decrease would have little effect on roadway noise volumes. Therefore, with regard to operational noise impacts, impacts would be similar to the proposed project.

#### 7.7.10 Population and Housing

Under this alternative, the current maximum buildout intensity within the IBC would remain the same. As shown in Table 7-2, buildout under this alternative would result in 14,431 fewer jobs and 10,351 more residents within the IBC. Therefore, the jobs/housing balance in the City at buildout would improve from 5.98 to 3.50 under this alternative. By comparison, this alternative allows for more residential development in close proximity existing employment centers in the IBC than the project. Therefore, the Increased Residential (25,000 du) Alternative is considered environmentally superior to the project.

#### 7.7.11 Public Services

Under this alternative, impacts associated with fire protection, law enforcement, and library services would be greater, since there would be more residential development at full buildout. Residential land uses result in greater calls for fire and police service as compared to commercial/office development. As a result, this alternative is considered to have greater impacts to fire, police and library services, although no significant project impacts related to public services were identified.

Under this alternative, there would be an additional 7,962 housing units and 10,351 additional residents at buildout. Therefore, more students would be generated by this Alternative when compared to the proposed project. Impacts to school services would be less than significant through provision of SB 50 fees. However, since more students would be generated, impacts would be greater than under the proposed project.

#### 7.7.12 Recreation

Under the Increased Residential (25,000 du) Alternative, the buildout population would increase by 10,351 people as shown in Table 7-2. As a result, a greater amount of parkland would be required to serve the projected population at buildout, which would increase impacts on recreational facilities. However, under this Alternative and the proposed project, future residential development would be required to submit a Park Plan to establish park dedication requirements, the amount of in-lieu fees, if any, and the allocation of those fees. As a result, impacts would remain less than significant though greater than the proposed project.

#### 7.7.13 Transportation and Traffic

Under the Increased Residential (25,000 du) Alternative, maximum buildout intensity within the IBC would result in an increase of 7,962 housing units and a reduction of 4,890,000 fewer square feet of non-residential uses. This alternative would increase the amount of traffic generated by the project from approximately 697,308 to 703,540 trips per day, for a total increase of 6,232 trips per day. Therefore, traffic impacts would be slightly increased under this alternative as compared to the project, although levels of service would be similar. The Increased Residential (25,000 du) Alternative is therefore expected to have similar traffic impacts and would remain significant and unavoidable.

#### 7.7.14 Utilities and Service Systems

Under this alternative, the current maximum buildout intensity within the IBC would remain the same, although residential intensity would be increased and non-residential intensity would be reduced. Since residential uses typically use more water and generate more wastewater, the increase in residential units would result in increased water demand and waste-water treatment requirements. Under this alternative and the proposed project, future project applicants within the IBC shall enter into agreement or agreements as necessary with IRWD to establish the appropriate financial fair share costs to be borne by the project proponent. Fair share costs may include, but are not limited to, those associated with the preparation of studies and infrastructure expansion necessary to analyze and serve the project. Additionally, under both the proposed project and this Alternative, each redevelopment project in the IBC must provide a fire flow analysis in accordance with IRWD requirements and is responsible for any water system improvements associated with the development project. Although, the demand on utilities and service systems may be slightly greater under this alternative, the impact would remain less than significant.

#### 7.7.15 Global Climate Change

This alternative would increase the amount of traffic generated by the project from approximately 697,308 to 703,540 trips per day, for a total increase of 6,232 trips per day as well as associated emissions. However, according to the Urban Land Institute, mixed-use development can reduce average trip lengths and vehicle miles travelled by approximately 30 percent. (Urban Land Institute, 2008) Therefore, from a regional perspective, this Alternative could decrease vehicle miles travelled (VMT) and associated air quality impacts within South Coast Air Basin, which is a non-attainment area. Consequently, the per capita emissions under this alternative would be lower as a result of the lower VMT. Therefore, based on per capita emissions the Increased Residential (25,000 du) Alternative would be environmentally superior to the project with respect to global climate change considerations.

#### 7.7.16 Conclusion

The Increased Residential (25,000 du) Alternative would reduce impacts associated with air quality, population and housing, and global climate change. However, this alternative would have greater impacts to hazards and hazardous materials, land use and planning, public services, recreation, and utilities and service systems. In addition, this alternative does not avoid any significant environmental impacts.

This alternative would provide greater housing opportunities in close proximity to existing employment centers, retail and entertainment uses, and transportation facilities and would promote the objectives of the City's long-range goals for



the IBC. Most of the project objectives would be met under this alternative. However, this Alternative would not protect the existing job base of the IBC to the same extent as the proposed project.

# 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 7-3 provides, in summary format, a comparison of the level of impacts for each alternative to the proposed project. In addition, Table 7-4 provides comparison of the ability of each of the alternatives to meet the objectives established for the project. Based on the preceding analysis, one alternative has been identified as "environmentally superior" to the proposed project:

• Reduced Intensity Alternative

The Reduced Intensity Alternative would reduce impacts associated with air quality, hazards and hazardous materials, noise, public services, recreation, local traffic and utilities and services. However, this alternative would have greater population and housing and global climate change impacts and increase regional VMT. All other impacts would be similar.

Although this alternative would lessen some environmental impacts, it would not avoid the significant environmental impacts to air quality, land use and planning, noise, or transportation/traffic. It would provide less housing opportunities in close proximity to existing employment centers, retail and entertainment uses, and transportation facilities and would not promote the objectives of the City's long-range goals for the IBC to the same extent as the proposed project. Most of the project objectives would be met, but not to the degree of the project. In addition, this alternative reduces overall allowable development intensity within the IBC below what is currently allowed and would impact existing entitlements.

# 7. Alternatives to the Proposed Project

Table 7-3									
Summary of Impacts of Alternatives Compared to the Proposed Project									
Торіс	Proposed Project	No Project/Existing General Plan Alternative	Reduced Intensity Alternative	Increased Residential (20,000 du) Alternative	Increased Residential (25,000 du) Alternative				
Aesthetics	Less Than Significant	(=)	(=)	(=)	(=)				
Air Quality Construction Local Regional	Significant and Unavoidable	(=) (=) (+)	(–) (–) (=)	(=) (=) (-)	(=) (=) (-)				
Biological Resources	Less Than Significant	(-)	(=)	(=)	(=)				
Cultural Resources	Significant and Unavoidable	(=)	(=)	(=)	(=)				
Geology and Soils	Less Than Significant	(=)	(=)	(=)	(=)				
Hazards and Hazardous Materials	Less Than Significant	(-)	(–)	(+)	(+)				
Hydrology and Water Quality Flood Water Quality	Less Than Significant	(=) (=)	(=) (=)	(=) (=)	(=) (=)				
Land Use and Planning	Significant and Unavoidable	(-)	(=)	(+)	(+)				
Noise Short-term Long-term	Significant and Unavoidable	(=) (=)	(-) (-)	(=) (=)	(=) (=)				
Population and Housing	Less Than Significant	(+)	(+)	(-)	()				
Public Services Fire/Sheriff Education	Less Than Significant	() ()	(–) (=)	(+) (+)	(+) (+)				
Recreation	Less Than Significant	()	(=)	(+)	(+)				
Transportation/ Traffic	Significant and Unavoidable	(=)	(–)	(=)	(=)				
Utilities and Service Systems	Less Than Significant	(-)	(-)	(+)	(+)				
Global Climate Change	Less Than Significant	(+)	(+)	(-)	(-)				
(-) The alternative would result in less of an impact than the proposed project.									

(+) The alternative would result in greater impacts than the proposed project.
 (=) The alternative would result in the same/similar impacts as the proposed project.

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Table 7-4							
Abil	ity of Each Alter Proposed Project	native to Meet the No Project/ Existing General Plan Alternative	Project Objectives Reduced Intensity Alternative	Increased Residential (20,000 du) Alternative	Increased Residential (25,000 du) Alternative		
<ul> <li>Provide for the on-going development of the IBC consistent with the City's General Plan Urban and Industrial land use designations and the City's adopted Vision Plan Goals, which are:</li> <li>Protect the existing job base.</li> <li>Develop mixed-use cores.</li> <li>Provide transportation, pedestrian, and visual connectivity.</li> <li>Create usable open space.</li> <li>Develop safe, well-designed neighborhoods.</li> </ul>	Yes	No	Yes	Yes, but not to the same extent	Yes, but not to the same extent		
Provide additional housing opportunities near existing employment centers, consistent with the City's General Plan Land Use and Housing Element.	Yes	No	Yes, but not to the same extent	Yes	Yes		
Provide residential uses near existing employment centers, retail and entertainment uses, and transportation facilities consistent with the goals of the Southern California Association of Governments' Regional Comprehensive Plan and Compass Blueprint.	Yes	No	Yes, but not to the same extent	Yes	Yes		
Provide residential development in areas of the IBC where adequate supporting uses and public services and facilities are provided, consistent with the City's General Plan Land Use Element.	Yes	No	Yes	Yes	Yes		
Contribute to the development of mixed-use cores by incorporating residential, office, and commercial/retail uses into existing areas of nearby community facilities, retail goods and services, and restaurants to enhance the IBC's overall mixed-use urban character and reduce vehicle miles traveled in the South Coast Air Basin.	Yes	No	Yes, but not to the same extent	Yes	Yes		

# 7. Alternatives to the Proposed Project

Table 7-4						
Abil	ity of Each Alter	rnative to Meet the	Project Objectives			
No Project/       No Project/         Existing       Reduced         Proposed       General Plan         Project Objective       Project         Alternative       (20,000 du) Alternative					Increased Residential (25,000 du) Alternative	
Provide neighborhood level amenities to serve the level of mixed- use development envisioned by the City's General Plan and IBC Vision Plan.	Yes	No	Yes	Yes	Yes	
Incorporate sustainable provisions into the proposed Zoning Code.	Yes	No	Yes	Yes	Yes	
Identify and pursue opportunities for open space areas that serve the recreational needs of IBC residents and employees.	Yes	No	Yes	Yes	Yes	