

7. *Alternatives to the Proposed Project*

7.1 INTRODUCTION

7.1.1 Purpose and Scope

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

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

- “The discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly” (15126.6[b]).
- “The specific alternative of ‘no project’ shall also be evaluated along with its impact” (15126.6[e][1]).
- “The no project analysis shall discuss the existing conditions at the time the Notice of Preparation (NOP) is published, and at the time the environmental analysis is commenced, as well as what would reasonably be expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services. If the environmentally superior alternative is the ‘no project’ alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives” (15126.6[e][2]).
- “The range of alternatives required in an EIR is governed by a ‘rule of reason’ that requires the EIR to set forth only those alternatives necessary to permit a reasoned choice. The alternatives shall be limited to ones that would avoid or substantially lessen any of the significant effects of the project” (15126.6[f]).
- “Among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries, and whether the proponent can reasonably acquire, control or otherwise have access to the alternative site (or the site is already owned by the proponent)” (15126.6[f][1]).
- For alternative locations, “only locations that would avoid or substantially lessen any of the significant effects of the project need be considered for inclusion in the EIR” (15126.6[f][2][A]).
- “An EIR need not consider an alternative whose effect cannot be reasonably ascertained and whose implementation is remote and speculative” (15126.6[f][3]).



7. Alternatives to the Proposed Project

For each development alternative, this analysis:

- Describes the alternative,
- 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 a wide range of housing opportunities in close proximity to jobs and a regional transportation center.
- Provide a mix of quality, high-density urban housing that is integrated into the area through carefully maintained pedestrian streets, transit connections, and arterial access.
- Create a development plan that encourages residents of Anaheim to work and shop in close proximity to their homes, minimizing use of their automobiles.
- Encourage extensive office development along the highly visible periphery of the area to provide a quality employment center.
- Foster mixed-use development that serves to reduce vehicle miles traveled by promoting alternatives to driving, such as walking, biking, and use of mass transit.
- Provide on-site open space and recreation amenities that further enhance the mixed-use environment of the area for both residents and employees working in the Platinum Triangle.
- Encourage high density mixed use development that is synergistic with the entertainment and employment uses already established in the Platinum Triangle.
- Maximize opportunities to increase tax increment received from the Redevelopment Project Area.
- Allow for the continued development of the Platinum Triangle and accommodate future market demand through amendments to the General Plan and Platinum Triangle Master Land Use Plan (PTMLUP).

7. Alternatives to the Proposed Project

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 Subsequent EIR (SEIR).

7.2.1 Alternative Development Areas

CEQA requires that the discussion of alternatives focus on alternatives to the project or its location that are capable of avoiding or substantially lessening any significant effects of the project. The key question and first step in the analysis is whether any of the significant effects of the project would be avoided or substantially lessened by putting the project in another location. Only locations that would avoid or substantially lessen any of the significant effects of the project need be considered for inclusion in the EIR (Guidelines Sec. 15126.6[f][2][A]). In general, any development of the size and type proposed by the project would have substantially the same impacts on air quality, land use and planning, noise, population and housing, public services, recreation, transportation and traffic, and utilities and service systems. Without a site specific analysis, impacts on aesthetics, biological resources, cultural resources, geology and soils, hazards and hazardous materials, hydrology and water quality, and mineral resources cannot be evaluated.

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 (Guidelines Section 15126.6[f][2][C]).

On May 25, 2004, the Anaheim City Council adopted the General Plan and Zoning Code Update for the City of Anaheim. Through this comprehensive General Plan Update, the City reduced allowable densities in the Hill and Canyon Area of the City which contained significant biological resources, and created a mixed-use overlay zone in the Platinum Triangle, which allows the introduction of residential units in this area through redevelopment of this predominantly industrial area. Therefore, through preparation of the General Plan, the City identified the most environmentally sensitive areas for permanent protection as open space. Less environmentally sensitive areas were designated for development. As a result, the project site is designated for a mix of residential, office, and commercial uses in accordance with the City's General Plan.

As the California Supreme Court indicated in its decisions 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... "The 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, 52 cal.3d at 570-571)

[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 General Plan Update, no alternative sites within the jurisdiction of the



7. Alternatives to the Proposed Project

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 Platinum Triangle are directly related to its location adjacent to major transportation facilities and activity centers, including SR-57 and I-5, Angel Stadium of Anaheim, and Honda Center. Therefore, an alternative site could not feasibly accomplish most of the basic objectives of the Proposed Project, and thus there are no available alternative sites which could accommodate the Proposed Project.

7.2.2 Southern California Gas Company Microwave Tower Relocation Alternative

CEQA requires an EIR to include a range of potential alternatives to the Proposed Project that could feasibly accomplish most of the basic objectives of the project and could avoid or substantially lessen one or more of the significant effects. Relocation of the Southern California Gas Company's microwave tower would reduce the significant land use compatibility impact to a less than significant level and was considered as an alternative. However, this alternative was rejected as being infeasible. The proposed high-rise buildings surrounding the microwave tower are approved projects and development agreements have been executed. Therefore, the developers of the high-rise buildings do not have the responsibility to accommodate the rooftop microwave tower and the City does not have the enforcement authority to require the relocation. Therefore, this alternative was considered but rejected. Moreover, the alternatives included in an EIR need only relate to the Proposed Project as a whole, not to its various parts, and since the location of the microwave tower is merely one feature of the overall project design, extended analysis is not required under CEQA. (*Big Rock Mesas Property Owners Association v. Board of Supervisors* (1977) 73 Cal.App.3d 218, 227.)

7.3 ALTERNATIVES SELECTED FOR FURTHER ANALYSIS

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

- No Project/Existing Master Land Use Plan (MLUP) Alternative
- Reduced Intensity Alternative
- Increased Residential Intensity Alternative

Table 7-1 provides a summary of the relative impacts and feasibility of each alternative. A complete discussion of each alternative is provided below.

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, traffic, and GHG were found to be significant and unavoidable. Section 7.7 identifies the Environmentally Superior Alternative.

The Preferred Land Use Alternative (Proposed Project) is analyzed in detail in Chapter 5 of this SEIR.

7. Alternatives to the Proposed Project

**Table 7-1
Summary of Development Alternatives**

<i>Alternative</i>	<i>Description</i>	<i>Basis for Selection and Summary of Analysis</i>
PROPOSED PROJECT		
	<ul style="list-style-type: none"> • 18,909 DU (8,643 DU additional) • 4,909,682 square feet of commercial/retail (2,645,282 square feet additional) • 14,340,522 square feet of office (9,284,972 square feet additional) • 1,500,000 square feet of institutional 	
PROJECT ALTERNATIVES		
1) No Project/Existing MLUP Alternative	<ul style="list-style-type: none"> • Existing general plan and zoning designations would remain • 10,266 DU • 2,264,400 square feet of commercial/retail • 5,055,550 square feet of office 	<ul style="list-style-type: none"> • Required by CEQA • Avoids need for general plan amendment and zone change • Avoids new significant environmental impacts • Does not meet the project objectives.
2) Reduced Intensity Alternative	<ul style="list-style-type: none"> • Reduces proposed intensity increases by 30% • 16,316 DU (6,050 DU additional) • 4,116,097 square feet of commercial/retail (1,851,697 square feet additional) • 11,555,030 square feet of office (6,499,480 square feet additional) • 1,050,000 square feet of institutional 	<ul style="list-style-type: none"> • May lessen some impacts • Does not avoid significant environmental impacts • Meets all of the project objectives but not to the degree of the Proposed Project
3) Increased Residential Intensity Alternative	<ul style="list-style-type: none"> • Converts some office uses to residential intensity. • Commercial/retail square footage would remain. • 23,500 DU (13,234 DU additional) • 4,909,682 square feet of commercial/retail (2,645,282 square feet additional) • 11,714,038 square feet of office (6,658,488 square feet additional) • 1,500,000 square feet of institutional 	<ul style="list-style-type: none"> • Does not avoid significant environmental impacts • Improves City's overall jobs/housing balance • Meets all of the project objectives but not to the degree of the Proposed Project.

DU = dwelling units



Alternatives Comparison

The following statistical analysis provides a summary of general socioeconomic build-out projections determined by the three land use alternatives, including the Proposed Project. It is important to note that these are not growth projections. That is, they do not anticipate what is likely to occur by a certain time horizon based on market projects, but rather provide a build-out scenario that would only occur if all the areas of the City were to develop to the probable capacities yielded by the associated General Plan land use designations and if the Platinum Triangle were to be built-out to the maximum permitted amount of

7. Alternatives to the Proposed Project

development in the Proposed Project. The following statistics were developed as a tool to understand better the difference between the alternatives analyzed in the SEIR. Table 7-2 identifies information regarding dwelling unit, population and employment projections, and also provides the jobs to housing ratio for each of the alternatives.

**Table 7-2
Alternatives Comparison**

	Proposed Project	No Project/Existing MLUP Alternative	Reduced Intensity Alternative	Increased Residential Intensity Alternative
Dwelling Units	18,909 DU	10,266 DU	16,316 DU	23,500 DU
Population	28,364	15,399	24,474	35,250
Employment	41,500	14,640	33,442	36,247
Jobs-to-Housing Ratio	2.19	1.43	2.05	1.54

1. Population generation is calculated at 1.5 persons per unit for the Platinum Triangle.

2. Employment is based on ratio of 500 square feet per employee.

3. Current jobs/housing ratio (2005) for the City of Anaheim is 1.79 which increases to 1.94 at build-out of the adopted General Plan.

7.4 NO PROJECT/EXISTING MLUP ALTERNATIVE

This alternative, which is required by CEQA, assumes that the Adopted MLUP and the Platinum Triangle Mixed Use (PTMU) Overlay Zone would remain unchanged. The properties designated by the General Plan for Mixed Use, Institutional, Industrial, Office-High and Office-Low land use would remain unchanged. The Katella and Orangewood Mixed Use Districts would not be expanded. The Office District and ARTIC Mixed Use District would not be created. Therefore, this alternative would not require a General Plan Amendment or amendments to the Platinum Triangle MLUP. As a result, the No-Project/Existing MLUP Alternative assumes a total of 10,266 dwelling units, a maximum overall commercial density of 2,264,400 square feet, and a maximum overall office density of 5,055,550 square feet. The impacts of the No-Project/Existing MLUP Alternative as compared to those of the Proposed Project are discussed below:

7.4.1 Aesthetics

Under this alternative, aesthetic impacts would be reduced because there would be less building area to be constructed and the mass and height of the buildings would be reduced. Additionally, all development within the project area would be guided by extensive design guidelines to provide a comprehensive and visually attractive urban environment. Construction activities would be staged over approximately 20 years and construction time period would be shortened in comparison to the Proposed Project. This alternative is environmentally superior to the Proposed Project, although this is not a significant, unavoidable impact of the Proposed Project.

7.4.2 Air Quality

This alternative would generate construction-related air pollutant emissions and increase long-term traffic-related emissions beyond existing levels. However, the level of construction and operational air impacts would be less than the Proposed Project because the construction duration and related vehicle trips would be less under No Project/Existing Use Alternative. However, under this alternative, i) no additional housing opportunities would be provided in close proximity to existing and future employment centers and transportation facilities, and ii) reductions to air pollutant emissions from a reduction in vehicle trips from residential units would be specific to the project area, and not a regional reduction. Regionally, implementation of this alternative would result in air quality impacts slightly greater than the Proposed

7. Alternatives to the Proposed Project

Project, because of the unique mixed use nature of the Platinum Triangle that integrates pedestrian oriented development and an intermodal transportation system to reduce reliance on traditional automobiles, thereby having the effect of reducing auto-related emissions. As with the Proposed Project, short-term construction impacts from reactive organic gas (ROG) and nitrogen oxides (NO_x) are anticipated. Both the Proposed Project and this alternative would be consistent with the Air Quality Management Plan (AQMP). Mitigation measures similar to the Proposed Project would be implemented under this alternative. This alternative would have less air quality impacts locally and slightly greater air quality impacts regionally compared with the Proposed Project. Significant unavoidable air quality impacts would occur under this alternative as well as with the Proposed Project. Therefore, this alternative is neither environmentally superior nor inferior to the Proposed Project.

7.4.3 Hydrology and Water Quality

Under this alternative, additional 1,804 acre feet of water demand per year for the Proposed Project would not be warranted and the additional groundwater extraction would not be necessary. Because increasing the initial production rate and drilling an extra groundwater well would not be necessary, impacts to water quality would be less than the Proposed Project. This alternative is environmentally superior to the Proposed Project, although this is not a significant, unavoidable impact of the Proposed Project.

7.4.4 Land Use and Planning

This alternative would not require any General Plan or Zoning Code Amendments as currently proposed by the expansion. Therefore, the impacts would be less than the Proposed Project. This alternative is environmentally superior to the Proposed Project, although this is not a significant, unavoidable impact of the Proposed Project.

7.4.5 Noise

Under this alternative, the short-term construction noise and long-term traffic-related noise would be similar when compared to the Proposed Project. As discussed in Chapter 5.5, *Noise*, construction noise impact under the No Project condition and the Proposed Project would be similar because the construction intensity (e.g., mass grading, utility installation, etc.) would be similar assuming that construction occurs for eight hours a day. Additionally, under both the No Project alternative and the Proposed Project, construction impacts that result in temporary exceedances of 65 dBA up to 446 feet from the construction site would remain as significant, unavoidable impact. While the magnitude of impact is considered similar under both conditions, the frequency exposed and the number of sensitive receptors would be fewer under this alternative, thus, this alternative is considered environmentally superior to the Proposed Project.

Additionally, as shown in Table 5.5-9, the overall noise environment with the Proposed Project would slightly degrade when compared to the No Project alternative, as the traffic noise along the project area roadway segments would increase from 0.1 to 1.8 dBA CNEL (as shown in Chapter 5.5, *Noise*, Table 5.5-9). In an ambient noise environment of less than 65 dBA CNEL, a 5 dBA increase is considered substantial impact and in 65 dBA CNEL or more, 3 dBA is considered substantial impact. Therefore, the project-generated maximum increase of 1.8 dBA CNEL is not considered a substantial increase. While the impact is not considered substantial, operational noise would worsen with the project implementation, thus this alternative is considered environmentally superior to the Proposed Project. Regardless, because the existing ambient noise environment under the No Project condition exceeds the thresholds, operational noise impact would remain significant and unavoidable.



7. Alternatives to the Proposed Project

7.4.6 Population and Housing

Under this alternative, a total of 10,266 dwelling units, 5,055,550 square feet of office use, and 2,264,400 square feet of commercial uses would be permitted to be constructed in the project area. No changes to industrial square footage (permitted up to 0.50 floor area ratio [FAR]) and institutional square footage (permitted up to 3.0 FAR) would occur. The direct and indirect population growth resulting from this alternative would be less than the Proposed Project and would result in a more balanced jobs/housing ratio within the Platinum Triangle. Jobs/housing ratio under this alternative is 1.43 and the Proposed Project is 2.19. This alternative would have an improved jobs/housing ratio and would be environmentally superior to the Proposed Project, although this is not a significant, unavoidable impact of the Proposed Project.

7.4.7 Public Services

Under No Project/Existing MUDP Alternative, the overall demand for public services would be less than the Proposed Project since there would be less population to serve. However, all standard conditions and mitigation measures identified for the Proposed Project would still be applicable. This alternative is environmentally superior to the Proposed Project, although this is not a significant, unavoidable impact of the Proposed Project.

7.4.8 Recreation

Under No Project/Existing MUDP Alternative, the demand for parks and recreational facilities would be less than the Proposed Project. Several parks are planned within the Platinum Triangle as a part of approved development agreements and would be constructed under this alternative. These parks are a result of compliance with the requirements of the PTMU Overlay Zone and the Platinum Triangle Standard Development Agreement. Therefore, with or without the Proposed Project, compliance with the dedication standards and conditions identified for the Platinum Triangle would ensure that adequate recreational facilities are provided. This alternative is neither environmentally superior nor inferior to the Proposed Project.

7.4.9 Transportation and Traffic

Under this alternative, the vehicle trips associated in each traffic analysis zone (TAZ) would be less than the Proposed Project. As discussed in Chapter 5.9, *Transportation and Traffic*, more street intersections, arterial segments, and Caltrans freeway ramps and mainlines would perform deficiently under the Proposed Project when compared to the No Project alternative. For example, under the 2030 No Project condition, 15 ICU intersections and one arterial segment are anticipated to perform deficiently compared to 32 ICU intersections and 10 arterial segments with the Proposed Project. In addition, for Caltrans facilities, one freeway ramp intersection and 21 freeway mainlines are anticipated to perform deficiently under this alternative compared to 5 ramp intersections and 23 freeway mainlines with the Proposed Project. Therefore, this alternative is environmentally superior to the Proposed Project. This is a significant, unavoidable impact of the Proposed Project.

7.4.10 Utilities and Service Systems

Under No Project/Existing MUDP Alternative, the project's impact on utilities and service systems would be less than the Proposed Project. However, all planned improvement and mitigation measures identified under the Proposed Project would be required in order to reduce impacts to a less than significant level. This alternative is environmentally superior to the Proposed Project, although this is not a significant, unavoidable impact of the Proposed Project.

7. Alternatives to the Proposed Project

7.4.11 Greenhouse Gas Emissions

Under this alternative, there would be 357,161 MTons of GHG emissions from existing conditions. This increase is less than an increase of 816,608 MTons expected from the Proposed Project. GHG emissions associated with the Proposed Project would be substantially greater than the No Project alternative. Although significant unavoidable air quality impacts would occur under this alternative as well as with the Proposed Project, this alternative is environmentally superior to the Proposed Project.

7.4.12 Conclusion

Avoid or Substantially Lessen Project Impacts

This alternative is environmentally superior to the Proposed Project in nine of the eleven resource areas, including noise, transportation and traffic, and GHG, which are significant and unavoidable impacts of the Project. This alternative is neither environmentally superior nor inferior to the Proposed Project in air quality, another significant and unavoidable impact of the Proposed Project.

Although No Project/Existing MLUP Alternative would reduce three of the four identified unavoidable significant impacts of the Proposed Project, the amount lessened would not be substantial and similar mitigation measures would be required.

Attainment of Project Objectives

This alternative would meet all of the project objectives identified in Section 3.2, but not to the extent attained by the implementation of the Proposed Project.

Comparative Merits

This alternative would insubstantially reduce impacts compared to the Proposed Project in the categories of aesthetics, hydrology, land use, population and housing, public services, transportation and traffic, utilities and service systems, and greenhouse gases. This alternative would also satisfy all of the project objectives to a certain degree. However, it would not do so to the extent that can be achieved by implementing the Proposed Project. Moreover, this project alternative would require relatively the same infrastructure improvements and other mitigation measures in order to reduce some of the potentially significant impacts to a less than significant level.

7.5 REDUCED INTENSITY ALTERNATIVE

This alternative would reduce proposed intensity increases by 30 percent. Implementation of this alternative would result in a total of 16,316 residential units, 4,116,097 square feet of commercial uses, 11,555,030 square feet of office uses, and 1,050,000 square feet of institutional uses within the PTMU Overlay Zone. The intent of this alternative is to reduce the impacts associated with implementation of the Platinum Triangle MLUP while achieving the basic goals and objectives established in the City's General Plan. The impacts of the Reduced Intensity Alternative as compared to the Proposed Project are discussed below:

7.5.1 Aesthetics

Under this alternative, the aesthetic impacts would be fewer than the Proposed Project. While implementation of this alternative would involve the development of uses similar to that of the Proposed Project, the overall decrease in development intensity would potentially result in slightly fewer impacts from



7. Alternatives to the Proposed Project

shade, shadow, and illumination. It should be noted that all development would be guided by extensive design standards to provide a comprehensive and visually attractive urban environment throughout the project area. As the individual project develops over an extended period of time, each project would be required to comply with various urban design attributes incorporated in the master land use plan, which would ensure that combined effects of individual projects exhibit an attractive overall visual character of the area. As with the Proposed Project, short-term construction impacts are anticipated. However, because there would be less construction, the construction time frame would also be reduced and impacts would be fewer than with the Proposed Project. This alternative is environmentally superior to the Proposed Project, although this is not a significant, unavoidable impact of the Proposed Project.

7.5.2 Air Quality

The Reduced Density Alternative would reduce local air quality impacts by approximately 30 percent since the traffic would be reduced by approximately 30 percent. This alternative would reduce the projected exceedance of the SCAQMD Threshold Criteria for project generated carbon monoxide (CO), ROG, NO_x, and coarse inhalable particulate matter (PM₁₀) emissions. However, any reductions to air pollutant emissions from a reduction in vehicle trips from residential units would be specific to the project area, and not a regional reduction. Regionally, implementation of this alternative would result in air quality impacts slightly greater than the Proposed Project, because of the unique mixed use nature of the Platinum Triangle that integrates pedestrian oriented development and various transportation options to reduce reliance on traditional automobiles, thereby having the effect of reducing auto-related emissions. Reduction in development intensity within the Platinum Triangle would result in development in other areas of the City or in the region. As with the Proposed Project, short-term construction impacts from ROG and NO_x are anticipated. Both the Proposed Project and this alternative would be consistent with the AQMP. Mitigation measures similar to the Proposed Project would be implemented under this alternative. The Reduced Density Alternative would have fewer air quality impacts locally and slightly more air quality impacts regionally compared with the Proposed Project. Significant unavoidable air quality impacts would occur under this alternative as well as with the Proposed Project. This alternative is neither environmentally superior nor inferior to the Proposed Project. This is a significant, unavoidable impact of the Proposed Project.

7.5.3 Hydrology and Water Quality

Under Reduced Intensity Alternative, water consumption would be reduced by approximately 30 percent, from 1,804 afy to 1,263 afy. To meet the project water demands the City currently proposes to upgrade the initial production rate of the previously proposed groundwater well in the Platinum Triangle and drill additional water well. Although less groundwater would be extracted for water supply under this alternative, construction of a water well would still be necessary to supply the additional 1,263 afy and construction could not be avoided. Therefore, impacts would be comparable to the Proposed Project. This alternative is environmentally superior to the Proposed Project, although this is not a significant, unavoidable impact of the Proposed Project.

7.5.4 Land Use and Planning

This alternative would require all of the amendments proposed under the Proposed Project. Therefore, even with the reduced intensity, potential land use impacts would be similar to that of the Proposed Project. This alternative is neither environmentally superior nor inferior to the Proposed Project.

7. Alternatives to the Proposed Project

7.5.5 Noise

Under this alternative, the short-term construction noise and long-term traffic-related noise would be similar when compared to the Proposed Project. The analysis included in Chapter 5.5, *Noise*, indicated that construction noise impact under the No Project condition and the Proposed Project would be similar because the construction intensity (e.g., mass grading, utility installation, etc.) would be similar assuming that construction occurs for eight hours a day. Similarly, with the 30 percent reduction in intensity, assuming eight hours of construction a day, this alternative would have comparable construction noise impact to the Proposed Project. And as with the Proposed Project, construction impacts that result in temporary exceedances of 65 dBA up to 446 feet from the construction site would remain as significant, unavoidable impact. However, although not substantial, the frequency exposed and the number of sensitive receptors would be fewer under this alternative, thus, this alternative is considered environmentally superior to the Proposed Project.

Considering that the overall traffic noise impact with the Proposed Project would not exceed 1.8 dBA CNEL, it is anticipated that the operational noise impact under this alternative would generally not exceed 1.3 dBA CNEL (30 percent less than 1.8 dBA CNEL) along the project area roadway segments. In an ambient noise environment of less than 65 dBA CNEL, a 5 dBA increase is considered substantial impact and in 65 dBA CNEL or more, 3 dBA is considered substantial impact. Therefore, the project-generated maximum increase of 1.3 dBA CNEL is not considered a substantial increase. While the impact is not considered substantial, operational noise would worsen with the project implementation, thus this alternative is considered environmentally superior to the Proposed Project. Regardless, because the existing ambient noise environment under the No Project condition exceeds the thresholds, operational noise impact would remain significant and unavoidable.

7.5.6 Population and Housing

Under Reduced Density Alternative, the direct and indirect population growth impacts would be reduced by approximately 30 percent and the jobs/housing ratio would improve slightly from 2.19 to 2.05 compared to the Proposed Project. This alternative is environmentally superior to the Proposed Project, although this is not a significant, unavoidable impact of the Proposed Project.

7.5.7 Public Services

The demand for public services generated at the project site would be reduced by approximately 30 percent, including the project's impact on police, fire, schools, and libraries. However, all standard and additional mitigation measures identified for the Proposed Project would still be applicable under this alternative in order to reduce impacts to a less than significant level. This alternative is environmentally superior to the Proposed Project, although this is not a significant, unavoidable impact of the Proposed Project.

7.5.8 Recreation

Under Reduced Density Alternative, the demand for parks and recreational facilities would be less than the Proposed Project. Several parks are planned within the Platinum Triangle as a part of approved development agreements and would be constructed under this alternative. These parks are a result of compliance with the requirements of the PTMU Overlay Zone and the Platinum Triangle Standard Development Agreement. Therefore, compliance with the dedication standards and conditions identified for the Platinum Triangle would ensure that adequate recreational facilities are provided. This alternative is neither environmentally superior nor inferior to the Proposed Project.



7. Alternatives to the Proposed Project

7.5.9 Transportation and Traffic

The Reduced Density Alternative would reduce project-generated average daily trips by approximately 30 percent and would have fewer traffic-related impacts than the Proposed Project. Although no quantitative analysis has been performed, project-related traffic impacts under this alternative on area intersections and Caltrans facilities would be slightly less than the Proposed Project. When comparing the No Project Alternative and the Proposed Project, approximately 110 percent more local intersections, 10 times more arterial segments, 5 times more Caltrans freeway ramp intersections, and 10 percent more Caltrans freeway mainlines were anticipated to perform deficiently. Therefore, if the project-generated average daily trips were to be reduced by 30 percent, it is anticipated that traffic impacts to these local and Caltrans facilities would be diminished, although not by 30 percent exactly. Therefore, this alternative is environmentally superior to the Proposed Project, this is a significant, unavoidable impact of the Proposed Project. However, although reduced, since it is reasonable to anticipate that impacted facilities under this alternative would also include facilities under the jurisdiction of the City of Orange and Caltrans, impacts to transportation and traffic would remain significant, unavoidable impact.

7.5.10 Utilities and Service Systems

Under Reduced Density Alternative, the project's impact on sewer, water, electricity, natural gas, and solid waste would be reduced by approximately 30 percent. However, it is anticipated that the majority of planned improvement and mitigation measures identified under the Proposed Project would still be required to reduce impacts to a less than significant level. This alternative is environmentally superior to the Proposed Project, although this is not a significant, unavoidable impact of the Proposed Project.

7.5.11 Greenhouse Gas Emissions

Under this alternative, GHG emissions would be reduced by approximately 30 percent since the land use intensity would be reduced by 30 percent. The Proposed Project is estimated to generate 492,597 MTons of GHG emissions compared to the Adopted MLUP, therefore, under this alternative, approximately 344,818 MTons of GHG emissions are anticipated. Therefore, this alternative is environmentally superior to the Proposed Project. However, although to a lesser degree, significant and unavoidable impact is anticipated.

7.5.12 Conclusion

Avoid or Substantially Lessen Project Impacts

This alternative is environmentally superior to the Proposed Project in eight of the eleven resource areas, including noise, transportation and traffic, and GHG emissions, which are significant and unavoidable impacts of the Proposed Project. This alternative is neither environmentally superior nor inferior to the Proposed Project in air quality, another significant and unavoidable impact of the Proposed Project.

While reducing three of the four identified unavoidable significant impacts of the Proposed Project, the amount lessened would not be substantial and similar mitigation measures would be required.

Attainment of Project Objectives

This alternative would meet all of the project objectives as described in Section 3.2 but not to the degree of the Proposed Project.

7. Alternatives to the Proposed Project

Comparative Merits

This alternative would insubstantially reduce impacts compared to the Proposed Project in the categories of aesthetics, hydrology, noise, population and housing, public services, traffic and circulation, utilities and service systems, and GHG emissions; and would have similar impacts in the categories of regional air quality, land use and planning, and recreation. This alternative would satisfy all of the project objectives to a certain degree. However, it would do so to the extent that can be achieved by implementing the Proposed Project. Moreover, this project alternative would require relatively the same infrastructure improvement and other mitigation measures in order to reduce some of the potentially significant impacts to a less than significant level.

7.6 INCREASED RESIDENTIAL INTENSITY ALTERNATIVE

The Increased Residential Intensity Alternative would convert some of office uses to residential intensity and commercial/retail and institutional square footages would remain. This Alternative would allow a maximum of 23,500 dwelling units, 11,714,038 square feet of office, 4,909,682 square feet of commercial/retail, and 1,500,000 square feet of institutional within the PTMU Overlay Zone. The increased Residential Intensity Alternative would reduce 2,626,484 square feet of office use from the Proposed Project and add 4,591 additional residential units. The resulting intensities would result in a more balanced jobs/housing ratio but exacerbate other environmental impacts associated with residential increases such as the need for additional recreation and education facilities where there may not be adequate available sites. The impacts of the Increased Residential Intensity Alternative as compared to the Proposed Project are discussed below:

7.6.1 Aesthetics

Additional 13,234 dwelling units in the project area would potentially result in greater impacts resulting from shade, shadow, and illumination. Additional units would likely result in greater building square footage, therefore, taller and more compact development. However, the same design guidelines and landscaping scheme would be implemented to enhance the overall aesthetic character of the project area. As with the Proposed Project, short-term views would be impacted during construction, though these activities will be staged over approximately 20 years and would not result in significant effects. This alternative is environmentally inferior to the Proposed Project.

7.6.2 Air Quality

This alternative would result in similar short-term construction and long-term operation impacts because any reduction in office square footage would be compensated by the additional residential construction. Adding more housing units may generate more CO, ROG, NO_x, and PM₁₀ emissions locally, but cause a regional reduction by promoting an intermodal transportation system that reduces reliance on traditional automobiles. Mitigation measures similar to the Proposed Project would be implemented under this alternative. Increased Residential Intensity Alternative would have similar air quality impacts locally and less air quality impacts regionally compared to the Proposed Project. Significant unavoidable air quality impacts would occur under this alternative as well as with the Proposed Project. This alternative is environmentally superior to the Proposed Project.

7.6.3 Hydrology and Water Quality

The Increased Residential Intensity Alternative would require more water than the Proposed Project, therefore more groundwater may be extracted. Water demand factor for residential unit is 105 gallons per day (gpd) per unit and for office use is 60 gpd/1,000 square feet of building area. Therefore, water demand



7. Alternatives to the Proposed Project

for additional 4,591 units would exceed the reduction in water demand for 2,626,484 square feet of office use. Implementation of the Proposed Project would require upgrade to the initial production rate of the planned water well in the Platinum Triangle and construction of second water well at a location to be determined. Under this alternative, further upgrades to the planned production rate or construction of the third water well may be necessary. Therefore, Increased Residential Intensity Alternative would have greater hydrology and water quality impacts compared to the Proposed Project. This alternative is environmentally inferior to the Proposed Project.

7.6.4 Land Use and Planning

Similar to the Proposed Project, this alternative would require amendments to the General Plan, PTMU Overlay Zone, and Platinum Triangle MULP, and zoning reclassification. This alternative would be consistent with most of the relevant General Plan policies as the Proposed Project and no substantial difference is anticipated. Instead, increased residential development could require more residence supporting services such as recreation and education facilities where there may not be adequate available sites. Therefore, implementation of this alternative would result in impacts greater than those anticipated from the Proposed Project. This alternative is environmentally inferior to the Proposed Project.

7.6.5 Noise

Additional housing units would replace some of office uses, therefore, short-term construction impacts and long-term traffic noise would be similar to the Proposed Project. However, there would be more sensitive receptors under this alternative than the Proposed Project. Significant noise impacts could not be avoided under this alternative and mitigation measures proposed for the Proposed Project would also be required. This alternative is environmentally inferior to the Proposed Project.

7.6.6 Population and Housing

Construction of additional housing and less office square footage would result in a more balance in jobs/housing ratio from 2.19 under the Proposed Project to 1.54 under this alternative. Therefore, this alternative is environmentally superior to the Proposed Project, although this is not a significant, unavoidable impact of the Proposed Project.

7.6.7 Public Services

Under Increased Residential Intensity Alternative, the demand for public services would be increased in the areas of schools, police, fire, and libraries. Additional mitigation measures may be required to accommodate the increased demand. This alternative is environmentally inferior to the Proposed Project.

7.6.8 Recreation

Increased number of dwelling units in the Platinum Triangle would increase the demand for parks and recreational facilities. Several parks are planned within the Platinum Triangle as a part of approved development agreements and would be constructed under this alternative. These parks are a result of compliance with the requirements of the PTMU Overlay Zone and the Platinum Triangle Standard Development Agreement. Therefore, compliance with the dedication standards and conditions identified for the Platinum Triangle would ensure that adequate recreational facilities are provided. This alternative is neither environmentally superior nor inferior to the Proposed Project.

7. Alternatives to the Proposed Project

7.6.9 Transportation and Traffic

Increased Residential Intensity Alternative would generate comparable traffic levels as the Proposed Project. Although there would be reduced office square footage, additional residential units would be allowed and other uses such as commercial and institutional uses would remain. Under this alternative, there would be 35,250 residents and 36,247 jobs compared to 28,364 residents and 41,500 jobs under the Proposed Project. Therefore, although the jobs/housing ratio under this alternative would improve, the overall project-generated vehicle trips in the Platinum Triangle are not anticipated to decrease. Therefore, the equivalent or comparable number of local and Caltrans facilities are expected to perform deficiently. This alternative is neither environmentally superior nor inferior to the Proposed Project. This is a significant, unavoidable impact of the Proposed Project and would remain as a significant, unavoidable impact under this alternative.

7.6.10 Utilities and Service Systems

Under the Increased Residential Intensity Alternative, the project's impact on sewer, water, electricity, natural gas, and solid waste would be increased. Additional mitigation measures may be required to those of the Proposed Project resulting in reduced for public services which would reduce impacts to a less than significant level. This alternative is environmentally inferior to the Proposed Project.

7.6.11 Greenhouse Gas Emissions

The Increased Residential Intensity Alternative would have similar GHG emissions impact compared to that of the Proposed Project. Construction emissions would not be reduced under this alternative and construction GHG impact would continue to be significant and unavoidable. Operational GHG would also be similar to that of the Proposed Project. Therefore, this alternative is neither environmentally superior nor inferior to the Proposed Project.



7.6.12 Conclusion

Avoid or Substantially Lessen Project Impacts

This alternative is environmentally superior to the Proposed Project in two of the eleven resource areas, including air quality, which is significant and unavoidable impact of the Proposed Project; and inferior in six of the eleven resource areas, including noise, another significant and unavoidable impact of the Proposed Project. This alternative would have comparable impacts in three resource areas, recreation, transportation and traffic, and GHG emissions. Increased Residential Intensity Alternative would result in similar or inferior environmental impacts and would not substantially lessen project impacts.

Attainment of Project Objectives

This alternative would meet all of the project objectives as described in Section 3.2.

Comparative Merits

This alternative would insubstantially reduce impacts compared to the Proposed Project in the categories of air quality and population and housing; and would have similar impacts in the categories of recreation, transportation and traffic, and GHG emissions. The Increased Residential Intensity would increase the level of impacts on categories including aesthetics, hydrology and water quality, land use and planning, noise, public services, and utilities and service systems. The main merit of this alternative would be the improved

7. Alternatives to the Proposed Project

jobs/housing balance from 2.19 to 1.54. However, other housing related impacts would either be the same or worse than the Proposed Project.

This alternative would satisfy all of the project objectives to a certain degree. However, it would do so the extent that can be achieved by implementing the Proposed Project. Moreover, this project alternative would require relatively the same infrastructure improvement and other mitigation measures in order to reduce some of the potentially significant impacts to a less than significant level.

7.7 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. Two alternatives have been identified as “environmentally superior” to the Proposed Project:

1. No-Project/Existing MLUP Alternative
2. Reduced Density Alternative

The No Project/Existing MLUP Alternative has the least impact to the environment because it is environmentally superior alternative with regard to aesthetics, hydrology and water quality, land use and planning, noise, population and housing, public services, transportation and traffic, utilities and service systems, and GHG emissions. Other impacts, including air quality and recreation resources, would have the similar impacts to the Proposed Project. However, CEQA Guidelines (Section 15126.6[e][2]) states that if the environmentally superior alternative is the “no project” alternative, the EIR shall also identify an environmentally superior development alternative. Table 7-3 shows impact comparison matrix for each impact category.

7. Alternatives to the Proposed Project

**Table 7-3
Alternative Impact Comparison Matrix**

	<i>Superior</i>	<i>Same</i>	<i>Inferior</i>
No Project	Aesthetics Hydrology and Water Quality Land Use & Planning *Noise Population & Housing Public Services *Transportation and Traffic Utilities & Service Systems *GHG	*Air Quality Recreation	
Total	9	2	0
Reduced Density	Aesthetics Hydrology *Noise Public Services *Transportation and Traffic Utilities and Service Systems *GHG	*Air Quality Land Use and Planning Population and Housing	Recreation
Total	7	3	1
Increased Residential	*Air Quality Population and Housing	Recreation *Transportation and Traffic *GHG	Aesthetics Hydrology Land Use and Planning *Noise Public Services Utilities and Service Systems
Total	1	3	6

Note: * Significant unavoidable project impact.



The Reduced Density Alternative would reduce environmental impacts compared to the Proposed Project in eight of the eleven resource areas, including aesthetics, hydrology and water quality, noise, population and housing, public services, transportation and traffic, utilities and service systems, and GHG emissions by approximately 30 percent. The Reduced Density Alternative would have impacts similar to the Proposed Project with respect to air quality, land use and planning, and recreation. The Reduced Density Alternative, while having the least amount of environmental impacts, is not capable of eliminating any significant unavoidable adverse effects associated with the development nor will it reduce the level of significance of any of the identified environmental impacts without incorporating the equivalent mitigation measures that are proposed as part of the Proposed Project. Reducing the project density by 30 percent would not result in avoidance of significant environmental impacts. While meeting all of the project objectives to a certain degree, it would not do so to the extent that can be achieved by the Proposed Project. For example, the Reduced Density Alternative would meet the project objective to provide for a wide-range of housing opportunities in close proximity to regional transportation centers consistent with regional growth management policies, however, the benefit of providing such housing and employment opportunities afforded by this alternative would be lessened by approximately 30 percent. Reducing the project density by 30 percent would not be the best possible utilization of the project area.

7. Alternatives to the Proposed Project

Among the factors that may be used to eliminate alternatives from detailed consideration in an EIR are: (i) failure to meet most of the basic project objectives, (ii) infeasibility, or (iii) inability to avoid significant environmental impacts” [Guidelines Sec. 15126.6(c)]. These are factors which will be considered by the City of Anaheim decision-makers in determining whether to approve the Proposed Project or one of the alternatives identified above.