
ENVIRONMENTAL IMPACT REPORT

3. PROJECT ALTERNATIVES ANALYSIS

3.1 Introduction

Introduction

Section 3: Project Alternatives Analysis of this DEIR presents the alternatives to the Proposed Project, including the No Project (current General Plan) alternative. CEQA Guidelines Section 15126.6 requires that an EIR describe and evaluate the comparative merits of a range of alternatives to the Project that could feasibly attain all or most of the objectives of the Project, but would avoid or substantially lessen any significant adverse effects of the Project. An EIR is not required to consider every conceivable alternative to a project; rather, it must consider a reasonable range of potentially feasible alternatives that will foster informed decision-making and public participation. The CEQA Guidelines further state that the specific alternative of “No Project” shall also be evaluated. The alternatives evaluated in this DEIR were identified based on input from City residents and property owners, public agencies and other stakeholders. The alternatives were selected in consideration of one or more of the following factors:

- Extent to which the alternative would accomplish all or most of the basic objectives of the project;
- Extent to which the alternative would avoid or lessen any of the identified significant adverse environmental effects of the project;
- Feasibility of the alternative, taking into account site/geographic suitability, economic viability, constructability, and consistency with regulatory requirements; and
- Appropriateness of the alternative in contributing to a reasonable range of alternatives necessary to permit a reasoned choice by decision-makers.

While Section 2 describes existing conditions and analyzes a range of potential project impacts and mitigation measures associated with the proposed General Plan, Section 3 of the EIR addresses the potential impacts associated with various project alternatives. Public Resources Code Section 21002.1 and CEQA Guidelines Section 15126.6 provide specific guidance on the need for alternatives to a Proposed Project. CEQA does not require that every potential alternative to a project be analyzed. Rather, an EIR must consider potentially feasible alternatives that meet most or all of the basic objectives of the Proposed Project and avoid or substantially reduce the significant environmental impacts of the Proposed Project. CEQA further requires that the analysis of alternatives contain sufficient information to allow for “meaningful evaluation, analysis and comparison with the Proposed Project.”

Finally, a No Project alternative must be considered, in order to allow decision makers to assess the impacts of approving the Proposed Project versus not approving it.

This section describes and analyzes the potential impacts of three potentially feasible alternatives: 1) Alternative 1: More Intense Alternative, 2) Alternative 2: Less Intense Alternative, and 3) No Project Alternative (Guidelines, Section 15126(3)). The No Project Alternative considers impacts associated with continued implementation of the current General Plan.

Section 2 of this EIR assessed impacts related to the following resource topics:

- Aesthetics
- Agriculture and Forestry Resources
- Air Quality and Greenhouse Gases
- Biological Resources
- Cultural and Tribal Cultural Resources
- Energy and Mineral Resources
- Geology and Soils
- Hazards, Wildfires, and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Noise
- Parks and Recreational Resources
- Population, Housing and Socio-Economic Resources
- Public Utilities and Service Systems
- Transportation

To provide a basis for comparison with the proposed General Plan, the same analysis categories are considered in this section for each alternative. Where mitigation is required for an alternative and the same mitigation measure required for the proposed General Plan Update in Section 2 applies, a reference to the appropriate Section 2 mitigation measure is made. Where additional mitigation measures are required for an alternative, the alternative-specific mitigation measures are listed in this section.

3.1.1 Statement of Project Objectives

Pursuant to CEQA Guidelines Section 15124(b), the project description includes a statement of objectives to assist the City in developing a reasonable range of alternatives to evaluate in this EIR. These objectives are intended to explain the purpose of the project and to aid decision-makers in preparing findings or a statement of overriding considerations, if necessary.

The City has identified the following list of criteria as the project objectives.

- A. An updated General Plan that ensures that associated City ordinances, including the Zoning and Subdivision Ordinances, are maintained in conformance with the General Plan
- B. The continued use of Specific Plans as a preferred method of detailed and systematic implementation of the General Plan for large or complex planning areas
- C. The periodic examination and review of the long-term implications of General Plan policies and programs as they relate to the City's ability to provide public services and facilities
- D. A cooperative planning process with Riverside County, assuring an effective advisory role regarding any and all development and other land use planning issues or proposals within or in close proximity to the City's Sphere-of-Influence
- E. A General Plan that assures that properly filed development applications shall be processed in an expeditious and timely manner

- F. Master facilities plans that address the recreation, drainage/flood control, infrastructure, utility management, traffic control, and other facility needs of the community
- G. In-fill development within already urbanized areas of the corporate boundaries of the City
- H. Expansion of new development that is logically phased and, as appropriate, guided by the development of existing and new Specific Plans
- I. Ensure opportunities for review and comment on development proposals through public hearing notices sent to owners of property located at least within 300 feet of development proposal sites
- J. Cooperative public/private ventures and partnerships that better provide public services and facilities that benefit the community

3.1.2 Summary of Alternatives

3.1.3 Alternative 1: More Intense Alternative

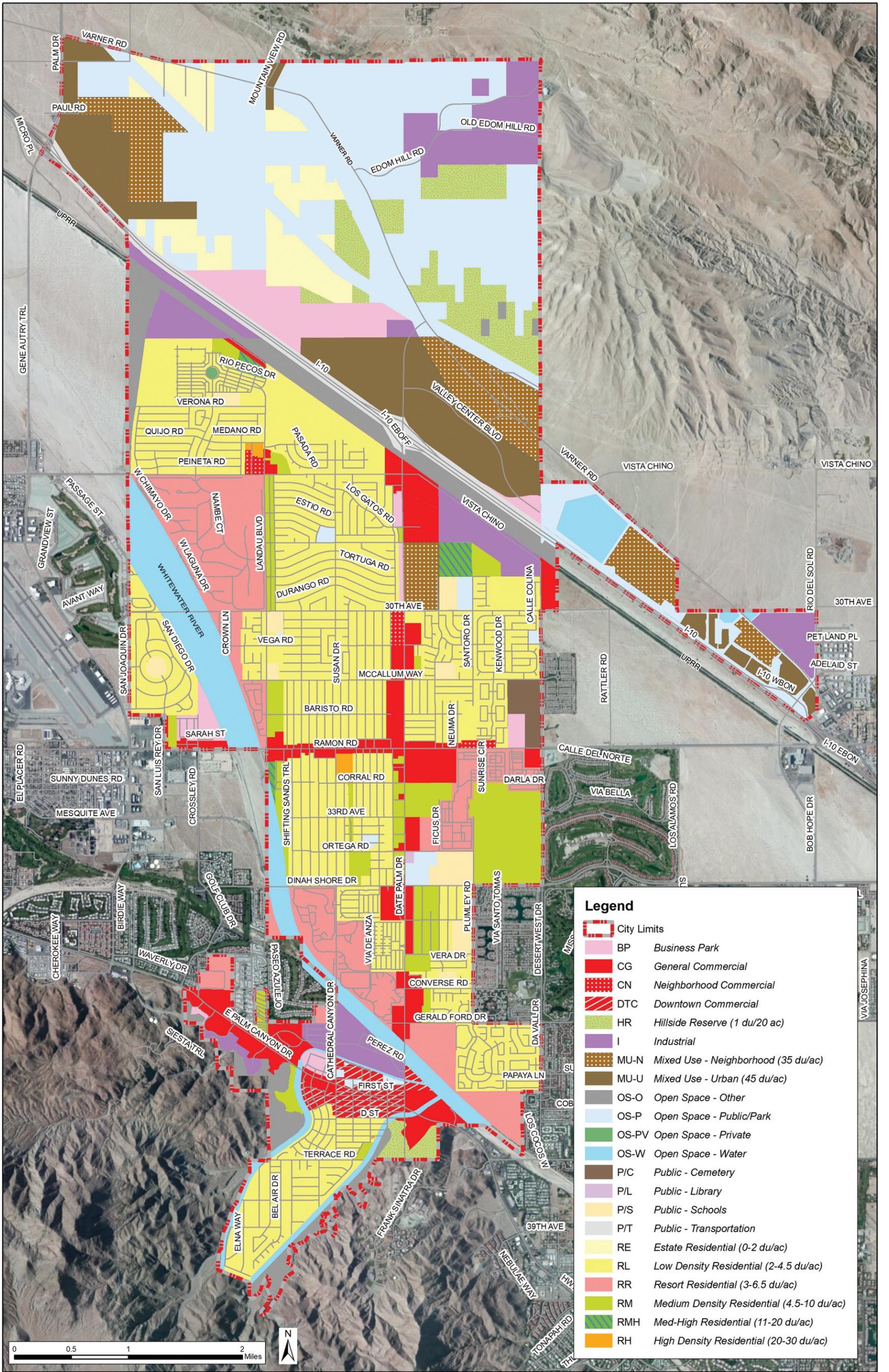
Alternative 1: More Intense Alternative proposes a General Plan update with the same General Plan Elements, goals, policies, and programs as the Proposed Project, but with land use assignments that in some instances intensify the land use pattern of the City, compared to the Proposed Project or the current General Plan. For instance, Alternative 1 increases residential densities for the RH (Residential High Density) from a maximum of 24 units per acre to up to 30 units per acre. No other intensification of land use designations are considered in this alternative.

Alternative 1 also increases development intensities on several vacant parcels south of I-10. Specifically, Alternative 1 proposes increased residential densities on vacant land northeast of Dinah Shore Drive and Plumley Road, and northeast of 30th Avenue and Date Palm Drive. Additionally, whereas the proposed General Plan assigns Industrial land uses northeast of 30th Avenue and Date Palm Drive, Alternative 1 proposes less Industrial and more General Commercial land uses.

Whereas the proposed General Plan proposes Business Park uses near the southwest boundary of the City, Alternative 1 proposes Industrial uses. These lands are designated General Commercial on the current General Plan. Several smaller scattered parcels are also proposed for higher intensity uses. Land use designations north of I-10 are the same for the current and proposed General Plans, and in Alternative 1, consistent with the approved North City Specific Plan and North City Extended Specific Plan.

Although more intense land use designations increase the development potential of land, they can also increase traffic, the potential consumption of resources, such as water and electricity, and the need for infrastructure and public services, such as roads and schools.

Section 3.4, below, analyzes the potential environmental impacts of Alternative 1 and compares them with potential impacts of the current and proposed General Plan, and the Less Intense Alternative 2 scenario.. The Alternative 1 land use map is shown on Exhibit 3-1, and the land use table is provided in Table 3-1.



**City of Cathedral City General Plan EIR
Land Use Alternative 1 - More Intense
Cathedral City, California**

Table 3-1 Cathedral City General Plan (Alternative 1) Land Use Table

| Land Use Category | ROW Acres | Land Use Acres | Total Acres | Vacant | Percentage Vacant Lands | Developed | Percentage Developed Lands | Total | Percentage | Existing SF/Units | Potential SF/Units | Build out SF/Units |
|---|----------------|-----------------|-----------------|----------------|-------------------------|----------------|----------------------------|-----------------|----------------|-------------------|--------------------|--------------------|
| Residential | | | | | | | | | | | | |
| Hillside Reserve (1du/20ac) | 1.76 | 457.29 | 459.05 | 451.23 | 98.67% | 6.06 | 1.33% | 457.29 | 3.52% | 0 | 23 | 23 |
| Estate Residential (0-2du/ac) | 6.92 | 421.86 | 428.78 | 421.27 | 99.86% | 0.59 | 0.14% | 421.86 | 3.25% | 1 | 632 | 633 |
| Low Density Residential (2-4.5du/ac) | 803.30 | 3125.92 | 3929.22 | 744.57 | 23.82% | 2381.35 | 76.18% | 3125.92 | 24.05% | 11,841 | 2,513 | 14,354 |
| Resort Residential (3-6.5du/ac) | 47.43 | 1102.45 | 1149.88 | 707.72 | 64.19% | 394.74 | 35.81% | 1102.45 | 8.48% | 5,153 | 3,450 | 8,603 |
| Medium Density Residential (4.5-10 du/ac) | 38.73 | 622.92 | 661.65 | 374.31 | 60.09% | 248.61 | 39.91% | 622.92 | 4.79% | 4,224 | 2,807 | 7,031 |
| Medium-High Density Res. (11-20du/ac) | 0.52 | 60.18 | 60.70 | 60.18 | 100.00% | 0.00 | 0.00% | 60.18 | 0.46% | - | 903 | 903 |
| High Density Residential (20-30du/ac) | 2.44 | 38.34 | 40.78 | 38.34 | 100.00% | 0.00 | 0.00% | 38.34 | 0.29% | - | 863 | 863 |
| Mixed Use - Neighborhood (35du/ac) | 9.24 | 241.85 | 251.09 | 241.85 | 100.00% | 0.00 | 0.00% | 241.85 | 1.86% | - | 7,195 | 7,195 |
| Mixed Use - Urban (45du/ac) | 29.86 | 482.50 | 512.36 | 475.68 | 98.59% | 6.82 | 1.41% | 482.50 | 3.71% | - | 18,195 | 18,195 |
| Total Residential Acreage | 940.20 | 6553.31 | 7493.51 | 3515.14 | 53.64% | 3038.17 | 46.36% | 6553.31 | 50.41% | 21,219 | 36,580 | 57,799 |
| Commercial | | | | | | | | | | | | |
| Neighborhood Commercial | 5.62 | 33.35 | 38.97 | 21.56 | 64.64% | 11.79 | 35.36% | 33.35 | 0.26% | 113,011 | 206,589 | 319,600 |
| General Commercial | 132.34 | 614.61 | 746.95 | 248.12 | 40.37% | 366.49 | 59.63% | 614.61 | 4.73% | 3,516,986 | 2,377,784 | 5,894,770 |
| Downtown Commercial | 40.58 | 90.34 | 130.92 | 37.65 | 41.68% | 52.69 | 58.32% | 90.34 | 0.69% | 504,910 | 360,836 | 865,746 |
| Mixed Use - Neighborhood | 13.87 | 362.78 | 376.65 | 362.78 | 100.00% | 0.00 | 0.00% | 362.78 | 2.79% | - | 3,476,593 | 3,476,593 |
| Mixed Use - Urban | 19.90 | 321.67 | 341.57 | 317.12 | 98.59% | 4.55 | 1.41% | 321.67 | 2.47% | 43,600 | 3,039,027 | 3,082,628 |
| Total Commercial Acreage | 212.31 | 1422.75 | 1635.06 | 987.23 | 69.39% | 435.52 | 30.61% | 1422.75 | 10.95% | 4,178,508 | 9,460,830 | 13,639,337 |
| Industrial | | | | | | | | | | | | |
| Industrial | 26.20 | 770.15 | 796.35 | 697.17 | 90.52% | 72.98 | 9.48% | 770.15 | 5.92% | 1,080,870 | 10,325,359 | 11,406,230 |
| Business Park | 17.85 | 381.21 | 399.06 | 304.47 | 79.87% | 76.74 | 20.13% | 381.21 | 2.93% | 1,136,603 | 4,509,269 | 5,645,873 |
| Total Industrial Acreage | 44.05 | 1151.36 | 1195.41 | 1001.64 | 87.00% | 149.72 | 13.00% | 1151.36 | 8.86% | 2,217,474 | 14,834,628 | 17,052,102 |
| Open Space | | | | | | | | | | | | |
| Open Space - Other | 10.73 | 528.60 | 539.33 | 499.68 | 94.53% | 28.92 | 5.47% | 528.60 | 4.07% | N/A | N/A | N/A |
| Open Space - Public | 148.33 | 2303.24 | 2451.57 | 2303.24 | 100.00% | 0.00 | 0.00% | 2303.24 | 17.72% | N/A | N/A | N/A |
| Open Space - Water | 8.56 | 772.77 | 781.33 | 477.32 | 61.77% | 295.45 | 38.23% | 772.77 | 5.94% | N/A | N/A | N/A |
| Total Open Space Acreage | 167.62 | 3604.61 | 3772.23 | 3280.24 | 91.00% | 324.37 | 9.00% | 3604.61 | 27.73% | N/A | N/A | N/A |
| Public | | | | | | | | | | | | |
| Cemetery | 4.64 | 55.74 | 60.38 | 0.00 | 0.00% | 55.74 | 100.00% | 55.74 | 0.43% | N/A | N/A | N/A |
| Library | 0.77 | 2.80 | 3.57 | 0.00 | 0.00% | 2.80 | 100.00% | 2.80 | 0.02% | N/A | N/A | N/A |
| Schools | 7.29 | 149.38 | 156.67 | 0.00 | 0.00% | 149.38 | 100.00% | 149.38 | 1.15% | N/A | N/A | N/A |
| Transportation | 181.20 | 58.97 | 240.17 | 0.00 | 0.00% | 58.97 | 100.00% | 58.97 | 0.45% | N/A | N/A | N/A |
| Total Public Acreage | 193.90 | 266.89 | 460.79 | 0.00 | 0.00% | 266.89 | 100.00% | 266.89 | 2.05% | N/A | N/A | N/A |
| Totals | 1558.08 | 12998.92 | 14557.00 | 8784.25 | 67.58% | 4214.67 | 32.42% | 12998.92 | 100.00% | | | |

*Existing and future conditions of Mixed-Use, Commercial, and Industrial land uses are calculated using the following assumptions: residential development is assumed to occur at 75% of the maximum density permitted, 22% lot coverage for commercial and mixed-use development, and 34% lot coverage for industrial development. Mixed-use Neighborhood is developed as 60% commercial and 40% residential. Mixed-use Urban is developed as 60% residential and 40% commercial. Updated 5.30.19

3.1.4 Alternative 2: Less Intense Alternative

Alternative 2: Less Intense Alternative proposes a General Plan update with the same General Plan Elements, goals, policies, and programs as the proposed Project, but with a less intense land use plan than the proposed Project. This alternative also reduced the maximum allowable density in Residential Medium density from 10 to 8 units per acre and reduced the Residential Medium High density from 20 to 16 units per acre.

Alternative 2 decreases the development intensity on several vacant parcels south of I-10. Specifically, where the proposed General Plan designates land for Medium Density Residential and Industrial northeast of 30th Avenue and Date Palm Drive, Alternative 2 designates it for Low Density Residential uses. Where the proposed General Plan designates land northeast of Dinah Shore Drive and Plumley Road for Resort Residential uses, Alternative 2 designates it for Low Density Residential. A few parcels designated General Commercial on Date Palm Drive between Ramon Road and Dinah Shore Drive are re-designated to Residential Medium, and returns all lands between the Union Pacific Railroad lines and Interstate-10 to Open Space-Other.

Land use designations north of I-10 are the same under both alternatives and North City Specific Plan and North City Extended Specific Plan, with the exception of a portion of the North City Extended Specific Plan east of Da Vall Drive (extended) re-designated from Mix-Use Neighborhood to Industrial.

Lower density land uses generally consume fewer resources and require less infrastructure and public services. However, they may not fully maximize the development potential of a parcel.

The potential environmental impacts of Alternative 2 are analyzed in Section 3.4, below, and compared to the potential impacts of the proposed General Plan that were analyzed in Section 2 of this EIR. The Alternative 2 land use map is shown on Exhibit 3-2, and the land use table is provided in Table 3-2.

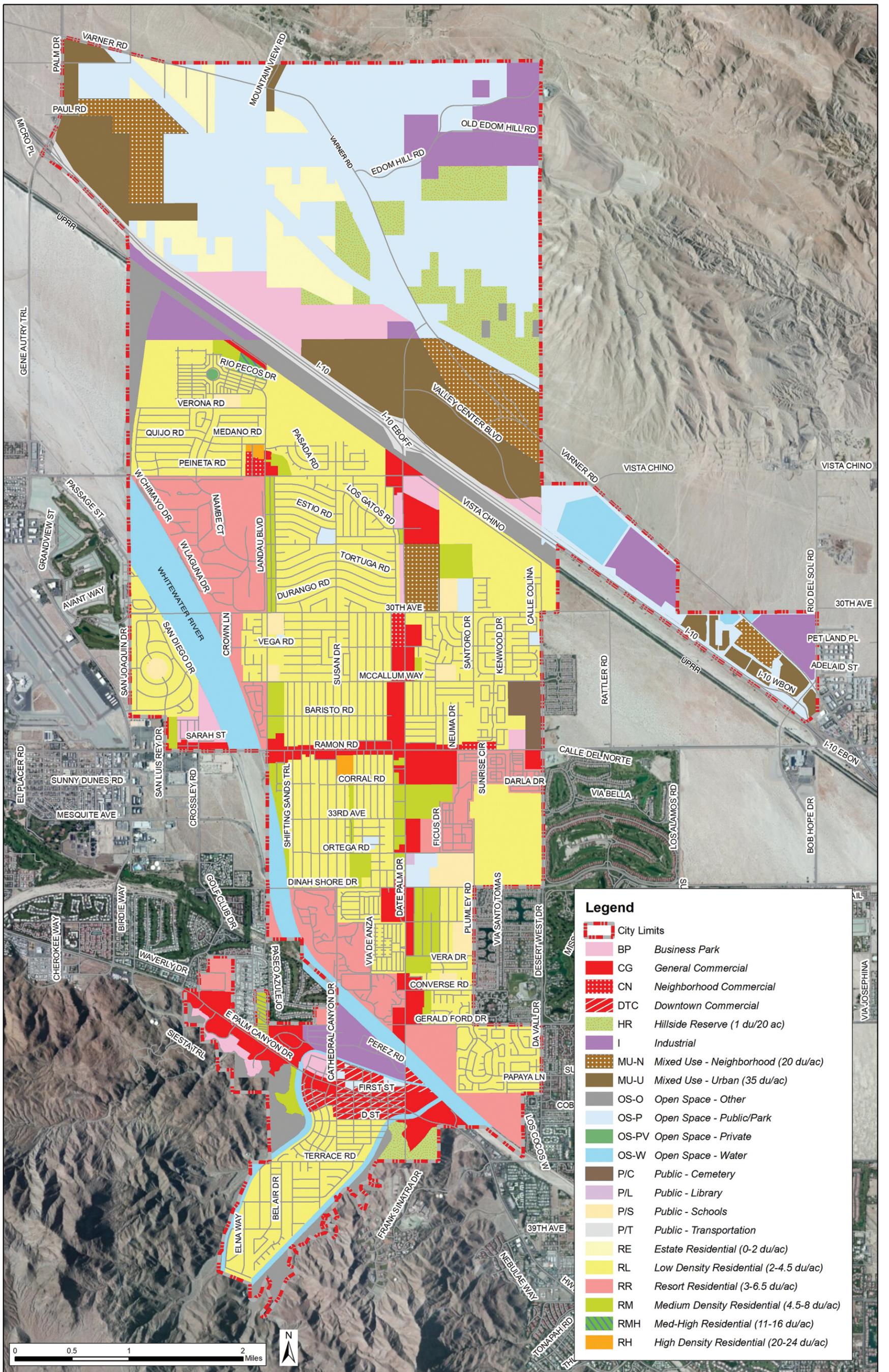


Table 3-2 Cathedral City General Plan (Alternative 2) Land Use Table

| Land Use Category | ROW Acres | Land Use Acres | Total Acres | Vacant | Percentage of Vacant Lands | Developed | Percentage of Developed Lands | Total | Percentage | Existing SF/Units | Potential SF/Units | Build out SF/Units |
|---|----------------|-----------------|-----------------|----------------|----------------------------|----------------|-------------------------------|-----------------|----------------|-------------------|--------------------|--------------------|
| Residential | | | | | | | | | | | | |
| Hillside Reserve (1du/20ac) | 1.76 | 457.29 | 459.05 | 451.23 | 98.67% | 6.06 | 1.33% | 457.29 | 3.52% | 0 | 23 | 23 |
| Estate Residential (0-2du/ac) | 6.92 | 421.86 | 428.78 | 421.27 | 99.86% | 0.59 | 0.14% | 421.86 | 3.25% | 1 | 632 | 633 |
| Low Density Residential (2-4.5du/ac) | 803.30 | 3554.00 | 4357.30 | 1172.65 | 33.00% | 2381.35 | 67.00% | 3554.00 | 27.34% | 11,841 | 3,958 | 15,799 |
| Resort Residential (3-6.5du/ac) | 47.43 | 1105.96 | 1153.39 | 711.23 | 64.31% | 394.74 | 35.69% | 1105.96 | 8.51% | 5,153 | 3,467 | 8,620 |
| Medium Density Residential (4.5-8du/ac) | 38.73 | 407.75 | 446.48 | 159.14 | 39.03% | 248.61 | 60.97% | 407.75 | 3.14% | 4,224 | 955 | 5,179 |
| Medium-High Density Res. (11-16du/ac) | 0.52 | 14.15 | 14.67 | 14.15 | 100.00% | 0.00 | 0.00% | 14.15 | 0.11% | - | 170 | 170 |
| High Density Residential (20-24du/ac) | 2.44 | 38.00 | 40.44 | 38.00 | 100.00% | 0.00 | 0.00% | 38.00 | 0.29% | - | 684 | 684 |
| Mixed Use - Neighborhood (20du/ac) | 9.24 | 120.46 | 129.70 | 120.46 | 100.00% | 0.00 | 0.00% | 120.46 | 0.93% | - | 2,048 | 2,048 |
| Mixed Use - Urban (35du/ac) | 29.86 | 482.49 | 512.35 | 475.67 | 98.59% | 6.82 | 1.41% | 482.49 | 3.71% | | 14,151 | 14,151 |
| Total Residential Acreage | 940.20 | 6601.96 | 7542.16 | 3563.79 | 53.98% | 3038.17 | 46.02% | 6601.96 | 50.79% | 21,219 | 26,087 | 47,306 |
| Commercial | | | | | | | | | | | | |
| Neighborhood Commercial | 5.62 | 33.35 | 38.97 | 21.56 | 64.64% | 11.79 | 35.36% | 33.35 | 0.26% | 113,011 | 206,589 | 319,600 |
| General Commercial | 132.33 | 553.57 | 685.90 | 187.08 | 33.80% | 366.49 | 66.20% | 553.57 | 4.26% | 3,516,986 | 1,792,825 | 5,309,812 |
| Downtown Commercial | 40.58 | 90.35 | 130.93 | 37.66 | 41.69% | 52.69 | 58.31% | 90.35 | 0.70% | 504,910 | 360,932 | 865,842 |
| Mixed Use - Neighborhood | 13.87 | 371.26 | 385.13 | 371.26 | 100.00% | 0.00 | 0.00% | 371.26 | 2.86% | - | 3,557,859 | 3,557,859 |
| Mixed Use - Urban | 19.91 | 321.67 | 341.58 | 317.12 | 98.59% | 4.55 | 1.41% | 321.67 | 2.47% | 43,600 | 3,039,027 | 3,082,628 |
| Total Commercial Acreage | 212.31 | 1370.20 | 1582.51 | 934.68 | 68.21% | 435.52 | 31.79% | 1370.20 | 10.54% | 4,178,508 | 8,957,233 | 13,135,740 |
| Industrial | | | | | | | | | | | | |
| Industrial | 26.20 | 726.94 | 753.14 | 653.96 | 89.96% | 72.98 | 10.04% | 726.94 | 5.59% | 1,080,870 | 9,685,402 | 10,766,272 |
| Business Park | 17.85 | 425.67 | 443.52 | 348.93 | 81.97% | 76.74 | 18.03% | 425.67 | 3.27% | 1,136,603 | 5,167,740 | 6,304,343 |
| Total Industrial Acreage | 44.05 | 1152.61 | 1196.66 | 1002.89 | 87.01% | 149.72 | 12.99% | 1152.61 | 8.87% | 2,217,474 | 14,853,141 | 17,070,615 |
| Open Space | | | | | | | | | | | | |
| Open Space - Other | 10.64 | 528.69 | 539.33 | 499.77 | 94.53% | 28.92 | 5.47% | 528.69 | 4.07% | N/A | N/A | N/A |
| Open Space - Public | 145.53 | 2308.69 | 2454.22 | 2308.69 | 100.00% | 0.00 | 0.00% | 2308.69 | 17.76% | N/A | N/A | N/A |
| Open Space - Water | 11.45 | 769.88 | 781.33 | 474.43 | 61.62% | 295.45 | 38.38% | 769.88 | 5.92% | N/A | N/A | N/A |
| Total Open Space Acreage | 167.62 | 3607.26 | 3774.88 | 3282.89 | 91.01% | 324.37 | 8.99% | 3607.26 | 27.75% | N/A | N/A | N/A |
| Public | | | | | | | | | | | | |
| Cemetery | 4.64 | 55.74 | 60.38 | 0.00 | 0.00% | 55.74 | 100.00% | 55.74 | 0.43% | N/A | N/A | N/A |
| Library | 0.77 | 2.80 | 3.57 | 0.00 | 0.00% | 2.80 | 100.00% | 2.80 | 0.02% | N/A | N/A | N/A |
| Schools | 7.29 | 149.38 | 156.67 | 0.00 | 0.00% | 149.38 | 100.00% | 149.38 | 1.15% | N/A | N/A | N/A |
| Transportation | 181.20 | 58.97 | 240.17 | 0.00 | 0.00% | 58.97 | 100.00% | 58.97 | 0.45% | N/A | N/A | N/A |
| Total Public Acreage | 193.90 | 266.89 | 460.79 | 0.00 | 0.00% | 266.89 | 100.00% | 266.89 | 2.05% | N/A | N/A | N/A |
| Totals | 1558.08 | 12998.92 | 14557.00 | 8784.25 | 67.58% | 4214.67 | 32.42% | 12998.92 | 100.00% | | | |

*Existing and future conditions of Mixed-Use, Commercial, and Industrial land uses are calculated using the following assumptions: residential development is assumed to occur at 75% of the maximum density permitted, 22% lot coverage for commercial and mixed-use development, and 34% lot coverage for industrial development. Mixed-Use Neighborhood is developed as 60% commercial and 40% residential. Mixed-use Urban is developed as 60% residential and 40% commercial. Updated 5.30.19

3.1.5 Alternative 3: No Project Alternative

The No Project Alternative (Alternative 3) represents the continued implementation of the current Cathedral City General Plan, adopted in 2002 and amended in 2009, including its land use map, General Plan elements, and goals, policies, and programs. No update to goals, policies, or programs would occur.

Whereas the proposed General Plan land use plan designates vacant parcels northeast of 30th Avenue and Date Palm Drive for a variety of commercial, industrial, and residential uses, the current General Plan designates a substantial portion of it Residential Low for low-density residential uses. It also maintains the limited Industrial and the substantial General Commercial designations in this area, and leaves the lands south of the railroad and east of Da Vall Drive as Open space-Other.

Whereas the proposed General Plan land use plan designates much of the west side of Date Palm Drive between Ramon Road and Ortega Road for Medium Density Residential, the current General Plan designates it for General Commercial uses. Under the proposed General Plan, vacant land at the southwest City boundary is designated for Business Park uses; the current General Plan designates it for General Commercial uses. Designations vary on several others parcels south of I-10, but designations north of I-10 are the same under both plans, consistent with the approved North City Specific Plan and North City Extended Specific Plan.

The No Project Alternative land use map is shown on Exhibit 3-3, and the land use table is provided in Table 3-3.

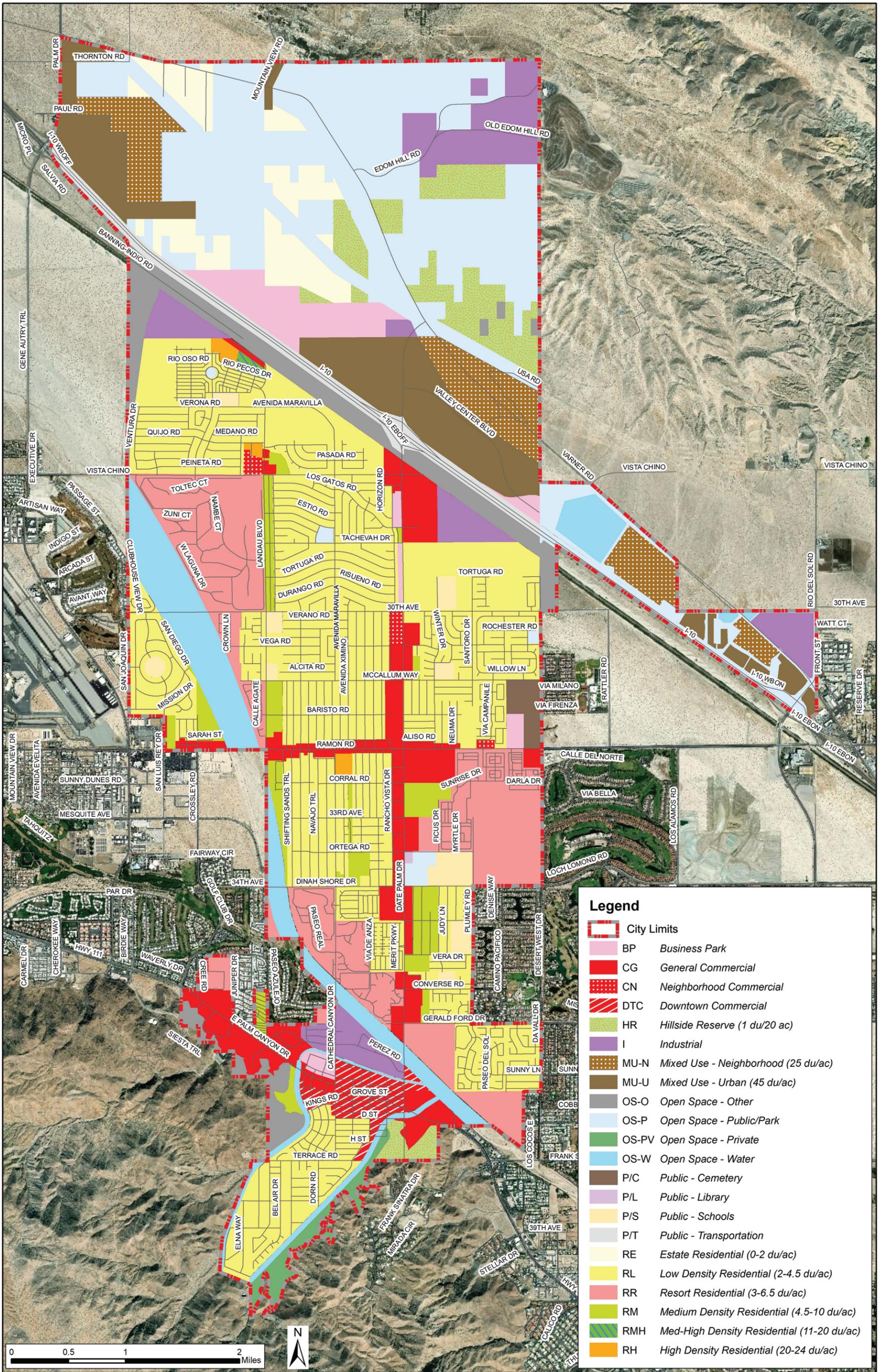


Table 3-3 Cathedral City General Plan (2018) (Alternative 3) Existing Land Use Table

| Land Use Category | ROW Acres | Land Use Acres | Total Acres | Vacant | Percentage of Vacant Lands | Developed | Percentage Developed Lands | Total | Percentage | Existing SF/Units | Potential SF/Units | Build out SF/Units |
|---------------------------------------|----------------|-----------------|-----------------|----------------|----------------------------|----------------|----------------------------|-----------------|----------------|-------------------|--------------------|--------------------|
| Residential | | | | | | | | | | | | |
| Hillside Reserve (1du/20ac) | 1.76 | 457.29 | 459.05 | 451.23 | 98.67% | 6.06 | 1.33% | 457.29 | 3.52% | 0 | 23 | 23 |
| Estate Residential (0-2du/ac) | 6.92 | 421.86 | 428.78 | 421.27 | 99.86% | 0.59 | 0.14% | 421.86 | 3.25% | 1 | 632 | 633 |
| Low Density Residential (2-4.5du/ac) | 803.30 | 3358.84 | 4162.14 | 977.49 | 29.10% | 2381.35 | 70.90% | 3358.84 | 25.84% | 11,841 | 3,299 | 15,140 |
| Resort Residential (3-6.5du/ac) | 47.43 | 1339.15 | 1386.58 | 944.41 | 70.52% | 394.74 | 29.48% | 1339.15 | 10.30% | 5,153 | 4,604 | 9,757 |
| Medium Density Res. (4.5-10 du/ac) | 38.73 | 348.75 | 387.48 | 100.14 | 28.71% | 248.61 | 71.29% | 348.75 | 2.68% | 4,224 | 751 | 4,975 |
| Medium-High Density Res. (11-20du/ac) | 0.52 | 14.15 | 14.67 | 14.15 | 100.00% | 0.00 | 0.00% | 14.15 | 0.11% | - | 212 | 212 |
| High Density Residential (20-24du/ac) | 2.44 | 38.65 | 41.09 | 38.65 | 100.00% | 0.00 | 0.00% | 38.65 | 0.30% | - | 696 | 696 |
| Mixed-Use - Neighborhood | 9.24 | 208.16 | 217.40 | 208.16 | 100.00% | 0.00 | 0.00% | 208.16 | 1.60% | - | 4,423 | 4,423 |
| Mixed-Use - Urban | 29.86 | 482.49 | 512.35 | 475.67 | 98.59% | 6.82 | 1.41% | 482.49 | 3.71% | - | 18,194 | 18,194 |
| Total Residential Acreage | 940.20 | 6669.34 | 7609.54 | 3631.17 | 54.45% | 3038.17 | 45.55% | 6669.34 | 51.31% | 21,219 | 32,834 | 54,053 |
| Commercial | | | | | | | | | | | | |
| Neighborhood Commercial | 5.62 | 28.78 | 34.40 | 16.99 | 59.03% | 11.79 | 40.97% | 28.78 | 0.22% | 113,011 | 162,794 | 275,804 |
| General Commercial | 132.31 | 647.06 | 779.37 | 280.57 | 43.36% | 366.49 | 56.64% | 647.06 | 4.98% | 3,516,986 | 2,688,758 | 6,205,745 |
| Downtown Commercial | 40.58 | 113.99 | 154.57 | 61.30 | 53.78% | 52.69 | 46.22% | 113.99 | 0.88% | 504,910 | 587,479 | 1,092,389 |
| Mixed-Use - Neighborhood | 13.87 | 312.54 | 326.41 | 312.54 | 100.00% | 0.00 | 0.00% | 312.54 | 2.40% | - | 2,995,133 | 2,995,133 |
| Mixed-Use - Urban | 19.91 | 321.66 | 341.57 | 317.11 | 98.59% | 4.55 | 1.41% | 321.66 | 2.47% | 43,600 | 3,038,932 | 3,082,532 |
| Total Commercial Acreage | 212.29 | 1424.03 | 1636.32 | 988.51 | 69.42% | 435.52 | 30.58% | 1424.03 | 10.95% | 4,178,508 | 9,473,096 | 13,651,604 |
| Industrial | | | | | | | | | | | | |
| Industrial | 26.20 | 645.18 | 671.38 | 572.20 | 88.69% | 72.98 | 11.31% | 645.18 | 4.96% | 1,080,870 | 8,474,503 | 9,555,374 |
| Business Park | 17.85 | 328.92 | 346.77 | 252.18 | 76.67% | 76.74 | 23.33% | 328.92 | 2.53% | 1,136,603 | 3,734,833 | 4,871,437 |
| Total Industrial Acreage | 44.05 | 974.10 | 1018.15 | 824.38 | 84.63% | 149.72 | 15.37% | 974.10 | 7.49% | 2,217,474 | 12,209,337 | 14,426,811 |
| Open Space | | | | | | | | | | | | |
| Open Space - Other | 10.64 | 602.57 | 613.21 | 573.65 | 95.20% | 28.92 | 4.80% | 602.57 | 4.64% | N/A | N/A | N/A |
| Open Space - Public | 145.54 | 2292.12 | 2437.66 | 2292.12 | 100.00% | 0.00 | 0.00% | 2292.12 | 17.63% | N/A | N/A | N/A |
| Open Space - Water | 11.45 | 769.88 | 781.33 | 474.43 | 61.62% | 295.45 | 38.38% | 769.88 | 5.92% | N/A | N/A | N/A |
| Total Open Space Acreage | 167.63 | 3664.57 | 3832.20 | 3340.20 | 91.15% | 324.37 | 8.85% | 3664.57 | 28.19% | N/A | N/A | N/A |
| Public | | | | | | | | | | | | |
| Cemetery | 4.64 | 55.74 | 60.38 | 0.00 | 0.00% | 55.74 | 100.00% | 55.74 | 0.43% | N/A | N/A | N/A |
| Library | 0.77 | 2.80 | 3.57 | 0.00 | 0.00% | 2.80 | 100.00% | 2.80 | 0.02% | N/A | N/A | N/A |
| Schools | 7.29 | 149.38 | 156.67 | 0.00 | 0.00% | 149.38 | 100.00% | 149.38 | 1.15% | N/A | N/A | N/A |
| Transportation | 181.20 | 58.97 | 240.17 | 0.00 | 0.00% | 58.97 | 100.00% | 58.97 | 0.45% | N/A | N/A | N/A |
| Total Public Acreage | 193.90 | 266.89 | 460.79 | 0.00 | 0.00% | 266.89 | 100.00% | 266.89 | 2.05% | N/A | N/A | N/A |
| Totals | 1558.08 | 12998.92 | 14557.00 | 8784.26 | 67.58% | 4214.66 | 32.42% | 12998.92 | 100.00% | | | |

*Existing and future conditions of Mixed-use, Commercial, and Industrial Land uses are calculated using the following assumptions: residential development is assumed to occur at 75% of the maximum density permitted, 22% lot coverage for commercial and mixed-use development, and 34% lot coverage for industrial development. Mixed-use Neighborhood is developed as 60% commercial and 40% residential. Mixed-use Urban is developed as 60% residential and 40% commercial. Updated 5.30.19

3.1.6 Alternatives Considered but Not Further Analyzed

Over the course of evaluating the current City General Plan, transportation plans and other General Plan parameters and possible environmental effects, a wide variety of changes, revisions and expansions were considered. A variety of land use changes were also considered and many of these have been incorporated into the Proposed Project and/or Project Alternatives. These have included expanded assignments of mixed-use land use designations to developed but vacant commercial properties, expansion of industrial land, and changes in allowed land uses and densities in different categories.

Other changes also considered but not included in project alternatives are changes in major Specific Plans, although some of these will be given further consideration following completion of the General Plan update process. Ultimately, it was determined that these master plans should remain intact and more time given to see if and how they may buildout. Other, much smaller existing Specific Plans were also evaluated, and several may be considered for rescinding. However, any determination to rescind (or amend) these Specific Plans is deferred until such time as the updated General Plan is adopted.

The following alternatives were considered by the City but were not further analyzed because it was determined they would not meet one or more of the project objectives (CEQA 15126.6).

A. Variations of Alternative 1

Higher residential densities and floor area ratios (FAR) were considered on various vacant parcels. However, it was determined that they were inconsistent with the character of the community, that environmental considerations made them impractical, and denser development was not compatible with the scale of existing development. Ever greater land use intensities would also be difficult to accommodate with the existing transportation network and opportunities for its expansion, even in light of the increased promotion of and provision for multi-modal transportation embodied in the proposed General Plan.

This alternative would not meet several project objectives (see Section 3.2) and, therefore, was not further analyzed.

B. Variations of Alternative 2

Lower residential densities were considered on various vacant parcels. However, it was determined that this approach would limit future opportunities for multi-unit housing, including affordable and senior housing. It was also likely to increase the inefficiencies and costs of providing infrastructure, such as utilities, roads and utilities, to support development that would be spread out geographically.

This alternative would not meet several project objectives (Section 3.2) and, therefore, was not further analyzed.

C. Broader-Reaching Multi-Modal Transportation Systems

Despite the support for comprehensive multi-modal transportation systems at various levels of government planning, private automobiles are expected to continue to dominate the transportation sector over the life of the General Plan update (20 years), and roads will continue to be needed to access development and facilitate the movement of people and goods. Safety considerations have also affected the viability of a more intensive conversion of the roadway network to alternative modes of travel

This alternative would not meet several project objectives (see Section 3.2) and, therefore, was not further analyzed.

Project Alternatives Analysis

3.2. Aesthetics

3.2.1. Introduction

This section evaluates potential impacts of implementing the Project alternatives on aesthetic, visual, and scenic resources, including potential loss of views, direct impacts to scenic resources, and effects of increased lighting on motorists and residents in the Planning Area. General Plan policies and programs, and standard City requirements are evaluated as to their effect of mitigating or avoiding any potentially significant effects.

3.2.2. Existing Conditions

Panoramic mountain vistas are the most prominent of the City’s scenic resources, including the upper slopes of the Santa Rosa Mountains to the southwest and south, the steeply rising terrain of the San Jacinto Mountains and Mt. San Jacinto to the west, Mt. San Gorgonio and the San Bernardino Mountains to the northwest, and the Indio Hills and Little San Bernardino Mountains to the north and northeast. In addition, a wide variety of visual resources in the City are associated with the built environment and include the City Downtown area, the East Palm Canyon Drive corridor, and the numerous public parks and golf course communities. Please also see Section 2.2 for further details on existing conditions and regulations.

3.2.3. Alternatives Impact Analysis

It should be noted that the future aesthetic conditions will be similarly impacted in the Alternative 1 (More Intense), 2 (Less Intense) and 3 (No Project) project alternatives, and will be comparable in all cases with the Proposed Project. Therefore, future impacts, avoidance, minimization and mitigation measures, post-mitigation residual impacts, and cumulative impacts are covered in one discussion. Please also see Section 2.2 for details on future aesthetic impacts and how they are avoidance, minimization and mitigated for the Proposed Project.

3.2.3.1. Alternatives 1, 2 & 3

3.2.3.1.1. Alternatives 1, 2 & 3 Impacts

a) Have a substantial adverse effect on a scenic vista?

Alternatives 1, 2 and 3 will facilitate new development in areas that are currently vacant, and encourage redevelopment in existing urbanized areas within the City. The redevelopment or development of new manmade structures, including buildings, streets, signage, walls, and landscaping (the built environment), has the potential to disrupt views of the scenic vistas and natural landscapes.

Similar to the Proposed Project, the policies and programs contained in the Community Design and Open Space/Conservation Elements, as well as the Circulation and Mobility Element, will limit the potential impacts on scenic vistas resulting from implementation of Alternatives 1, 2 and 3. As a result, impacts on scenic vistas caused by implementation of the project alternatives will be less than significant.

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

Scenic resources include trees, rock outcroppings, and historic buildings that are visible from a state scenic highway. All of the alternatives respect and preserve both important and valuable scenic resources, as well as historic buildings. Currently, there are no state scenic highways that run through Cathedral City. While the General Plan Circulation and Mobility Element identifies “image corridors”, none of these would be adversely impacted by implementation of any of the project alternatives. Therefore, impacts to scenic resources along a state scenic highway or other important scenic corridors will be less than significant.

The City protects and enhances scenic corridors such as streetscapes, parks and open space, by securing and thoughtfully landscaping parkway easements along major roadways, resulting in greater building setbacks and enhanced parkway appearance. Alternatives 1, 2 and 3 would apply policies and programs currently set forth in the Proposed Project and the current General Plan that enhance parkways and assure viewshed protection. Parkway easements along image corridors help assure that the traveling public (and adjoining property owners) share in a quality landscaped parkway experience that enhances the image of these scenic corridors. Therefore, implementation of Alternatives 1, 2 or 3 will have a less than significant impact on scenic resources within the City.

- c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?***

Visual character includes the existing look, feel, and quality of urbanized and natural areas. Large portions of the City are already developed with a full mix of land uses. Several areas in the already urbanized portions of the City are vacant and available primarily for in-fill development. Overall, industrial and commercial development has been intensified as part of the Proposed Project, Alternative 1, and Alternative 2 in an effort to increase land use efficiencies and to achieve a greater return on the City's investment in infrastructure and services.

Policies and programs in the proposed General Plan, specifically the Community Design Element, are consistent with and will enhance the existing character of development in the City. Streets will continue to be developed with curb, gutter, and landscaping to improve visual character along public rights-of-way. In addition, the City's Architectural Review Committee is responsible for reviewing architectural and landscaping design for all new commercial, industrial and multi-family residential projects, major commercial remodels and administrative design review applications on a project-specific, case-by-case basis. All development projects will also be required to adhere to the design standards and guidelines set forth in the City's Municipal Code. The project alternatives will not conflict with applicable zoning and other regulations governing scenic quality. Visual character impacts in both urbanized and rural areas within the City as a result of the implementation of Alternatives 1, 2, or 3 are, therefore, expected to be less than significant.

- d) Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?***

Similar to the Proposed Project, the project alternatives will adhere to proposed General Plan policies and programs that protect against excessive lighting or glare. Also, the City's Municipal Code prohibits light spillage onto neighboring properties. Therefore, implementation of Alternative 1, 2 or 3 will have a less than significant impact on light and glare impacts within the City.

3.2.3.1.2. Alternatives 1, 2 & 3 Mitigation Measures

The proposed General Plan policies and programs would apply to all of the alternatives analyzed, and include those specifically in the Community Design Element but also elsewhere in the proposed General Plan, the City's Municipal Code. Also, the project-specific design review process will control the aesthetics, mass, scale and bulk of new projects and redeveloped sites. Therefore, all of the General Plan alternatives would serve to avoid, minimize and mitigate the potential adverse effects of continuing urbanization of the City's visual and other aesthetic resources. Impacts to aesthetic resources are expected to be less than significant for all project alternatives, and no mitigation measures are required. Nonetheless, the project alternatives will adhere to the measures set forth in Section 2.2.6 which were derived from the Community Design Element and will further assure that impacts related to aesthetics are less than significant.

3.2.3.1.3. Alternatives 1, 2 & 3 Significance After Mitigation

Policies and programs set forth in the proposed General Plan and adherence to the City's Municipal Code and project review process ensure that impacts associated with implementation of Alternatives 1, 2 or 3 that are related to aesthetic quality and resources will be less than significant.

3.2.3.1.4. Alternatives 1, 2 & 3 Cumulative Impacts

The policies and programs set forth in the proposed General Plan update are applicable to all project alternatives, provide design regulation and guidance for future growth within the City, and augment the additional regulation under the City Municipal Code. While the potential exists for aesthetic resources to be degraded by future development, the General Plan recognizes the importance of and vested interest in preserving and enhancing the community's aesthetic resources. Therefore, any such impacts resulting from the implementation of Alternatives 1, 2 or 3 will not make a considerable cumulative addition to regional impacts to these resources.

3.2.4. Environmental Superior Alternative

The environmentally superior alternative was chosen based on potential long-term impacts to the scenic environment. The General Plan policies, the City's Municipal Code, and the project-specific design review process will control the aesthetics, mass, scale and bulk of new projects and redeveloped sites. In this regard, the proposed General Plan and alternatives will implement the same policies and programs, along with the City's existing review processes, are designed to avoid, minimize and mitigate the potential adverse effects of continuing urbanization of the City's visual and other aesthetic resources. Therefore, all project alternatives, including the Proposed Project, will have the same general level of impact which will be less than significant. There is no Environmentally Superior Alternative. All Alternatives are equally as effective and will have a positive impact on aesthetic resources.

3.3 Agriculture and Forestry Resources

3.3.1. Introduction

The following section assesses impacts on agricultural and forestry resources resulting from the three General Plan project alternatives. A detailed discussion of agricultural and forestry resources and how they could be affected by implementation of the Proposed Project can be found in Section 2.3.

3.3.2. Existing Conditions

Most of the Planning Area is designated as being “Urban and Built-up Land” and “Other Land” according to the Riverside County Important Farmland Map of 2016. Currently, there are no agricultural activities located in the City, although cannabis is being grown in the City but within enclosed buildings. There are no Williamson Act Lands or forest lands within the Planning Area. Please see Section 2.3 for a detailed discussion of the existing agricultural and forestry environment.

3.3.3. Alternatives Impact Analysis

It should be noted that the agricultural and forestry environment in the City and region will be similarly impacted in the Alternative 1 (More Intense), 2 (Less Intense) and 3 (No Project) project alternatives. Therefore, future impacts, mitigation measures, post-mitigation residual impacts, and cumulative impacts are covered in one discussion.

3.3.3.1. Alternatives 1, 2 & 3

3.3.3.1.1. Alternatives 1, 2 & 3 Impacts

- a) *Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?*

There are no prime or unique farmlands, or farmlands of statewide importance in the City. Nor will the implementation of Alternatives 1, 2, or 3 impact farmlands of any type. Similar to the Proposed Project, there will be no impacts to farmlands.

- b) *Conflict with existing zoning for agricultural use, or a Williamson Act contract?*

There are no lands that are zoned for agricultural use in the City nor are there any lands that are under a Williamson Act contract. Therefore, the implementation of Alternatives 1, 2, or 3 will have no impact on such lands.

- c) *Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?*

There are no forest lands within the City nor are their lands zoned for forestry or would be re-zoned for such use as a consequence of the implementation of Alternatives 1, 2, or 3. There will be no impacts.

d) Result in the loss of forest land or conversion of forest land to non-forest use?

The implementation of Alternatives 1, 2, or 3 will not result in the loss of forestry land or the conversion of such lands to non-forestry uses. There will be no impacts.

e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?

The implementation of Alternatives 1, 2, or 3 will not result in the conversion of any designated farmlands to non-agricultural uses, nor will it affect forestry lands. There will be no impacts.

3.3.3.1.2. Alternative 1, 2 & 3 Mitigation Measures

Alternatives 1, 2, or 3 will not directly or indirectly affect or require conversion of farmland or forestry land to non-agricultural or non-forestry uses. Therefore, no mitigation is required.

3.3.3.1.3. Alternative 1, 2 & 3 Significance After Mitigation

There will be no residual impacts to agricultural or forestry resources as a consequence of implementing Alternatives 1, 2, or 3.

3.3.3.1.4. Alternative 1, 2 & 3 Cumulative Impacts

There are no agricultural or forest resources in the project study area. Therefore, none of the project alternatives would contribute to any cumulative projects related to acting to diminish or reduce agricultural or forest resources. No agricultural or forest land conversions would occur, and no alternative would contribute to any cumulatively considerable impacts related to agricultural resources.

3.3.4. Environmental Superior Alternative

Because no actions from implementation of the Proposed Project or project alternatives convert farmland to non-farmland uses, or affect forestry resources, in the planning area, all alternatives will have essentially the same effect of “no impact” as the Proposed Project. There is no environmentally superior alternative.

3.4 Air Quality and Greenhouse Gas Emissions

3.4.1. Introduction

The following section analyzes the potential air quality and greenhouse gas emissions impacts associated with the Proposed Project alternatives. A variety of local and regional data and information, ranging from research and analysis conducted for the City planning area, to regional-scale planning and environmental documents, have been used in researching and analyzing the Project and its potential effects on air quality. An Air Quality and Greenhouse Gas Report was prepared for the Proposed Project and alternatives and is provided in Appendix B of this EIR.

3.4.2. Existing Conditions

Cathedral City is located within the Salton Sea Air Basin (SSAB) and is within the jurisdiction of the South Coast Air Quality Management District (SCAQMD). Air quality in the Salton Sea Air Basin has been impacted by emissions associated with increased development, population growth, and vehicle emissions. Although air pollution is emitted locally from various sources, some of the degradation of air quality within the Salton Sea Air Basin can be attributed to sources located outside of the basin. In the General Plan area, air quality is regulated by the SCAQMD, which implements applicable state and federal policies and regulations.

Some air polluting agents are also greenhouse gases such as carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), and fluorinated gases (hydrofluorocarbons, perfluorocarbons and sulfur hexafluoride), which are released into the atmosphere through natural processes and human activities. These gases are termed greenhouse gases (GHG) due to their shared characteristic of trapping heat.

Please see Section 2.4 for a detailed description of the regulatory framework and existing air quality conditions relating to the Project site.

3.4.3. Alternatives Impact Analysis

3.4.1.1 Alternative 1

Alternative 1, the More Intense Alternative, would result in increased housing, commercial, and industrial/business land use intensities when compared to the 2040 General Plan. It would also result in an increase in vehicle trips and vehicle miles traveled, when compared to the current and proposed General Plan. The land use increases will also increase population, traffic, waste generation, water demand and energy demand. Overall, Alternative 1 would result in an increase of criteria pollutant and greenhouse gas emissions.

3.4.1.1.1 Alternative 1 Impacts

AIR QUALITY

Would Alternative 1:

a) Conflict with or obstruct implementation of the applicable air quality plan?

Compared to the Proposed Project, implementation of Alternative 1 has the potential to further increase development intensities and the City's buildout population upon which population projections for the 2016 AQMP and 2016-2040 RTP/SCS were based. Because the City's population projections for 2040 under the Proposed Project is more than double the population projections assumed in the Growth Management chapter of the RTP/SCS, and Alternative 1 could slightly increase the 2040 population based on a faster annual growth rate, Alternative 1 possibly could conflict with or obstruct implementation of the SCAQMD attainment plans.

The 2040 General Plan policies and programs can be applied to Alternative 1 and represent the best practicable strategies to reduce emissions associated with buildout. Section 2.4.7 Mitigation Measures are derived from the proposed General Plan programs and are designed to avoid and or reduce air quality impacts to less than significant levels. These programs were designed to ensure the City’s compliance with air quality management plans, regardless of changes in population projections. Therefore, impacts will be less than significant with mitigation measures AQ-1 through AQ-22.

b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?

The Coachella Valley portion of the SSAB is classified as a “non-attainment” area for PM₁₀ and ozone. Any development project or activity resulting in emissions of PM₁₀, ozone, or ozone precursors will contribute, to some degree, to regional non-attainment designations of ozone and PM₁₀. As shown in the table below, the cumulative net increases of PM₁₀, ROG, and NO_x emissions, which are ozone precursors, would be slightly greater than those emitted under the Proposed Project.

**Table 3.4-1
 Operational Emissions Summary
 Proposed vs Alternative 1 Land Use
 (lbs./day)**

| | CO | NO _x | ROG | SO _x | PM ₁₀ | PM _{2.5} |
|-------------------------------|------------------|------------------|-----------------|-----------------|------------------|-------------------|
| Proposed LU Table | | | | | | |
| Area | 4,686.34 | 515.21 | 2,816.59 | 3.19 | 62.46 | 62.46 |
| Energy | 222.46 | 414.35 | 47.71 | 2.60 | 32.96 | 32.96 |
| Mobile | 16,904.81 | 13,432.64 | 1,444.33 | 80.89 | 6,223.26 | 1,685.44 |
| TOTAL: | 21,813.61 | 14,362.20 | 4,308.63 | 86.68 | 6,318.68 | 1,780.86 |
| SCAQMD Threshold* | 550.00 | 100.00 | 75.00 | 150.00 | 150.00 | 55.00 |
| Exceeds Threshold | Yes | Yes | Yes | No | Yes | Yes |
| Alternative 1 LU Table | | | | | | |
| Area | 4,959.43 | 545.25 | 2,877.50 | 3.38 | 66.10 | 66.10 |
| Energy | 226.12 | 422.21 | 48.62 | 2.65 | 33.59 | 33.59 |
| Mobile | 17,196.18 | 13,719.06 | 1,472.87 | 82.27 | 6,319.41 | 1,711.50 |
| TOTAL: | 22,381.73 | 14,686.52 | 4,398.99 | 88.30 | 6,419.10 | 1,811.19 |
| SCAQMD Threshold* | 550.00 | 100.00 | 75.00 | 150.00 | 150.00 | 55.00 |
| Exceeds Threshold | Yes | Yes | Yes | No | Yes | Yes |

Source: CalEEMod Version 2016.3.2. See Appendix A for detailed tables. Value shown represents the average emissions of summer and winter outputs.

* Source: “SCAQMD Air Quality Significance Thresholds” prepared by SCAQMD.

The SCAQMD does not currently recommend quantified analyses of construction and/or operational emissions from multiple development projects nor provides methodologies or thresholds of significance to be used to assess the significance of cumulative emissions generated by multiple cumulative projects, including buildout of a General Plan. However, it is recommended that a project’s potential contribution to cumulative impacts should be assessed utilizing the same significance criteria as those for project-specific impacts.

As shown above, projections of these pollutants exceed established daily thresholds, with the exception of Sox, and therefore as ozone precursors have the potential to result in a cumulative impact to ozone, and PM₁₀. However, subsequent CEQA documentation prepared for future individual projects would subject to project-specific analysis and would be required to address, and to the extent feasible, mitigate any significant air quality impacts to a less than significant level.

Therefore, with implementation of the General Plan policies and programs, as set forth in Section 2.4.7 and the Air Quality and Climate Stability Element, impacts to non-attainment criteria pollutants are expected to be reduced to less than significant levels on a case-by-case basis. (See mitigation measures AQ-6). In addition, the majority of criteria pollutant emissions are due to mobile sources. The 2040 General Plan policies that promote the reduction of GHG emissions through transportation planning include CD Policy 5.1, OSC Policy 2, and OSC Policy 5.

Impacts are expected to be less than significant with mitigation.

c) *Expose sensitive receptors to substantial pollutant concentrations?*

The impact related to potential exposure of sensitive receptors to substantial concentrations of toxic air contaminants would be the same as for the Proposed Project. The addition of the Health Risk Evaluation program (AQCS Program 3.C) would guide health risk considerations and reduce potential toxic air contaminant exposure for existing and new sensitive receptors, thereby reducing this impact to less than significant levels because TAC significance thresholds would not be exceeded. Thus, Alternative 1 is not expected to expose sensitive receptors to substantial pollutant concentrations and air quality impacts to sensitive receptors are expected to be less than significant.

d) *Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?*

The impact related to potential exposure of people to odors or other emissions would be the same as for the Proposed Project. The City’s current project review process ensures that within the Planning Area, project applications will be reviewed individually based on their potential to generate odors under CEQA. Therefore, it is considered unlikely that implementation of Alternative 1 would result in objectionable odors affecting a substantial number of people. Similar to the Proposed Project, Alternative 1 is expected to have less than significant impacts in regard to odors or other emissions.

GREENHOUSE GASES

Would Alternative 1:

a) *Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?*

The following GHG estimates are provided to compare 2040 conditions under the Proposed Project land use plan and Alternative 1 land use plan.

**Table 3.4-2
 2040 Operational GHG Emission Comparison (Metric Tons/Year)**

| | Existing GP LU | Proposed GP LU | Alternative 1 LU |
|------------------|-----------------------|-----------------------|-------------------------|
| Area Emissions | 1,820.48 | 1,839.46 | 1,946.69 |
| Energy Emissions | 298,088.72 | 309,553.68 | 314,077.55 |
| Mobile Emissions | 1,275,498.08 | 1,261,202.65 | 1,287,766.49 |
| Waste Emissions | 36,993.72 | 38,848.62 | 40,590.35 |
| Water Emissions | 54,009.62 | 58,424.33 | 59,322.92 |
| Total | 1,666,410.62 | 1,669,868.74 | 1,703,704.00 |

Source: CalEEMod Version 2016.3.2. See Appendix B of this DEIR for detailed tables. Values shown represent the total unmitigated GHG emission projections for 2040 under existing GP conditions vs proposed GP conditions vs Alternative 1 conditions.

Because of the increased land use intensities, and thus increased traffic generation, Alternative 1 would generate more GHG emissions than the Proposed Project. Alternative 1 GHG emissions would also fail to achieve the State's GHG reduction targets for 2020, 2030, and 2050, as well as GHG reduction targets set forth in the City's CAP. Similar to the Proposed Project, the same General Plan policies would help promote GHG emission reductions. However, based on the GHG projections above, it is possible that Alternative 1 would generate GHG emissions that could have a significant and unavoidable impact on the environment.

b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Similar to the Proposed Project, Alternative 1 would not only increase the City's GHG emissions when compared to the existing and proposed General Plan land use plans, but buildout emission projections will fail to achieve State GHG reduction targets for 2020, 2030, and 2050, as well as GHG reduction targets set forth in the City's CAP. The same General Plan policies would be applied under Alternative 1 to help promote GHG emission reductions. Individual development projects developed under Alternative 1 will be assessed on a case-by-case basis for potential impacts related to GHG emissions. Projects will be required to demonstrate adherence to applicable plans, policies, and regulations adopted for the Proposed Project to reduce GHG emissions. However, based on the GHG projections above, it is possible that Alternative 1 would generate GHG emissions that are inconsistent with State reduction targets. Impacts will be significant and unavoidable.

3.4.1.1.2 Alternative 1 Mitigation Measures

Alternative 1 will be held to the same mitigation measures, **AQ-1** through **AQ-42**, set forth in Section 2.4.7 for the Proposed Project.

3.4.1.1.3 Alternative 1 Significance After Mitigation

AIR QUALITY

The mitigation measures provided in Section 2.4.7 have been programmed to ensure impacts to air quality will be reduced to the greatest extent possible. Due to the nature of air quality impacts, all future development within the City will be analyzed on a case-by-case basis and mitigated accordingly. Alternative 1 impacts after mitigation are expected to be less than significant.

GREENHOUSE GAS

The mitigation measures provided in Section 2.4.7 have been programmed to ensure impacts of greenhouse emissions will be reduced to the greatest extent practicable. Due to the nature of greenhouse gases, all future development within the City will be analyzed on a case-by-case basis and mitigated accordingly. However, based on the GHG projections, it is possible that Alternative 1 would generate GHG emissions that could have a significant and unavoidable impact on the environment.

3.4.1.1.4 Alternative 1 Cumulative Impacts

Cumulative impacts related to air quality and GHG's would be slightly greater than those of the Proposed Project, as discussed in Section 2.4.12. Cumulative impacts would be less than significant for air quality. However, impacts will remain significant and unavoidable for greenhouse gas emissions.

3.4.1.2 Alternative 2

Alternative 2, the Less Intense Alternative, would result in decreased housing, commercial, and industrial/business land use intensities when compared to the 2040 General Plan. The land use decreases will also decrease population, traffic, waste generation, water demand and energy demand. Overall, Alternative 2 would result in a decrease of criteria pollutant and greenhouse gas emissions.

3.4.1.2.1 Alternative 2 Impacts

AIR QUALITY

Would Alternative 2:

a) Conflict with or obstruct implementation of the applicable air quality plan?

Compared to the Proposed Project, implementation of Alternative 2 has the potential to decrease development intensities and the City’s buildout population upon which population projections for the 2016 AQMP and 2016-2040 RTP/SCS were based. Although Alternative 2 would result in a slight decrease in population, the City’s population projections for 2040 are more than double the population projections assumed in the Growth Management chapter of the RTP/SCS, based on a faster annual growth rate, and therefore Alternative 2 possibly could conflict with or obstruct implementation of the SCAQMD attainment plans. The 2040 General Plan policies and programs can be Applied to Alternative 2 and represent the best practicable strategies to reduce emissions associated with buildout. Section 2.4.7 Mitigation Measures provides the list of City programs designed to avoid and or reduce air quality impacts to less than significant levels. These programs were designed to ensure the City’s compliance with air quality management plans, regardless of changes in population projections. Therefore, impacts will be less than significant with mitigation measures AQ-1 through AQ-22.

b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?

The Coachella Valley portion of the SSAB is classified as a “non-attainment” area for PM₁₀ and ozone. Any development project or activity resulting in emissions of PM₁₀, or ozone or ozone precursors, will contribute incrementally to regional non-attainment designations of ozone and PM₁₀. As shown in the table below, the cumulative net increases of PM₁₀, ROG, and NO_x emissions, which are ozone precursors, would be slightly less than those emitted under the Proposed Project.

**Table 3.4-3
 Operational Emissions Summary
 Proposed vs Alternative 2 Land Use
 (lbs./day)**

| | CO | NO _x | ROG | SO _x | PM ₁₀ | PM _{2.5} |
|--------------------------|------------------|------------------|-----------------|-----------------|------------------|-------------------|
| Proposed LU Table | | | | | | |
| Area | 4,686.34 | 515.21 | 2,816.59 | 3.19 | 62.46 | 62.46 |
| Energy | 222.46 | 414.35 | 47.71 | 2.60 | 32.96 | 32.96 |
| Mobile | 16,904.81 | 13,432.64 | 1,444.33 | 80.89 | 6,223.26 | 1,685.44 |
| TOTAL: | 21,813.61 | 14,362.20 | 4,308.63 | 86.68 | 6,318.68 | 1,780.86 |
| SCAQMD Threshold* | 550.00 | 100.00 | 75.00 | 150.00 | 150.00 | 55.00 |
| Exceeds Threshold | Yes | Yes | Yes | No | Yes | Yes |
| Alternative 2 LU Table | | | | | | |
| Area | 4,059.61 | 446.27 | 2,597.59 | 2.76 | 54.10 | 54.10 |
| Energy | 207.42 | 383.48 | 44.12 | 2.40 | 30.48 | 30.48 |
| Mobile | 16,211.63 | 12,711.86 | 1,373.85 | 77.61 | 6,002.46 | 1,625.60 |
| TOTAL: | 20,478.66 | 13,541.61 | 4,015.56 | 82.77 | 6,087.04 | 1,710.18 |
| SCAQMD Threshold* | 550.00 | 100.00 | 75.00 | 150.00 | 150.00 | 55.00 |
| Exceeds Threshold | Yes | Yes | Yes | No | Yes | Yes |

Source: CalEEMod Version 2016.3.2. See Appendix A for detailed tables. Value shown represents the average emissions of summer and winter outputs.

* Source: “SCAQMD Air Quality Significance Thresholds” prepared by SCAQMD.

The SCAQMD does not currently recommend quantified analyses of construction and/or operational emissions from multiple development projects nor provides methodologies or thresholds of significance to be used to assess the significance of cumulative emissions generated by multiple cumulative projects, including buildout of a General Plan. However, it is recommended that a project's potential contribution to cumulative impacts should be assessed utilizing the same significance criteria as those for project-specific impacts.

As shown above, projections of these pollutants exceed established daily thresholds and therefore have the potential to result in cumulative impacts to ozone and PM₁₀. However, subsequent CEQA analysis prepared for individual projects would have project-specific data and would be required to address, and to the extent feasible, mitigate any significant air quality impacts to a less than significant level. Therefore, with implementation of the General Plan programs and mitigation measures set forth in Section 2.4.7, impacts to non-attainment criteria pollutants are expected to be reduced to less than significant levels on a case-by-case basis. (See mitigation measures AQ-6). In addition, the majority of criteria pollutant emissions are due to mobile sources. The proposed General Plan policies that promote the reduction of GHG emissions through transportation planning include CD Policy 5.1, OSC Policy 2, and OSC Policy 5.

Impacts are expected to be less than significant with mitigation.

c) Expose sensitive receptors to substantial pollutant concentrations?

The impact related to potential exposure of sensitive receptors to substantial concentrations of toxic air contaminants would be the same as for the Proposed Project. The addition of the Health Risk Evaluation program (AQCS Program 3.C) would guide health risk considerations and reduce potential toxic air contaminant exposure at existing and new sensitive receptors, thereby reducing this impact to less than significant levels because TAC significance thresholds would not be exceeded. Thus, Alternative 2 is not expected to expose sensitive receptors to substantial pollutant concentrations and air quality impacts to sensitive receptors are expected to be less than significant.

d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

The impact related to potential exposure of people to odors or other emissions would be the same as for the Proposed Project. The City's current project review process ensures that within the Planning Area, project applications will be reviewed individually based on their potential to generate odors under CEQA. Therefore, it is considered unlikely that implementation of Alternative 2 would result in objectionable odors affecting a substantial number of people. Similar to the Proposed Project, Alternative 2 is expected to have less than significant impacts in regard to odors or other emissions.

GREENHOUSE GAS

Would Alternative 2:

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

The following GHG estimates are provided to compare 2040 conditions under the proposed land use plan and Alternative 2 land use plan.

**Table 3.4-4
 2040 Operational GHG Emission Comparison
 (Metric Tons/Year)**

| | Existing GP LU | Proposed GP LU | Alternative 2 LU |
|------------------|---------------------|---------------------|---------------------|
| Area Emissions | 1,820.48 | 1,839.46 | 1,593.38 |
| Energy Emissions | 298,088.72 | 309,553.68 | 290,501.50 |
| Mobile Emissions | 1,275,498.08 | 1,261,202.65 | 1,209,657.55 |
| Waste Emissions | 36,993.72 | 38,848.62 | 38,441.37 |
| Water Emissions | 54,009.62 | 58,424.33 | 53,811.23 |
| Total | 1,666,410.62 | 1,669,868.74 | 1,594,005.03 |

Source: CalEEMod Version 2016.3.2. See Appendix B of this DEIR for detailed tables. Values shown represent the total unmitigated GHG emission projections for 2040 under existing GP conditions vs proposed GP conditions vs Alternative 2 conditions.

Because of the decreased land use intensities, and thus decreased traffic generation, Alternative 2 would generate fewer GHG emissions than the Proposed Project. Alternative 2 GHG emissions would also fail to achieve the State’s GHG reduction targets for 2020, 2030, and 2050. Similar to the Proposed Project, the same General Plan policies would help promote GHG emission reductions. However, based on the GHG projections above, it is possible that Alternative 2 would generate GHG emissions that could have a significant and unavoidable impact on the environment.

b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Similar to the Proposed Project, Alternative 2 buildout emission projections will fail to achieve State GHG reduction targets for 2020, 2030, and 2050, as well as GHG reduction targets set forth in the City’s CAP. However, Alternative 2 would decrease the City’s GHG emissions when compared to the existing and proposed General Plan land use plans. The same General Plan policies would be applied under Alternative 2 to help promote further GHG emission reductions. Individual development projects developed under Alternative 2 will be assessed on a case-by-case basis for potential impacts related to GHG emissions. Projects will be required to demonstrate adherence to applicable plans, policies, and regulations adopted for the purposed General Plan to reduce GHG emissions. However, based on the GHG projections above, it is possible that Alternative 2 would generate GHG emissions that are inconsistent with State reduction targets. Impacts will be significant and unavoidable.

3.4.1.2.2 Alternative 2 Mitigation Measures

Alternative 2 will be held to the same mitigation measures, AQ-1 through AQ-42, set forth in Section 2.4.7.

3.4.1.2.3 Alternative 2 Significance After Mitigation

AIR QUALITY

The mitigation measures provided in Section 2.4.7 have been programmed to ensure impacts to air quality will be reduced to the greatest extent possible. Due to the nature of air quality impacts, all future development within the City will be analyzed on a case-by-case basis and mitigated accordingly. Alternative 2 impacts after mitigation are expected to be less than significant.

GREENHOUSE GAS

The mitigation measures provided in Section 2.4.7 have been programmed to ensure impacts of greenhouse emissions will be reduced to the greatest extent possible. Due to the nature of greenhouse gases, all future development within the City will be analyzed on a case-by-case basis and mitigated accordingly. However, based on the GHG projections, it is possible that Alternative 2 would generate GHG emissions that could have a significant and unavoidable impact on the environment.

3.4.1.2.4 Alternative 2 Cumulative Impacts

Cumulative impacts related to air quality and GHG's would be slightly less than those of the Proposed Project, as discussed in Section 2.4.12. Cumulative impacts would be less than significant for air quality. However, impacts will remain significant and unavoidable for greenhouse gas emissions.

3.4.1.3 Alternative 3 – No Project

Under Alternative 3, buildout of the existing General Plan would occur and there would be no modifications to land uses.

3.4.1.3.1 Alternative 3 Impacts

AIR QUALITY

Would Alternative 3:

a) Conflict with or obstruct implementation of the applicable air quality plan?

There are currently 54,466 residents in Cathedral City. Assuming 32,834 new units and 3.16 persons per household¹, buildout of the No Project Alternative is projected to result in an additional 103,756 residents. At buildout, the total City population would be approximately 158,222 residents. This is 1,776 (1%) fewer residents than projected at buildout of the proposed General Plan Update. Although Alternative 3 would result in a slight decrease in population compared to the proposed General Plan Update, the City's population projections for 2040 are more than double the population projections assumed in the Growth Management chapter of the RTP/SCS, and therefore Alternative 3 possibly could conflict with or obstruct implementation of the SCAQMD attainment plans. Section 2.4.7 Mitigation Measures is based on the proposed General Plan's list of implementation programs designed to avoid and or reduce air quality impacts to less than significant levels. Many of these programs are also provided in the existing General Plan and were designed to ensure the City's compliance with air quality management plans, regardless of changes in population projections. Therefore, impacts will be less than significant.

b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?

The Coachella Valley portion of the SSAB is classified as a "non-attainment" area for PM₁₀ and ozone. Any development project or activity resulting in emissions of PM₁₀, ozone, or ozone precursors will contribute, to some degree, to regional non-attainment designations of ozone and PM₁₀. As shown in the table below, the cumulative net increases of PM₁₀, ROG, and NO_x emissions, which are ozone precursors, would be slightly less under the No Project alternative compared to those emitted under the Proposed Project.

¹ City/County Population and Housing Estimates (Report E-5), January 1, 2018, California Department of Finance.

**Table 3.4-5
 Operational Emissions Summary
 Alternative 3 vs. Proposed Land Use (lbs./day)**

| | CO | NO _x | ROG | SO _x | PM ₁₀ | PM _{2.5} |
|-----------------------------------|------------------|------------------|-----------------|-----------------|------------------|-------------------|
| Alternative 3 (Existing) LU Table | | | | | | |
| Area | 4,637.86 | 509.91 | 2,744.19 | 3.16 | 61.82 | 61.82 |
| Energy | 209.39 | 399.20 | 46.04 | 2.51 | 31.81 | 31.81 |
| Mobile | 17,046.83 | 13,529.10 | 1,455.39 | 81.58 | 6,278.86 | 1,700.50 |
| TOTAL: | 21,894.08 | 14,438.21 | 4,245.62 | 87.25 | 6,372.49 | 1,794.13 |
| SCAQMD Threshold* | 550.00 | 100.00 | 75.00 | 150.00 | 150.00 | 55.00 |
| Exceeds Threshold | Yes | Yes | Yes | No | Yes | Yes |
| Proposed LU Table | | | | | | |
| Area | 4,686.34 | 515.21 | 2,816.59 | 3.19 | 62.46 | 62.46 |
| Energy | 222.46 | 414.35 | 47.71 | 2.60 | 32.96 | 32.96 |
| Mobile | 16,904.81 | 13,432.64 | 1,444.33 | 80.89 | 6,223.26 | 1,685.44 |
| TOTAL: | 21,813.61 | 14,362.20 | 4,308.63 | 86.68 | 6,318.68 | 1,780.86 |
| SCAQMD Threshold* | 550.00 | 100.00 | 75.00 | 150.00 | 150.00 | 55.00 |
| Exceeds Threshold | Yes | Yes | Yes | No | Yes | Yes |

Source: CalEEMod Version 2016.3.2. See Appendix A for detailed tables. Value shown represents the average emissions of summer and winter outputs.

* Source: "SCAQMD Air Quality Significance Thresholds" prepared by SCAQMD.

The SCAQMD does not currently recommend quantified analyses of construction and/or operational emissions from multiple development projects nor provides methodologies or thresholds of significance to be used to assess the significance of cumulative emissions generated by multiple cumulative projects, including buildout of a General Plan. However, it is recommended that a project's potential contribution to cumulative impacts should be assessed utilizing the same significance criteria as those for project-specific impacts.

As shown above, under the No Project alternative projections of these pollutants exceed established daily thresholds and therefore have the potential to result in cumulative impacts to ozone and PM₁₀. However, subsequent CEQA documentation prepared for individual projects would have project-specific data and would be required to address, and to the extent feasible, mitigate any significant air quality impacts to a less than significant level. Therefore, with implementation of the existing General Plan programs and mitigation measures set forth in Section 2.4.7, impacts to non-attainment criteria pollutants are expected to be reduced to less than significant levels on a case-by-case basis. (See mitigation measures AQ-6).

Impacts are expected to be less than significant with mitigation.

c) Expose sensitive receptors to substantial pollutant concentrations?

The impact related to potential exposure of sensitive receptors to substantial concentrations of toxic air contaminants under the No Project alternative would be the same as for the Proposed Project due to the existing General Plan policy (AQCS Policy 3) regarding the protection of sensitive receptors and the CEQA review process. However, Alternative 3 does not include the addition of the Health Risk Evaluation program (AQCS Program 3.C), which would further guide health risk considerations and reduce potential toxic air contaminant exposure at existing and new sensitive receptors. However, due to the CEQA review process for new development projects and standard requirements for mitigation, Alternative 3 is not expected to expose sensitive receptors to substantial pollutant concentrations and air quality impacts to sensitive receptors are expected to be less than significant.

d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

The impact related to potential exposure of people to odors or other emissions under the No Project alternative would be the same as for the Proposed Project. The City’s current project review process ensures that within the Planning Area, project applications will be reviewed individually based on their potential to generate odors under CEQA. Therefore, it is considered unlikely that implementation of Alternative 3 would result in objectionable odors affecting a substantial number of people. Similar to the Proposed Project, Alternative 3 is expected to have less than significant impacts in regard to odors or other emissions.

GREENHOUSE GAS

Would Alternative 3:

a) Generate gas emissions, either directly or indirectly, that may have a significant impact on the environment?

The following GHG estimates are provided to compare 2040 conditions under the proposed land use plan and Alternative 3, the existing General Plan land use plan.

**Table 3.4-6
 2040 Operational GHG Emission Comparison
 (Metric Tons/Year)**

| | Alt 3 (Existing) GP LU | Proposed GP LU |
|------------------|-------------------------------|-----------------------|
| Area Emissions | 1,820.48 | 1,839.46 |
| Energy Emissions | 298,088.72 | 309,553.68 |
| Mobile Emissions | 1,275,498.08 | 1,261,202.65 |
| Waste Emissions | 36,993.72 | 38,848.62 |
| Water Emissions | 54,009.62 | 58,424.33 |
| Total | 1,666,410.62 | 1,669,868.74 |

Source: CalEEMod Version 2016.3.2. See Appendix B of this DEIR for detailed tables. Values shown represent the total unmitigated GHG emission projections for 2040 under existing GP conditions vs proposed GP conditions.

Because of the lower land use intensities, and thus lower traffic generation, Alternative 3 would generate fewer GHG emissions than the Proposed Project. However, Alternative 3 GHG emissions would also fail to achieve the State’s GHG reduction targets for 2020, 2030, and 2050 unless mitigated. The existing General Plan policies and CAP would help promote GHG emission reductions. However, based on the GHG projections above, it is possible that Alternative 3 would generate GHG emissions that could have a significant and unavoidable impact on the environment.

b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Similar to the Proposed Project, Alternative 3 buildout emission projections will fail to achieve State GHG reduction targets for 2020, 2030, and 2050, and the GHG reduction targets in the City’s CAP. However, Alternative 3 would result in fewer GHG emissions when compared to the proposed General Plan Update land use plan. The existing General Plan policies would be applied under Alternative 3 to help promote further GHG emission reductions.

Individual development projects developed under Alternative 3 will be assessed on a case-by-case basis for potential impacts related to GHG emissions. Projects will be required to demonstrate adherence to applicable plans, policies, and regulations adopted for the purpose of reducing GHG emissions. However, based on the GHG projections above, it is possible that Alternative 3 would generate GHG emissions that are inconsistent with State reduction targets. Thus, impacts will be significant and unavoidable.

3.4.1.3.2 Alternative 3 Mitigation Measures

Alternative 3 will be held to the same mitigation measures, AQ-1 through AQ-42, set forth in Section 2.4.7, as they are existing programs within the current General Plan.

3.4.1.3.3 Alternative 3 Significance After Mitigation

AIR QUALITY

The mitigation measures provided in Section 2.4.7 are currently programmed into the existing General Plan to ensure impacts to air quality will be reduced to the greatest extent possible. Due to the nature of air quality impacts, all future development within the City will be analyzed on a case-by-case basis and mitigated accordingly. Alternative 3 impacts after mitigation are expected to be less than significant.

GREENHOUSE GAS

The mitigation measures provided in Section 2.4.7 have been programmed into the existing General Plan to ensure impacts of greenhouse emissions will be reduced to the greatest extent possible. Due to the nature of greenhouse gases, all future development within the City will be analyzed on a case-by-case basis and mitigated accordingly. However, based on the GHG projections, it is possible that Alternative 3 would generate GHG emissions that could have a significant and unavoidable impact on the environment.

3.4.1.3.4 Alternative 3 Cumulative Impacts

Cumulative impacts related to air quality and GHG's would be slightly less under the No Project alternative compared to those of the Proposed Project, as discussed in Section 2.4.12. Impacts to air quality would be less than significant. However, impacts will remain significant and unavoidable for greenhouse gas emissions.

3.4.4. Environmental Superior Alternative

At buildout, Alternative 2 would result in the fewest criteria pollutant and GHG emissions, thus resulting in less intense impacts to air quality and GHG thresholds. In this regard, Alternative 2 is the environmentally superior alternative compared to the other alternatives.

3.5. Biological Resources

3.5.1. Introduction

This section provides environmental analysis of potential biological resource impacts that would result from implementation of project alternatives. Each alternative's potential impacts to these resources are discussed and compared to the Proposed Project.

3.5.2. Existing Conditions

The General Plan planning area is located in the Coachella Valley which is at the western edge of the Colorado Desert subdivision of the Sonoran Desert. A wide range of common plant and animal species are reported in this region. Much of the General Plan planning area south of I-10 is already developed with urban land uses that, over time, have resulted in the permanent loss of native habitats and plant and animal species, and disturbance of the natural aeolian (wind) or hydrological (water) processes needed to sustain them. Scattered vacant parcels are interspersed with development in this portion of the City, and several larger expanses of undeveloped land are immediately south of I-10. Nearly all land north of I-10 is undeveloped, with the exception of a few roads, above-ground water reservoirs, wind turbines and electric power lines.

Please see Section 2.5 Biological Resources for the full discussion of regional and local conditions.

3.5.3. Alternatives Impact Analysis

3.5.3.1. Alternative 1

Alternative 1, also known as the "More Intense Alternative," will result in greater land use densities. However, the same General Plan planning area as the Proposed Project will be affected.

3.5.3.1.1. Alternative 1 Impacts

Would Alternative 1:

- a) *Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?*

As described in Section 2.5, the General Plan planning area contains or potentially contains numerous sensitive species, including some designated as endangered or threatened by the USFWS and CDFW. Some have been identified for conservation or protection in the CVMSHCP and Agua Caliente Tribal HCP, and some are subject to land management policies and plans of the BLM and other regulatory agencies.

Similar to the proposed General Plan update, Alternative 1 would facilitate future urban development that could disturb or permanently remove sensitive species and/or their habitats. Future development projects facilitated under Alternative 1 would be evaluated on a project-by-project basis for potential adverse impacts to sensitive species and required to implement mitigation measures, as needed. Overall, as is the case for the Proposed Project, with the implementation of Mitigation Measures set forth in Section 2.5.7 (BIO-1 through BIO-6), potential impacts to sensitive species associated with the Alternative 1 would be less than significant, and consistent with the impacts of the Proposed Project.

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?

In the General Plan planning area, riparian habitat is generally found along major drainages, such as the Whitewater River Stormwater Channel and East and West Cathedral Canyon Channels. As with the proposed General Plan update, Alternative 1 would facilitate future development that could impact riparian habitat. However, development opportunities near riparian habitat in the planning area are limited because most sensitive natural communities are in areas designated as Open Space. Nonetheless, the possibility exists for a project to occur in the vicinity of riparian habitat.

As in the case for the Proposed Project, impacts would be minimized by implementation of General Plan Biological Resources Sub-Element Policy 2, which requires the City to evaluate development projects for their impacts on existing habitat and wildlife, and for the land's value as viable open space. The City may require site-specific biological assessments to evaluate potential impacts to riparian habitat and the need for mitigation measures. Consistent with the Proposed Project, project-specific impacts would be less than significant with implementation of Mitigation Measures BIO-7 through BIO-10 (see Section 2.5.7).

c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

In Cathedral City, the Whitewater River Stormwater Channel, East Cathedral Canyon Channel, and drainage from East Wide Canyon (north of I-10) have been identified as part of “riverine” systems that include “wetlands and deepwater habitats contained within a channel that periodically or continuously contains moving water, or which forms a connecting link between two bodies of standing water.”

As with the proposed General Plan update, Alternative 1 would facilitate new development in the planning area which could permanently or temporarily impact wetlands under state or federal jurisdiction. Policy 10 of the General Plan Water Resources Sub-Element requires new development to protect the quality of water bodies and natural drainage systems through sign design, source controls, storm water treatment, runoff reduction measures, and best management practices. The City may require assessments of hydrologic and habitat conditions to determine whether and to what extent future development projects will impact protected wetlands, as well as the need for mitigation (see Mitigation Measures BIO-7 through BIO-10). Implementation of these measures will reduce potential impacts of future development on protected wetlands to less than significant levels. These impacts are consistent with impacts of the Proposed Project.

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

The City contains no natural aquatic resources that could support fish; therefore, Alternative 1 will have no impact on the movement of fish species.

The majority of parcels on the valley floor within the General Plan area are currently developed and surrounded by elements of the built environment, including buildings, roads, walls and fences, and utility infrastructure, thus diminishing the viability of wildlife migratory corridors. Nonetheless, development could result in the construction of barriers to wildlife movement, such as fences, walls, buildings, and roads. Development within and adjacent to CVMSHCP Conservation Areas is subject to land use adjacency guidelines, which could also reduce potential impacts.

Future development facilitated by Alternative 1 could impact nesting birds if construction occurs in the spring; however, implementation of MBTA surveys (Mitigation Measure BIO-4) would reduce potential impacts to less than significant levels.

The General Plan Biological Resources Sub-Element includes Policy 3 and Program 3.A by which the City would encourage and cooperate with other agencies in establishing multiple-use corridors that take advantage of drainage channels and utility easements as wildlife movement corridors, public access ways, and linkages between open space areas and the built environment. Consistent with the Proposed Project, implementation of these measures would reduce potential impacts to less than significant levels.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

As discussed in Section 2.5, the City does not have a tree preservation or similar ordinance that protects a particular biological resource. However, the City is a Permittee to the CVMSHCP/NCCP and it cooperates with the Agua Caliente Band of Cahuilla Indians to assure development projects on tribal lands in the City abide by the provisions of the Tribal HCP.

As with the Proposed Project, Alternative 1 would be subject to the Biological Resources Sub-Element of the General Plan Update includes Programs 1.B, 1.D, 1.E, and 4.A that support the City's continued participation in implementation of the above-referenced HCPs. Future development facilitated by Alternative 1 would be required to mitigate impacts to Covered species through the payment of local development mitigation fees (Mitigation Measures BIO-1 and BIO-2). Development within or adjacent to a CVMSHCP Conservation area would be subject to land use adjacency guidelines (BIO-1). Alternative 1 will continue to implement all the above-mentioned plans and policies and, therefore, impacts would be less than significant.

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

The City is a Permittee to the CVMSHCP/NCCP and cooperates with the Agua Caliente Band of Cahuilla Indians to implement the Tribal HCP on tribal lands within City boundaries. Alternative 1 would be subject to General Plan Programs 1.B, 1.D, 1.E, and 4.A that provide for the City's continued participation in both HCPs, including requiring future development projects to pay local development mitigation fees and protection of CVMSHCP Conservation Areas through implementation of land use adjacency guidelines (Mitigation Measures BIO-1 and BIO-2). Consistent with the Proposed Project, Alternative 1 would not conflict with the provisions of either plan; no impact would occur.

3.5.3.1.2. Alternative 1 Mitigation Measures

The same mitigation measures provided in Section 2.5 for the Proposed Project would also apply to Alternative 1.

3.5.3.1.3. Alternative 1 Significance After Mitigation

After implementation of the above-referenced mitigation measures, biological resource-related impacts of Alternative 1 would be less than significant.

3.5.3.1.4. Alternative 1 Cumulative Impacts

Alternative 1 would have the same cumulative impacts as the proposed General Plan update because the City would continue to require project-specific biological evaluations and mitigation measures, where necessary, for individual projects to minimize impacts at the local level. Therefore, the impacts of Alternative 1 on biological resources would not be cumulatively considerable.

3.5.3.2. Alternative 2

Alternative 2, also known as the “less intense alternative,” will result in decreased land use densities. However, the same General Plan planning area as the Proposed Project will be affected.

3.5.3.2.1. Alternative 2 Impacts

Would Alternative 2:

- a) *Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?*

As described in Section 2.5, the General Plan planning area contains or potentially contains numerous sensitive species, including some designated as endangered or threatened by the USFWS and CDFW. Some have been identified for conservation or protection in the CVMSHCP and Agua Caliente Tribal HCP, and some are subject to land management policies and plans of the BLM and other regulatory agencies.

Similar to the proposed General Plan update, Alternative 2 would facilitate future urban development that could disturb or permanently remove sensitive species and/or their habitats. Future development projects facilitated under Alternative 2 would be evaluated on a project-by-project basis for potential adverse impacts to sensitive species and required to implement mitigation measures, as needed. Overall, as is the case for the Proposed Project, with the implementation of Mitigation Measures set forth in Section 2.5.7 (BIO-1 through BIO-6), potential impacts to sensitive species associated with the Alternative 2 would be less than significant, and consistent with the impacts of the Proposed Project.

- b) *Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?*

As with the proposed General Plan Update, Alternative 2 would facilitate future development that could impact riparian habitat. As in the case for the Proposed Project, impacts would be minimized by implementation of General Plan Biological Resources Sub-Element Policy 2, which requires the City to evaluate development projects for their impacts on existing habitat and wildlife, and for the land’s value as viable open space. The City may require site-specific biological assessments to evaluate potential impacts to riparian habitat and the need for mitigation measures. Consistent with the Proposed Project, project-specific impacts would be less than significant with implementation of Mitigation Measures BIO-7 through BIO-10 (see Section 2.5.7).

- c) *Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?*

As with the proposed General Plan update, Alternative 2 would facilitate new development in the planning area which could permanently or temporarily impact wetlands under state or federal jurisdiction. Policy 10 of the General Plan Water Resources Sub-Element requires new development to protect the quality of water bodies and natural drainage systems through sign design, source controls, storm water treatment, runoff reduction measures, and best management practices. The City may require assessments of hydrologic and habitat conditions to determine whether and to what extent future development projects will impact protected wetlands, as well as the need for mitigation (see Mitigation Measures BIO-7 through BIO-10). Implementation of these measures will reduce potential impacts of future development on protected wetlands to less than significant levels. These impacts are consistent with impacts of the Proposed Project.

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

The City contains no natural aquatic resources that could support fish; therefore, Alternative 2 will have no impact on the movement of fish species.

Under Alternative 2, development could result in the construction of barriers to wildlife movement, such as fences, walls, buildings, and roads. Development within and adjacent to CVMSHCP Conservation Areas is subject to land use adjacency guidelines, which could also reduce potential impacts.

Future development facilitated by Alternative 2 could impact nesting birds if construction occurs in the spring; however, implementation of MBTA surveys (Mitigation Measure BIO-4) would reduce potential impacts to less than significant levels.

The General Plan Biological Resources Sub-Element includes Policy 3 and Program 3.A by which the City would encourage and cooperate with other agencies in establishing multiple-use corridors that take advantage of drainage channels and utility easements as wildlife movement corridors, public access ways, and linkages between open space areas and the built environment. Consistent with the Proposed Project, implementation of these measures would reduce potential impacts to less than significant levels.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

As discussed in Section 2.5, the City does not have a tree preservation or similar ordinance that protects a particular biological resource. However, the City is a Permittee to the CVMSHCP/NCCP and it cooperates with the Agua Caliente Band of Cahuilla Indians to assure development projects on tribal lands in the City abide by the provisions of the Tribal HCP.

As with the Proposed Project, Alternative 2 would be subject to the Biological Resources Sub-Element of the General Plan Update includes Programs 1.B, 1.D, 1.E, and 4.A that support the City's continued participation in implementation of the above-referenced HCPs. Future development facilitated by Alternative 2 would be required to mitigate impacts to Covered species through the payment of local development mitigation fees (Mitigation Measures BIO-1 and BIO-2). Development within or adjacent to a CVMSHCP Conservation area would be subject to land use adjacency guidelines (BIO-1). Alternative 2 will continue to implement all the above-mentioned plans and policies and, therefore, impacts would be less than significant.

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

The City is a Permittee to the CVMSHCP/NCCP and cooperates with the Agua Caliente Band of Cahuilla Indians to implement the Tribal HCP on tribal lands within City boundaries. Alternative 2 would be subject to General Plan Programs 1.B, 1.D, 1.E, and 4.A that provide for the City's continued participation in both HCPs, including requiring future development projects to pay local development mitigation fees and protection of CVMSHCP Conservation Areas through implementation of land use adjacency guidelines (Mitigation Measures BIO-1 and BIO-2). Consistent with the Proposed Project, Alternative 2 would not conflict with the provisions of either plan; no impact would occur.

3.5.3.2.2. Alternative 2 Mitigation Measures

The same mitigation measures provided in Section 2.5 for the Proposed Project would also apply to Alternative 2.

3.5.3.2.3. Alternative 2 Significance After Mitigation

After implementation of the above-referenced mitigation measures, biological resource-related impacts of Alternative 2 would be less than significant.

3.5.3.2.4. Alternative 2 Cumulative Impacts

Alternative 2 would have the same cumulative impacts as the proposed General Plan Update because the City would continue to require project-specific biological evaluations and mitigation measures, where necessary, for individual projects to minimize impacts at the local level. Therefore, the impacts of Alternative 2 on biological resources would not be cumulatively considerable.

3.5.3.3. Alternative 3

Alternative 3, also known as the No Project alternative, will result in buildout of the existing General Plan.

3.5.3.3.1. Alternative 3 Impacts

Would Alternative 3:

- a) *Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?*

As described in Section 2.5, the General Plan planning area contains or potentially contains numerous sensitive species, including some designated as endangered or threatened by the USFWS and CDFW. Some have been identified for conservation or protection in the CVMSHCP and Agua Caliente Tribal HCP, and some are subject to land management policies and plans of the BLM and other regulatory agencies.

Similar to the proposed General Plan Update, Alternative 1 would facilitate future urban development that could disturb or permanently remove sensitive species and/or their habitats. Future development projects facilitated under Alternative 1 would be evaluated on a project-by-project basis for potential adverse impacts to sensitive species and required to implement mitigation measures, as needed. Overall, as is the case for the Proposed Project, with the implementation of Mitigation Measures set forth in Section 2.5.7 (BIO-1 through BIO-6), potential impacts to sensitive species associated with the Alternative 1 would be less than significant, and consistent with the impacts of the Proposed Project.

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?

As with the proposed General Plan Update, Alternative 3 would facilitate future development that could impact riparian habitat. As in the case for the Proposed Project, impacts would be minimized by implementation of General Plan Biological Resources Sub-Element Policy 2, which requires the City to evaluate development projects for their impacts on existing habitat and wildlife, and for the land's value as viable open space. The City may require site-specific biological assessments to evaluate potential impacts to riparian habitat and the need for mitigation measures. Consistent with the Proposed Project, project-specific impacts would be less than significant with implementation of Mitigation Measures BIO-7 through BIO-10 (see Section 2.5.7).

c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

As with the proposed General Plan Update, Alternative 3 would facilitate new development in the planning area which could permanently or temporarily impact wetlands under state or federal jurisdiction. Policy 10 of the General Plan Water Resources Sub-Element requires new development to protect the quality of water bodies and natural drainage systems through sign design, source controls, storm water treatment, runoff reduction measures, and best management practices. The City may require assessments of hydrologic and habitat conditions to determine whether and to what extent future development projects will impact protected wetlands, as well as the need for mitigation (see Mitigation Measures BIO-7 through BIO-10). Implementation of these measures will reduce potential impacts of future development on protected wetlands to less than significant levels. These impacts are consistent with impacts of the Proposed Project.

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

The City contains no natural aquatic resources that could support fish; therefore, Alternative 3 will have no impact on the movement of fish species.

Under Alternative 3, development could result in the construction of barriers to wildlife movement, such as fences, walls, buildings, and roads. Development within and adjacent to CVMSHCP Conservation Areas is subject to land use adjacency guidelines, which could also reduce potential impacts.

Future development facilitated by Alternative 3 could impact nesting birds if construction occurs in the spring; however, implementation of MBTA surveys (Mitigation Measure BIO-4) would reduce potential impacts to less than significant levels.

The General Plan Biological Resources Sub-Element includes Policy 3 and Program 3.A by which the City would encourage and cooperate with other agencies in establishing multiple-use corridors that take advantage of drainage channels and utility easements as wildlife movement corridors, public access ways, and linkages between open space areas and the built environment. Consistent with the Proposed Project, implementation of these measures would reduce potential impacts to less than significant levels.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

As discussed in Section 2.5, the City does not have a tree preservation or similar ordinance that protects a particular biological resource. However, the City is a Permittee to the CVMSHCP/NCCP and it cooperates with the Agua Caliente Band of Cahuilla Indians to assure development projects on tribal lands in the City abide by the provisions of the Tribal HCP.

Alternative 3 is currently subject to the Biological Resources Sub-Element of the General Plan update includes Programs 1.B, 1.D, 1.E, and 4.A that support the City's continued participation in implementation of the above-referenced HCPs. Future development facilitated by Alternative 3 would be required to mitigate impacts to Covered species through the payment of local development mitigation fees (Mitigation Measures BIO-1 and BIO-2). Development within or adjacent to a CVMSHCP Conservation area would be subject to land use adjacency guidelines (BIO-1). Alternative 3 will continue to implement all the above-mentioned plans and policies and, therefore, impacts would be less than significant.

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

The City is a Permittee to the CVMSHCP/NCCP and cooperates with the Agua Caliente Band of Cahuilla Indians to implement the Tribal HCP on tribal lands within City boundaries. Alternative 3 would continue to implement General Plan Programs 1.B, 1.D, 1.E, and 4.A that provide for the City's continued participation in both HCPs, including requiring future development projects to pay local development mitigation fees and protection of CVMSHCP Conservation Areas through implementation of land use adjacency guidelines (Mitigation Measures BIO-1 and BIO-2). Consistent with the Proposed Project, Alternative 3 would not conflict with the provisions of either plan; no impact would occur.

3.5.3.3.2. Alternative 3 Mitigation Measures

The same mitigation measures provided in Section 2.5 for the Proposed Project would also apply to Alternative 3.

3.5.3.3.3. Alternative 3 Significance After Mitigation

After implementation of the above-referenced mitigation measures, biological resource-related impacts of Alternative 3 would be less than significant.

3.5.3.3.4. Alternative 3 Cumulative Impacts

Alternative 3 would have the same cumulative impacts as the proposed General Plan Update because the City would continue to require project-specific biological evaluations and mitigation measures, where necessary, for individual projects to minimize impacts at the local level. Therefore, the impacts of Alternative 3 on biological resources would not be cumulatively considerable.

3.5.4. Environmental Superior Alternative

All Alternatives, including the Proposed Project, encompass the same planning area and propose to develop the same parcels. The difference in buildout intensities and whether or not a parcel would develop into the same land use is irrelevant to biological resources.

Alternative 3, the No Project Alternative, is the least preferred alternative because the existing programs under Policy 1 would not be updated to include Program 1.E or 1.F, which ensure that impacts to Tribal conservation lands and Casey's June Beetle are managed properly and efficiently. All other Alternatives, including the Proposed Project, would include these updated programs and thus are equally environmentally superior to Alternative 3.

3.6. Cultural and Tribal Resources

3.6.1. Introduction

This section of the EIR analyzes the potential impacts associated with the Project alternatives based on cultural resources in the area. It also addresses impacts associated with tribal cultural resources as a result of implementing proposed alternatives.

3.6.2. Existing Conditions

As discussed in Section 2.6 of this EIR, the base of the San Jacinto and Santa Rosa Mountains and mesquite dunes between Seven Palms Valley and Edom Hill areas are highly sensitive for prehistoric archaeological resources. The valley floor, however, demonstrates low sensitivity for prehistoric archaeological resources as it would have offered few resources for native settlements.

According to the EIC, most surveys have been conducted in the northern portion of the planning area on the valley floor and in the Indio Hills; a few have been conducted in the urban core. Only one prehistoric site (CA-RIV-2171), a rock ring feature, has been recorded into the California Historical Resource Information System (CHRIS); its location is kept confidential for its protection. Another prehistoric site in the vicinity of Willow Hole has been reported by the Coachella Valley Archaeological Society, but it has not been recorded.

Six locations of potential Native American cultural significance, listed in Table 2.6-1 and shown on Exhibit 2.6-1 and discussed in Section 2.6, have been identified by anthropologists and Cahuilla cultural authorities. Four are located along the base of the San Jacinto and Santa Rosa Mountains, one in the Whitewater River in the same general vicinity, and one near Edom Hill.

3.6.3. Alternatives Impact Analysis

3.6.3.1. Alternative 1

3.6.3.1.1. Alternative 1 Impacts

Cultural Resources

a) Cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5?

Currently, the majority of the City is developed and includes several historic properties that have been recorded in the California Historical Resource Information Center, although some have been demolished or significantly altered. The proposed General Plan is a policy document that will not, in and of itself, result in physical changes to a historical resource. Similar to the Proposed Project, the area that could be developed under Alternative would be the same as for the Proposed Project and therefore the potential impacts to historical resources would be the same. New developments under Alternative 1 would be expected to conform to the Cultural Resources Sub-Element policies and programs set forth in the proposed General Plan update, which include strict programs and permitting processes to secure the historical resources. Impacts associated with this alternative could be mitigated as discussed in Section 2.6.7.

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?

The planning area includes known archaeological resources and areas of potential Native American cultural significance. It includes land within the Agua Caliente Band of Cahuilla Indians Reservation and the Traditional Use Area of Native Americans. Similar to the Proposed Project, there is a potential for archaeological resources to be uncovered during ground-disturbing activities under Alternative 1. Potential impacts are not expected to be significant because the Cultural Resources Sub-Element in the General Plan includes policies and programs to protect the archaeological resource. In addition, to reduce the potential impact to less than significant, Mitigation Measures were provided in Section 2.6.7 for the Proposed Project, require worker education and monitoring if resources are identified, which will also be applicable to Alternative 2. With implementation of General Plan policies and Section 2.6.7 mitigation measures, impacts associated with archaeological resources would be less than significant, and consistent with the Proposed Project.

c) Disturb any human remains, including those interred outside of formal cemeteries?

Under Alternative 1, the planning area will be developed with a mixed of land uses comparable to that set forth in the Proposed Project. Under Alternative 1, the potential exists for human remains to be unearthed during ground disturbance activities, such as grading and or other sub-surface excavations or disturbances. To reduce the impact to less than significant levels, Mitigation Measures are provided in Section 2.6.7, which will be applicable to this alternative and will reduce impacts to less than significant levels, as it will under the Proposed Project.

Tribal Resources

- a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:***
- i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or***
 - ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.***

Construction-related activities under the Alternative 1 would be the same as those under the proposed General Plan update, including demolition, grading, excavation, infrastructure improvements, and new building construction. Depths of construction activities, and requirements for tribal cultural resources and ground investigation, would be similar to those associated with the Proposed Project and therefore would result in similar impacts to cultural resources, particularly with regard to tribal cultural resources. Tribal cultural resources are generally addressed on a site-by-site basis, and the probability of uncovering new resources or disturbing known resources is considered during project-level environmental review, including subsurface investigations (as warranted). As such, impacts to tribal cultural resources under the Alternative 1 would be less than significant and comparable to impacts identified for the proposed General Plan update. The mitigation measures provided for the Proposed Project will also be applicable to this alternative.

3.6.3.1.2. Alternative 1 Mitigation Measures

With the implementation of the mitigation measures set forth in Section 2.6.7 of this EIR, application of relevant policies and programs set forth in the Cultural Resources Sub-Element of the proposed General Plan and compliance with standard conditions applied to development projects, no significant adverse impacts to cultural resources, including the tribal cultural resources, are anticipated.

3.6.3.1.3. Alternative 1 Significance After Mitigation

Residual environmental effects associated with the implementation of the Alternative 1 project would essentially be the same as those for the Proposed Project. Through the implementation of the applicable General Plan policies and programs, and the mitigation measures set forth in Section 2.6.7 of this EIR, potential impacts can be avoided, minimized and/or reduced to levels that are less than significant.

3.6.3.1.4. Alternative 1 Cumulative Impacts

A consideration of cumulative effects associated with cultural resources includes the degree to which a project may contribute to the cumulative impacts from cultural, historical, and tribal resources. Future development associated with the Alternative 1 project would involve grading and excavation activities on individual sites, which could impact buried cultural, historical, and tribal resources. Alternative 1 would contribute considerably to cumulative impacts if it were to have a substantial or significant adverse effect on such resources in the Coachella Valley.

As discussed above and Section 2.6.5, cultural, historical, and archaeological resources are identified in the planning area. The City also has few areas located within the traditional use area of the Cahuilla people, and mitigation measures are provided to reduce any potential impacts to buried resources, which will also reduce cumulative impacts to less than considerable levels. The proposed General Plan update also contains policies to protect cultural resources, including historical, archaeological, and tribal. Compliance with those policies and the recommendations of individual cultural resources investigations would reduce impacts. Overall, the Alternative 1 project will not significantly increase the community impacts to cultural resources in the Coachella Valley. Therefore, there would be no cumulatively considerable impacts associated with the implementation of the Alternative 1 project.

3.6.3.2. Alternative 2

3.6.3.2.1. Alternative 2 Impacts

Cultural Resources

a) Cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5?

As discussed in Section 2.6.5, the majority of the planning area is already developed. The City includes several historic properties that have been recorded in the California Historical Resource Information Center, although some have been demolished or significantly altered. The proposed General Plan is a policy document that will not, in and of itself, result in physical changes to an historical resource. Similar to the Proposed Project, the Alternative 2 land uses and extent of development in this area would be comparable to the Proposed Project and therefore the potential impacts to historical resources would be the same. New developments under Alternative 2 would be expected to conform to the Cultural Resources Sub-Element policies and programs set forth in the proposed General Plan update, which include strict programs and permitting processes to protect historical resources. Impacts associated with this alternative could be mitigated as discussed in Section 2.6.7.

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?

As discussed in Section 2.6.5, the planning area includes known archaeological resources and areas of potential Native American cultural significance. It includes land within the Agua Caliente Band of Cahuilla Indians Reservation and the Traditional Use Area of Native Americans. Similar to the Proposed Project, there is a potential for archaeological resources to be uncovered during ground-disturbing activities under this alternative. Potential impacts are not expected to be significant because the Cultural Resources Sub-Element in the General Plan includes

policies to protect archaeological and other cultural resource. In addition, to reduce the potential impact to levels that are less than significant, mitigation measures were provided in Section 2.6.7 for the Proposed Project, requiring worker education and monitoring if the potential for resources is identified, which will also be applicable to Alternative 2. With implementation of General Plan policies and Section 2.6.7 mitigation measures, impacts associated with archaeological resources would be less than significant, and consistent with the Proposed Project.

c) Disturb any human remains, including those interred outside of formal cemeteries?

Under Alternative 2, the planning area will be developed with a mixed of land uses comparable to that set forth in the Proposed Project. Under Alternative 2, the planning area that would be developed has the potential to unearthed human remains during ground disturbance activities, such as grading and sub-surface excavation. To reduce the impact to less than significant levels, mitigation measures are provided in Section 2.6.7, which will be applicable to this alternative and will reduce impacts to less than significant levels, as it will under the Proposed Project.

Tribal Resources

a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

- i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or***
- ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.***

Construction-related activities under the Alternative 2 would be the same as under the Proposed Project, including demolition, grading, new building construction and other site disturbance. Depths of construction activities, and requirements for cultural resources investigations and monitoring, would be similar and therefore would result in similar impacts comparable to those identified for the proposed General Plan update, particularly with regard to tribal cultural resources. Tribal cultural resources are generally addressed on a site-by-site basis, and the probability of uncovering new resources or disturbing known resources is considered during project-level environmental review, including subsurface investigations (as warranted). As such, impacts to tribal cultural resources under the Alternative 2 would be less than significant and comparable to impacts identified for the proposed General Plan. The mitigation measures provided for the Proposed Project will also be applicable to this alternative.

3.6.3.2.2. Alternative 2 Mitigation Measures

With the implementation of the mitigation measures set forth in Section 2.6.7 of this EIR, relevant policies and programs set forth in the Cultural Resources Sub-Element of the proposed General Plan update, and compliance with the standard development conditions, no significant adverse impacts on cultural resources, including the tribal cultural resources, are anticipated.

3.6.3.2.3. Alternative 2 Significance After Mitigation

Residual environmental effects associated with the implementation of the Alternative 2 project would essentially be the same as those for the Proposed Project. Through the implementation of applicable General Plan policies and programs, and the mitigation measures set forth in Section 2.6.7 of this EIR, potential impacts can be avoided, minimized and/or reduced to levels that are less than significant.

3.6.3.2.4. Alternative 2 Cumulative Impacts

Cumulative impacts associated with cultural resources include those affecting cultural, historical, and tribal resources. Future development under Alternative 2 project would involve grading, and excavation and other site disturbance on individual sites, which could impact buried cultural, historical, and tribal resources. Alternative 2 would contribute considerably to cumulative impacts if it were to have a substantial or significant adverse effect on such resources in the City and elsewhere in the Coachella Valley.

As discussed above and Section 2.6.5, cultural, historical, and archaeological resources have been identified in the planning area. The City also has few areas located within the traditional use area of the Cahuilla people, and mitigation measures are provided to reduce any potential impacts to buried resources, which will also reduce cumulative impacts to less than considerable levels. The proposed General Plan update also contains policies to protect cultural resources, including historical, archaeological, and tribal. Compliance with those policies and the recommendations of individual cultural resources investigations would avoid or greatly reduce impacts. Overall, the Alternative 2 project will not significantly increase the community impacts to cultural resources in the Coachella Valley. Therefore, there would be no cumulatively considerable impacts associated with the implementation of the Alternative 2 project.

3.6.3.3. Alternative 3

3.6.3.3.1. Alternative 3 Impacts

Cultural Resources

a) Cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5?

As discussed in Section 2.6.5, majority portions of the City are already developed. Identified historic properties have been recorded in the California Historical Resource Information Center, although some have been demolished or significantly altered. The proposed General Plan is a policy document that will not, in and of itself, result in physical changes to a historical resource. Similar to the Proposed Project, areas subject to site disturbance and development under Alternative 3 would be the same as for the Proposed Project and therefore the potential impacts to historical resources would be the same. New developments under Alternative 3 would be subject to the same strict programs and permitting processes to protect the historical resources. Impacts associated with this alternative could be mitigated as discussed in Section 2.6.7.

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?

As discussed in Section 2.6.5, the planning area includes known archaeological resources and areas of potential Native American cultural significance. It includes land within the Agua Caliente Band of Cahuilla Indians Reservation and the Traditional Use Area of Native Americans. Similar to the Proposed Project, there is a potential for archaeological resources to be uncovered during ground-disturbing activities under this alternative. Potential impacts are not expected to be significant because ground disturbing activities are subject to the same policies, regulations and mitigation measures meant to protect the archaeological and other cultural resource.

In addition, to reduce the potential impact to less than significant, Mitigation Measures were provided in Section 2.6.7 for the Proposed Project, requiring worker education and monitoring if the potential for sensitive resources are identified, and would also be applicable to Alternative 3. With implementation of proposed General Plan policies and Section 2.6.7 mitigation measures, Alternative 3 impacts associated to archaeological resources would be less than significant, and consistent with the Proposed Project.

c) Disturb any human remains, including those interred outside of formal cemeteries?

Under Alternative 3, the planning area will be developed with a mixed of land uses comparable to that set forth in the Proposed Project. Under Alternative 3, the planning area that would be developed has the potential to unearthed human remains during ground disturbance activities, such as grading and sub-surface excavation. To reduce the impact to less than significant levels, mitigation measures are provided in Section 2.6.7, which will be applicable to this alternative and will reduce impacts to less than significant levels, as it will under the Proposed Project.

Tribal Resources

a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

- i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or***
- ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.***

Construction-related activities under the Alternative 3 would be the same as under the Proposed Project, including demolition, grading, new building construction and other site disturbance. Depths of construction activities, and requirements for cultural resources investigations and monitoring, would be similar and therefore would result in avoidance and minimization of impacts comparable to the proposed General Plan update, particularly with regard to tribal cultural resources. Tribal cultural resources are generally addressed on a site-by- site basis, and the probability of uncovering new resources or disturbing known resources is considered during project-level environmental review, including subsurface investigations (as warranted). As such, impacts to tribal cultural resources under the Alternative 3 would be less than significant and comparable to impacts identified for the proposed General Plan. The mitigation measures provided for the Proposed Project will also be applicable to this alternative.

3.6.3.3.2. Alternative 3 Mitigation Measures

With the implementation of the mitigation measures set forth in Section 2.6.7 of this EIR and relevant policies and programs set forth in the Cultural Resources Sub-Element of the in the proposed General Plan and compliance with the standard development conditions, no significant adverse impacts on cultural resources, including the tribal cultural resources, are anticipated.

3.6.3.3.3. Alternative 3 Significance After Mitigation

Residual environmental effects associated with the implementation of the Alternative 3 project would essentially be the same as those for the Proposed Project. Through the application of the applicable General Plan policies and programs, and the mitigation measures set forth in Section 2.6.7 of this EIR, potential impacts can be avoided, minimized and/or reduced to levels that are less than significant.

3.6.3.3.4. Alternative 3 Cumulative Impacts

Cumulative impacts associated with cultural resources include those affecting cultural, historical, and tribal resources. Future development under the Alternative 3 project would involve grading, and excavation and other site disturbance on individual sites, which could impact buried cultural, historical, and tribal resources. Alternative 3 would contribute considerably to cumulative impacts if it were to have a substantial or significant adverse effect on such resources in the City, and in conjunction with such impacts elsewhere in the Coachella Valley.

As discussed above and Section 2.6.5, cultural, historical, and archaeological resources have been identified in the planning area. The City also has few areas located within the traditional use area of the Cahuilla people, and mitigation measures are provided to reduce any potential impacts to buried resources, which will also reduce cumulative impacts to less than considerable levels. The proposed General Plan update also contains policies to protect cultural resources, including historical, archaeological, and tribal. Compliance with those policies and the recommendations of individual cultural resources investigations would avoid or greatly reduce impacts. Overall, the Alternative 3 project will not significantly increase the community impacts to cultural resources in the Coachella Valley. Therefore, there would be no cumulatively considerable impacts associated with the implementation of the Alternative 3 project.

3.6.4. Environmental Superior Alternative

Of the four alternatives, Alternative 2 is marginally environmentally superior to the others with respect to potential impacts to cultural or tribal resources. This is due to the limited reduction in potential site disturbance on lands located between the UPRR lines and US Interstate-10. It can be argued that, overall, the Proposed Project is environmentally superior because it sets forth more stringent programs and policies to regulate construction activities and protect cultural resources.

3.7. Energy and Mineral Resources

3.7.1. Introduction

This section of the EIR analyzes the potential impacts associated with the alternatives to the proposed Cathedral City General Plan Update based on regional and local energy and mineral resources. In the Coachella Valley, energy resources are widely distributed, with wind turbine development focused in the San Gorgonio Pass area and extending east to the west slope of Edom Hills, extensive geothermal energy development at the south end of the Salton Sea and extensive solar photovoltaic systems built across the valley. Solar photovoltaic systems have been and are continuing to be developed throughout the Valley on various scales, from individual residential to utility-scale systems. There are no known fossil energy resources (coal, oils, natural gas) known to occur in the Coachella Valley or the region.

The valley is an important source of mineral resources that are largely associated with fluvial deposits and are limited to sand and gravel used for a variety of construction projects and products, including concrete and asphalt. These resources occur across the valley and are most developed in the Indio Hills, Mecca Hills and foothills of the Little San Bernardino Mountains.

3.7.2. Existing Conditions

The nearest Mineral Resource Zone to Cathedral City is in the Indio Hills near the community of Thousand Palms and north of the city's sphere-of-influence (SOI). It contains an area designated MRZ-2a PCC-3. This 50.5±-acre site was reclassified from MRZ-2 in California Geological Survey Special Report 159 to MRZ-2a for PCC-grade aggregate in Special Report 198. The E.L. Yeager Construction Company is permitted to mine in this area. However, there are no mapped or exploited mineral resources in the City or its SOI.

The Coachella Valley region has seen major developments in wind energy; the region is known internationally for the scale of wind resource development. The western Coachella Valley is a proven wind resource area, where strong and sustained winds are channeled through the San Gorgonio Pass and into the valley. Today, the San Gorgonio Pass is home to one of the nation's largest wind farms; it includes more than 2,299 wind turbines, with a total capacity of 665 megawatts.¹

Eight wind turbines currently operate in Cathedral City on Edom Hill (BLM lands), with a capacity of approximately 2.5 megawatts. These turbines are three-blade, horizontal axis machines with galvanized or painted steel towers; larger turbines can exceed 300 feet in overall height.

To conserve the natural energy and mineral resources, Cathedral City has implemented the *Green for Life* energy conservation and renewable energy installation program on City facilities and encouraged these activities throughout the community.

3.7.3. Alternatives Impact Analysis

3.7.3.1. Alternative 1

3.7.3.1.1. Alternative 1 Impacts

Mineral Resources

- a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?***

¹ United States Wind Turbine Database - USGS Energy Resources, July 2018

The City contains no known, commercially retrievable mineral resources. Future development and redevelopment facilitated by the Alternative 1 could result in comparable demand for sand and gravel resources for roadways, infrastructure, and building construction as compare to the Proposed Project. While Alternative 1 would result in a greater number of residential units, it would also result in less industrial development compared to the Proposed Project. Sand and gravel resources needed for future development will be derived from the region's substantial long-term supply. The demand associated with Alternative 1 would not be considered significant when compared to available regional resources. As discussed in Section 2.7.5, PCC-grade aggregate reserves in the Palm Springs Production-Consumption Region are projected to be enough to meet future demand in the region through the year 2038 and well beyond. Alternative 1 would result demand comparable to the Proposed Project, and impacts would not be significant. Mitigation identified in Chapter 2.7.7 would further reduce impacts to these resources.

b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?

The General Plan planning area does not contain any locally important mineral resource recovery sites, and none are delineated on the current General Plan or resource mapping developed by the State of California. Therefore, no impact is anticipated.

Energy Resources

Would the Project:

a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

Similar to the Proposed Project, development of land uses as designated in the Alternative 1 would require energy for construction and operation, and transportation thereby increasing energy demand in the City. To accommodate the projected development, Alternative 1 would result in an annual demand for approximately 705,966,600 kwh of electricity and 16,455,852 therms of natural gas. Furthermore, implementation of Alternative 1 has the potential to generate approximately 7,399,781 daily vehicle miles traveled (VMTs), resulting in a demand of 112,538,336 gallons of gasoline/diesel (fuel) annually. Alternative 1 would increase the demand for electricity, natural gas and fuel by 8,9509,00 kWh, 309,484 therms, and 2,157,104 gallons of fuel, respectively, when compared the Proposed Project. Therefore, compared to the Proposed Project, the Alternative 1 would result in an increased demand for energy. Although impacts would be increased under Alternative 1, the same General Plan policies and mitigation measures set forth in Section 2.7 would apply and reduce impacts related to energy consumption to less than significant levels.

b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Similar to the Proposed Project, Alternative 1 would not interfere with any state or local plan that promotes renewable energy or energy efficiency. The General Plan itself includes policies in the Energy and Mineral Resources Sub-Element, Circulation and Mobility Element and Community Design Element that encourage energy conservation in new development and the City's transportation system, and reduce energy usage by encouraging greater energy efficiency and alternative energy sources.

3.7.3.1.2. Alternative 1 Mitigation Measures

With the implementation of the mitigation measures set forth in Section 2.7.7 of this EIR and relevant policies and programs set forth in the Energy and Mineral Resources Sub-Element of the proposed General Plan and compliance with the standard conditions, no significant adverse impacts on energy and mineral resources are anticipated.

3.7.3.1.3. Alternative 1 Significance After Mitigation

Impacts would be reduced to less than significance levels with mitigations.

3.7.3.1.4. Alternative 1 Cumulative Impacts

Cumulative impacts related to energy resources would be slightly greater than those of the Proposed Project, as discussed in Section 2.7.6, while impacts to mineral resources would be comparable to those for the proposed General Plan. For both energy and mineral resources, impacts will be less than significant with mitigation measures. Alternative 1 impacts to the substantial local mineral resource that will support continued development in the City and regionally will not be cumulatively considerable. Alternative 1 impacts to finite energy resources will be much the same as those associated with the Proposed Project; however, in the Coachella Valley City and regional energy systems are rapidly evolving to the use of renewables, including wind, solar and geothermal that will support continued development in the City and regionally and reduce long-term demand for finite energy sources. Therefore, energy demand associated with the Alternative 1 project will not be cumulatively considerable.

3.7.3.2. Alternative 2

3.7.3.2.1. Alternative 2 Impacts

Mineral Resources

- c) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?*

As discussed above in Section 3.7.3.1, the City contains no known commercially viable mineral resources. Future development and redevelopment facilitated under the less intense Alternative 2 scenario would result in lower demand for sand and gravel resources for roadways, infrastructure, and building construction as compare to the Proposed Project primarily due to fewer number of the residential units. These resources could be derived from the regional Coachella Valley market, but the demand for sand and gravel resources would not be considered significant when compared to available regional resources. As discussed in Section 2.7.6, PCC-grade aggregate reserves in the Palm Springs Production-Consumption Region are projected to be enough to meet future demand in the region through the year 2038 and well beyond. Although, this alternative would result in fewer impacts compared to the Proposed Project, impacts would still be considered significant and the mitigation identified in Section 2.7.7 would be required. Impacts to these mineral resources from implementation of the Alternative 2 project would be less than significant.

- b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?*

The General Plan planning area does not contain any locally important mineral resource recovery sites, and none are delineated on the current General Plan or resource mapping developed by the State of California. Therefore, no impact is anticipated.

Energy Resources

- a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?*

Similar to the Proposed Project, development of land uses as designated in the Alternative 2 would require energy for construction and operation, thereby increasing energy demand in the City. Alternative 2 would result in an annual demand of approximately 657,773,000 kwh of electricity and 14,934,660 therms of natural gas. Furthermore, implementation of Alternative 2 has the potential to generate approximately 6,998,265 daily VMTs, resulting in a demand for 106,431,947 gallons of petroleum-based fuel annually.

The demand for electricity, natural gas and fuel would decrease under Alternative 2 by 39,242,700 kWh, 1,211,708 therms, and 3,949,285 gallons of fuel, respectively, compared to the Proposed Project. Therefore, compared to the Proposed Project, Alternative 2 would result in a decreased demand for energy. The same General Plan policies and programs, and the mitigation measures set forth in Section 2.7.7, would apply and further reduce impacts related to energy consumption to less than significant levels.

d) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Similar to the Proposed Project, Alternative 2 would not interfere with any state or local plan that promotes renewable energy or energy efficiency. The General Plan itself includes policies in the Energy and Mineral Resources Sub-Element to encourage energy conservation in new development and the City's transportation system and reduce energy usage by encouraging alternative energy sources.

3.7.3.2.2. Alternative 2 Mitigation Measures

With the implementation of the mitigation measures set forth in Section 2.7.7 of this EIR and relevant policies and programs set forth in the Energy and Mineral Resources Sub-Element and other elements of the proposed General Plan, as well as compliance with the standard conditions of development, no significant adverse impacts on energy and mineral resources are anticipated.

3.7.3.2.3. Alternative 2 Significance After Mitigation

Impacts would be reduced to less than significance levels with mitigations.

3.7.3.2.4. Alternative 2 Cumulative Impacts

Cumulative impacts related to energy resources would be slightly greater than those of the Proposed Project, as discussed in Section 2.7.6, while impacts to mineral resources would be comparable to or lower than those for the proposed General Plan. For both energy and mineral resources, impacts will be less than significant with mitigation measures. Alternative 2 impacts to the substantial local mineral resource that will support continued development in the City and regionally will not be cumulatively considerable. Alternative 2 impacts to finite energy resources will be much the same as those associated with the Proposed Project; however, in the Coachella Valley City and regional energy systems are rapidly evolving to the use of renewables, including wind, solar and geothermal that will support continued development in the City and regionally and reduce long-term demand for finite energy sources. Therefore, energy demand associated with the Alternative 1 project will not be cumulatively considerable.

3.7.3.3. Alternative 3

3.7.3.3.1. Alternative 3 Impacts

Mineral Resources

a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

As discussed above in Section 3.7.3.1., the City contains no known, commercially viable mineral resources. As compared to the Proposed Project, Alternative 3 would result in modestly lower demand for sand and gravel resources for roadways, infrastructure, and building construction due to fewer number of the residential units. Demand would not be considered significant when compared to available regional resources. As discussed in Section 2.7.6, PCC-grade aggregate reserves are sufficient to meet future demand well beyond the year 2038. Although, this alternative would result in fewer impacts compared to the Proposed Project, impacts would still be considered significant and the mitigation identified in Chapter 2.7.7 would be required. Impacts to these mineral resources from implementation of the Alternative 3 project would be less than significant.

b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?

As discussed above in Section 3.7.3.1., the planning area does not contain a locally important mineral resource recovery site, and none are delineated on the current General Plan, a specific plan, or other land use plan. Therefore, no impact is anticipated.

Energy Resources

a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

Alternative 3 would require energy for construction and operation, and would result in an annual demand for approximately 670,594,900 kwh of electricity and 15,584,392 therms of natural gas. Alternative 3 also has the potential to generate approximately 7,346,153 daily VMTs, resulting in a demand for 111,722,744 gallons of fuel annually. Compared to the Proposed Project, the demand for electricity and natural gas would decrease under Alternative 3 by 26,420,800 kWh and 561,976 therms, respectively. However, fuel consumption would increase by approximately 1,341,512 gallons of fuel annually. This increase in fuel consumption is likely due to decreased land use efficiencies resulting in longer and more frequent vehicle trips.

Overall, Alternative 3 would result in a decreased demand for energy when compared to the Proposed Project. The same General Plan policies, and the mitigation measures set forth in Section 2.7.7, would apply and further reduce impacts related to energy consumption to less than significant levels.

b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Similar to the Proposed Project, Alternative 3 would not interfere with any state or local plan that promotes renewable energy or energy efficiency. The existing General Plan itself includes policies in the Energy and Mineral Resources Sub-Element to encourage energy conservation in new development and the City's transportation system and reduce energy usage by encouraging alternative energy sources.

3.7.3.3.2. Alternative 2 Mitigation Measures

With the implementation of the mitigation measures set forth in Section 2.7.7 of this EIR and relevant policies and programs set forth in the Energy and Mineral Resources Sub-Element of the in the proposed General Plan and compliance with the standard conditions, no significant adverse impacts on energy and mineral resources are anticipated.

3.7.3.3.3. Alternative 2 Significance After Mitigation

Impacts would be reduced to less than significance levels with mitigations.

3.7.3.3.4. Alternative 2 Cumulative Impacts

Cumulative impacts related to energy and mineral resources would be slightly greater than those of the Proposed Project, as discussed in Section 2.7.9. Therefore, impacts will be less than cumulatively significant with mitigation.

3.7.4. Environmental Superior Alternative

At buildout, Alternative 2 would result in the lowest electricity demand, natural gas demand, and VMTs, thus resulting in less intense impacts to energy and mineral resources thresholds. In this regard, Alternative 2 is the environmentally superior alternative compared to the other alternatives.

3.8. Geology and Soils

3.8.1. Introduction

This section of the EIR analyzes the potential impacts associated with the alternatives to the proposed Cathedral City General Plan Update based on regional and local geologic and soils conditions. Coachella Valley is under the influence of two major geologic fault zones: the San Andreas Fault Zone and San Jacinto Fault Zone. The nearest earthquake fault is the Banning branch of the San Andreas Fault Zone, which passes through the northeast corner of the city limits (see Exhibit 2-8-3 of this EIR) and is capable of generating magnitude 7.4 earthquake. Other faults in the planning area that could impact the City include the Mission Creek fault located 1.25± miles northeast of the city limits, and the easterly extension of the Garnet Hill Fault, which also passes through the planning area and move in sympathy with a fault rupture on either the Banning or Mission Creek faults to the north.

Regional soils range from rocky outcrops within the mountains bordering the valley to coarse gravels of mountain canyons and recently laid fine- and medium-grained alluvial (stream deposited) and aeolian (wind deposited) sediments on the central valley floor. The valley consists of a diverse range of rocks and sediments, which were formed or deposited over millions of years and provide important details about the geologic history of the region.

3.8.2. Existing Conditions

Local Geology and Soils

Cathedral City and the Coachella Valley lie in the Colorado Desert Geomorphic Province ranging in elevation from about 2,000 feet above mean sea level in the San Gorgonio Pass to 245± feet below mean sea level at the Salton Sea. Tectonically, the Coachella Valley is a deep fault graben formed by plate movement along the San Andreas Fault (SAF). The SAF is a complex strike-slip fault and is more correctly referred to as a fault "zone". Its motion is accommodated along a complex system of interrelated faults. Other faults influencing the Coachella valley include the San Jacinto Fault, a northwest/southeast trending fault located along the western front of the San Jacinto Mountains. During the offset along San Andrea Fault system and associated smaller faults, sediments have been eroded to fill the valley and subsequently uplifted as the Indio and Mecca Hills, which are now exposed. Erosion and valley fill has deposited as much as 12,000 feet of sediments in the basin. Local geological and soil conditions are discussed in detail in Section 2.8.5 and in the Geotechnical Sub-Element of the proposed General Plan.

The majority of the City is underlain by alluvium which has low potential to contain unique paleontological resources. These soils are predominately comprised of aeolian and dune deposit. These medium-grained soils are picked up and transported by strong winds emanating from the San Gorgonio Pass at the northwesterly edge of the Coachella Valley. These deposits are unconsolidated, generally well-sorted windblown sand. They are redistributed along the central valley floor where they form shifting sand dunes. Aeolian deposits are typically loose near the ground surface but become denser with increasing depth. Like alluvial deposits, they are generally suitable for use as compacted fill, as they can be readily compacted with a combination of thorough wetting and wheel rolling with rubber-tired construction equipment. These units typically have high permeabilities, and shrinkage of up to 30% can be expected upon compaction. The northern portions of the planning area are also comprised of unconsolidated fanglomerates that have been uplifted along with Edom Hill and the Indio Hills. In the southern-most portions of the City, soils include alluvial fan deposits emanating from numerous washes draining the Santa Rosa foot hills and rocky outcroppings of granitic rock that are part of the Palm Springs complex.

Seismic Faults and Groundshaking

The City is in Seismic Zone 4 with a high probability of significant seismic activity. The nearest active faults are capable of generating strong ground shaking, slope collapse, seismically induced ground cracking or buckling of the pathway associated with soils settlement or collapse, damage to shade structures and other vertical improvements associated with the planning area.

Other Geotechnical Hazards in the Planning Area

During liquefaction, soils lose their bearing or shear strength needed to support structural foundations and can cause structural failures. The potential for liquefaction is low to very low throughout most of the City due to the depth to groundwater. Also see Section 2.8. Strong ground shaking can result in unstable slope conditions, including rock falls and landslides. Development in these areas can also be impacted by seismically-induced settlement.

The City planning areas is susceptible to high winds, which are predominantly from the northwest and channeled through the San Gorgonio Pass. They pick up sands and silts from the alluvial plain and washes and carry them across the valley floor. Wind erosion is a serious environmental problem in the valley often resulting in soil degradation, damage to cars and structures, and contributing to poor air quality. The General Plan planning area is located within *very severe* and *severe* wind erosion hazard zones.

Expansive soils contain significant amounts of clay particles and have the ability to give up water (shrink) or take on water (swell) and construction on these soils can result in structural and other damage. Minor amounts of clay present in the planning area are not considered a hazard to development in the planning area. The hazards associated with expansive soils in the City planning area are considered to be less than significant. Collapsible soils are unsaturated soils that exhibit a high strength when dry but experience a large and rapid volume reduction upon saturation, which can result in substantial structural damage. Collapsible soils were primarily found in the near surface of wind and water-deposited soils, and have been noted in the mid and east valley areas, including the City planning area. Also see Section 2-8.

Seiche refers to the seismically-induced oscillation or sloshing of water contained in an enclosed basin, such as a reservoir, pond, water storage tank, or swimming pool. The Desert Water Agency (DWA) owns four water reservoirs on elevated terrain in the Santa Rosa Mountains surrounding and near the Cathedral Canyon Cove. Damage to and/or failure of these tanks could result in inundation of homes and property in these areas of the City. Two water reservoirs owned by the Coachella Valley Water District (CVWD) are located on the north edge of Flat Top Mountain just south of Varner Road in the northern portion of the planning area..

The City planning area is comprised of bedrock and sedimentary soils (both fluvial and aeolian) that are not known to harbor paleontological resources. The potential for such resources to be impacted by development or other site disturbance facilitated by the Proposed Project and alternative projects is considered to be low.

3.8.3. Alternatives Impact Analysis

3.8.3.1. Alternative 1

3.8.3.1.1. Alternative 1 Impacts

- a) *Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:*
 - i) *Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.*

The Banning branch of the San Andreas (Coachella Segment) Fault, runs through the northern portion of the planning area. Proposed land uses in this area would be the same as for the Proposed Project and therefore the potential impacts to these lands and future land uses would be the same. New developments under Alternative 1 would be expected to conform to the most recent California Building Codes, which include strict building specifications to ensure structural and foundational stability. Fault investigations may also be required depending on where structures are proposed. Impacts associated with this alternative could be mitigated as discussed in Section 2.8.

ii) Strong seismic ground shaking?

Buildout of the Alternative 1 will result in a limited increase in the number of residential units and commercial square footage within the City compared to the Proposed Project. In the event of an earthquake along nearby active faults near the planning area, development under the Alternative 1 could be subjected to the same ground motion as the Proposed Project. Seismic ground-shaking generated by San Andreas and San Jacinto Fault systems could pose hazards to existing and future development in the General Plan planning area, including damage to building foundations, frames, walls and columns, windows, chimneys, and ceilings, as well as improvements like roads, railroads, subsurface pipes, bridges, and utility infrastructure. As is the case for the Proposed Project, the risk of damage to Alternative 1 structures due to seismic hazards cannot be completely eliminated, but structure-specific geotechnical investigation and advanced building practices would minimize potential impacts from a seismic event.

iii) Seismic related ground failure, including liquefaction?

The majority of the City has no susceptibility, or low or very low liquefaction susceptibility. Alternative 1 hazards associated with liquefaction are the same as those described for the Proposed Project and are limited to a small area in the northern portion of the City where groundwater is diked by faults.

iv) Landslides?

The slopes of the Indio Hills and Santa Rosa Mountains are susceptible to seismically-induced rock fall and landslides. Slopes on Edom Hill and Flat-top Mountain are especially susceptible to landslides in a strong seismic event. Rockfall hazards are greatest along the slopes of the Santa Rosa foothills. Landslide and rockfall hazards for Alternative 1 are essentially the same as those associated with the Proposed Project. Also see Exhibit 2.8-3, which maps the landslide and rockfall hazards in the City.

b) Result in substantial soil erosion or the loss of topsoil?

As noted above and in Section 2.8, major portions of the City are susceptible to severe and very severe wind erosion. Implementation of the Alternative 1 would result in the same type and extent of erosion hazards that are expected with the implementation of the Proposed Project. Therefore, implementation of mitigation measures set forth in Section 2.8.7 and conformance with the policies and programs in the General Plan Geotechnical Sub-Element can ensure that significant impact can be avoided. Therefore, the Alternative 1 would result in potential impacts comparable to the Proposed Project.

c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on-or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

See discussions in Sections 3.8.3.1.1. i through v, above. Alternative 1 exposures to these geotechnical hazards are comparable to those associated with the Proposed Project. Mitigation measures set forth in Section 2.8.7 and adherence to the policies and programs set forth in the Geotechnical Sub-Element will ensure that potentially significant impacts are avoided, minimized and otherwise mitigated.

d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

The geotechnical hazards associated with expansive soils in the City are considered to be low and less than significant. In those very limited areas where this potential does exist, conventional soils analysis and foundation engineering will reduce any potential impacts to a level that is less than significant.

e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

Implementation of the Alternative 1 would allow development of designated land uses in areas where soils are capable of supporting the use of waste water disposal systems. Similar to the Proposed Project, Alternative 1 would not allow installation of new septic tanks in those areas where prohibited by City Ordinance 572. All future development projects would be required to comply with all applicable regulations related to waste water disposal. Compliance with such regulations will ensure that impacts related to waste water disposal systems are less than significant. Therefore, as with the Proposed Project, Alternative 1 would not result in the construction of septic systems on lands incapable of supporting them.

f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Neither bedrock nor sedimentary soils occurring in the City planning area are expected to harbor sensitive paleontological resources. Therefore, impacts to these resources from implementation of the Alternative 1 project would be less than significant.

3.8.3.1.2. Alternative 1 Mitigation Measures

With the implementation of the mitigation measures set forth in Section 2.8.7 of this EIR and relevant policies and programs set forth in the Geotechnical Sub-Element of the in the proposed General Plan update and compliance with standard conditions of development, no significant adverse impacts associated with geology and soils are anticipated.

3.8.3.1.3. Alternative 1 Significance After Mitigation

Residual environmental effects associated with the implementation of the Alternative 1 project would essentially be the same as those for the Proposed Project. Through the implementation of applicable General Plan policies and programs, and the mitigation measures set forth in Section 2.8.7 of this EIR, potential impacts can be avoided, minimized and/or reduced to levels that are less than significant.

3.8.3.1.4. Alternative 1 Cumulative Impacts

A consideration of cumulative effects associated with geotechnical conditions includes the degree to which a project may contribute to the cumulative impacts from seismic events, surface soils, steep and unstable terrain and other conditions. Future development associated with the Alternative 1 project would involve grading and excavation activities on individual sites, which would result in changes to the area's existing geology and soils conditions. Development sites that are relatively flat would remain flat, while hillside development would require cut and fill, manufactured slopes, and changes to the natural topography. Compliance with the California Building Code (CBC) and the recommendations of individual geotechnical investigations would reduce geologic hazards to new development. Overall, the Alternative 1 project will not significantly increase the community impacts associated with prevailing geotechnical conditions in the Coachella Valley. Therefore, impacts would be comparable to those associated with implementation of the pursuant to the proposed 2040 General Plan Update and would not be cumulatively considerable.

3.8.3.2. Alternative 2

3.8.3.2.1. Alternative 2 Impacts

a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

Similar to the Proposed Project planning area, the Banning Branch of the San Andreas (Coachella Segment) Fault, runs through the northern portion of the Alternative 2 area. The Alternative 2 land uses in this area would be largely the same as for the Proposed Project excepting that there would be a reduction in mixed-use lands and commensurate reduction in commercial and residential potential, and an increase in industrial lands. Therefore, the potential impacts to these lands and future land uses would be somewhat less than for the Proposed Project. New developments under Alternative 2 would be expected to conform to the most recent California Building Codes, which include strict building specifications to ensure structural and foundational stability. Fault investigations may also be required depending on where structures are proposed. Impacts associated with this alternative could be mitigated as discussed in Section 2.8.7.

ii) Strong seismic ground shaking?

Buildout of the Alternative 2 will result in a decrease in the number of residential units and commercial square footage within the City compared to the Proposed Project. In the event of an earthquake along nearby active faults near the planning area, development under the Alternative 2 could be subjected to the same ground motion as the Proposed Project. Seismic ground-shaking generated by San Andreas and San Jacinto Fault systems could pose hazards to existing and future development in the General Plan planning area, including damage to building foundations, frames, walls and columns, windows, chimneys, and ceilings, as well as improvements like roads, railroads, subsurface pipes, bridges, and utility infrastructure. As is the case for the Proposed Project, the risk of damage to Alternative 2 structures due to seismic hazards cannot be completely eliminated, but structure-specific geotechnical investigation and advanced building practices would minimize potential impacts from a seismic event.

iii) Seismic related ground failure, including liquefaction?

As is the case for the Proposed Project, the majority of the City has no susceptibility, or low or very low liquefaction susceptibility. Alternative 2 hazards associated with liquefaction are the same as those described for the Proposed Project and are limited to a small area in the northern portion of the City.

iv) Landslides?

The slopes of the Indio Hills and Santa Rosa Mountains are susceptible to seismically-induced rock fall and landslides. Slopes on Edom Hill and Flat-top Mountain are especially susceptible to landslides in a strong seismic event. Rockfall hazards are greatest along the slopes of the Santa Rosa foothills. Landslide and rockfall hazards for Alternative 2 are essentially the same as those associated with the Proposed Project. Also see Exhibit 2.8-1, which maps the landslide and rockfall hazards in the City.

b) Result in substantial soil erosion or the loss of topsoil?

Implementation of the Alternative 2 would allow development of land uses that would result in construction and operational activities that would have the potential to expose topsoil to erosion from water or wind. Similar to the Proposed Project, major portions of the City are susceptible to severe and very severe wind erosion. Implementation of the Alternative 2 would result in the same type and extent of erosion hazards that are expected with the implementation of the Proposed Project. Therefore, implementation of mitigation measures set forth in Section 2.8.7 and conformance with the policies and programs in the General Plan Geotechnical Sub-Element can ensure that significant impact can be avoided. Therefore, the Alternative 2 would result in potential impacts comparable to the Proposed Project.

- c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on-or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?*

See discussions in Sections 3.8.3.1.1. i through v, above. Alternative 2 exposures to these geotechnical hazards are comparable to those associated with the Proposed Project. Mitigation measures set forth in Section 2.8.7 and adherence to the policies and programs set forth in the Geotechnical Sub-Element will ensure that potentially significant impacts are avoided, minimized and otherwise mitigated.

- d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?*

Similar to the propose project, the geotechnical hazards associated with expansive soils in the City are considered to be low and less than significant. In those very limited areas where this potential does exist, conventional soils analysis and foundation engineering will reduce any potential impacts to a level that is less than significant.

- e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?*

Implementation of the Alternative 2 would allow development of designated land uses in areas where soils are capable of supporting the use of waste water disposal systems. Similar to the Proposed Project, Alternative 2 would not allow installation of new septic tanks in those areas where prohibited by City Ordinance 572. All future development projects would be required to comply with all applicable regulations related to waste water disposal. Compliance with such regulations will ensure that impacts related to waste water disposal systems are less than significant. Therefore, as with the Proposed Project, Alternative 2 would not result in the construction of septic systems on lands incapable of supporting them.

- f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?*

The majority of City soils are composed of recently deposited alluvium which has a low potential to contain paleontological resources. Neither bedrock nor sedimentary soils occurring in the City planning area are expected to harbor sensitive paleontological resources. Therefore, impacts to these resources from implementation of the Alternative 2 project would be less than significant.

3.8.3.2.2. Alternative 2 Mitigation Measures

With the implementation of the mitigation measures set forth in Section 2.8.7 of this EIR and relevant policies and programs set forth in the Geotechnical Sub-Element of the proposed General Plan and compliance with standard development conditions, no significant adverse impacts on geology and soils are anticipated. Thus, no mitigation measures are required.

3.8.3.2.3. Alternative 2 Significance After Mitigation

Residual environmental effects associated with the implementation of the Alternative 2 project would essentially be the same as those for the Proposed Project. Through the application of the applicable General Plan policies and programs, and the mitigation measures set forth in Section 2.8.7 of this EIR, potential impacts can be avoided, minimized and/or reduced to levels that are less than significant.

3.8.3.2.4. Alternative 2 Cumulative Impacts

A consideration of cumulative effects associated with geotechnical conditions includes the degree to which a project may contribute to the cumulative impacts from seismic events, surface soils, steep and unstable terrain and other conditions. Future development associated with the Alternative 1 project would involve grading and excavation activities on individual sites, which would result in changes to the area's existing geology and soils conditions. Development sites that are relatively flat would remain flat, while hillside development would require cut and fill, manufactured slopes, and changes to the natural topography. Compliance with the CBC and the recommendations of individual geotechnical investigations would reduce geologic hazards to new development. Overall, the Alternative 1 project will not significantly increase the community impacts associated with prevailing geotechnical conditions in the Coachella Valley. Therefore, cumulative impacts would be comparable to those associated with implementation of the pursuant to the proposed General Plan and would not be cumulatively considerable.

3.8.3.3. Alternative 3 No Project

3.8.3.3.1. Alternative 3 Impacts

- a) *Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:*
 - i) *Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.*

Development under the No Project Alternative would modestly reduce the number of residential dwelling units at buildout. However, consistent with the Proposed Project, the Alternative 3 would designate the areas within the Alquist-Priolo Earthquake Fault Zone with the same land uses and potential development near fault rupture zones. Therefore, geologic hazards associated with rapture would be the same under the Alternative 3 as they would be for the Proposed Project.

New developments under Alternative 3 would be expected to conform to the most recent California Building Codes, which include strict building specifications to ensure structural and foundational stability. Impacts associated with this alternative could be mitigated to levels of insignificance as discussed in Section 2.8.7.

ii) Strong seismic ground shaking?

Buildout of the Alternative 3 will result in the extent and intensity of land uses compared to the Proposed Project. In the event of an earthquake along nearby active faults near the planning area, development under the Alternative 3 could be subjected to the same ground motion. Seismic ground-shaking generated by San Andreas and San Jacinto Fault systems could pose hazards to existing and future urban and infrastructure development in the General Plan area. As with the Proposed Project, the risk of damage to Alternative 3 structures due to seismic hazards cannot be completely eliminated, but structure-specific geotechnical investigation and advanced building practices would minimize potential impacts from a seismic event.

iii) Seismic related ground failure, including liquefaction?

The majority of the City has no susceptibility, or low to very low liquefaction susceptibility. The Alternative 3 scenario will be exposed to the same liquefaction hazards as those described for the Proposed Project and are limited to a small area in the northern portion of the City.

iv) Landslides?

The slopes of the Indio Hills and Santa Rosa Mountains are susceptible to seismically-induced rock fall and landslides. Slopes on Edom Hill and Flat-top Mountain are especially susceptible to landslides in a strong seismic event. Rockfall hazards are greatest along the slopes of the Santa Rosa foothills. Landslide and rockfall hazards for Alternative 1 are essentially the same as those associated with the Proposed Project. Also see Exhibit 2.8-3, which maps the landslide and rockfall hazards in the City.

b) Result in substantial soil erosion or the loss of topsoil?

Implementation of the Alternative 3 would result in the same type and extent of erosion hazards that are expected with the implementation of the Proposed Project. Therefore, implementation of mitigation measures set forth in Section 2.8.7 and conformance with the policies and programs in the General Plan Geotechnical Sub-Element can ensure that significant impact can be avoided or minimized. Therefore, the Alternative 3 would result in potential impacts comparable to the Proposed Project.

c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on-or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

Under existing conditions, limited portions of the planning area are identified as being susceptible to landslides and subsidence. See discussions in Sections 3.8.3.1.1. i through v, above. Alternative 3 exposures to these geotechnical hazards are comparable to those associated with the Proposed Project. Mitigation measures set forth in Section 2.8.7 and adherence to the policies and programs set forth in the Geotechnical Sub-Element will ensure that potentially significant impacts are avoided, minimized and otherwise mitigated.

d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

The geotechnical hazards associated with expansive soils in the City are considered to be low and less than significant. In those very limited areas where this potential does exist, conventional soils analysis and foundation engineering will reduce any potential impacts to a level that is less than significant.

e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

Buildout of the existing General Plan, the Alternative 3 scenario, would allow development in areas where soils are capable of supporting the use of waste water disposal systems. Similar to the Proposed Project, Alternative 3 would not allow installation of new septic tanks in those areas where prohibited by City Ordinance 572. All future development projects would be required to comply with all applicable regulations related to waste water disposal. Compliance with such regulations will ensure that impacts related to waste water disposal systems are less than significant. Therefore, as with the Proposed Project, Alternative 3 would not result in the construction of septic systems on lands incapable of supporting them.

f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

The majority of City soils are composed of recently deposited alluvium which has a low potential to contain paleontological resources. Neither bedrock nor sedimentary soils occurring in the City planning area are expected to harbor sensitive paleontological resources. Therefore, impacts to these resources from implementation of the Alternative 3 project would be less than significant.

3.8.3.3.2. Alternative 3 Mitigation Measures

Under this alternative, implementation of the relevant Geotechnical Sub-Element policies and programs in the proposed General Plan Update and compliance with the standard development conditions, would result in no unmitigated significant adverse impacts associated with City geology and soils.

3.8.3.3.3. Alternative 3 Significance After Mitigation

Residual environmental effects associated with the implementation of the Alternative 3 project would essentially be the same as those for the Proposed Project. Through the application of applicable General Plan policies and programs, mitigation measures set forth in Section 2.8.7 of this EIR, and compliance with applicable California seismic codes, potential impacts can be avoided, minimized and/or reduced to levels that are less than significant.

3.8.3.3.4. Alternative 3 Cumulative Impacts

Consideration of cumulative effects associated with geotechnical conditions includes the degree to which a project may contribute to the cumulative impacts from seismic events, surface soils, steep and unstable terrain and other conditions. Future development associated with Alternative 3 (current General Plan) would involve grading and excavation activities on individual sites, and could be affected by existing geology and soils conditions. Development sites that are relatively flat would remain flat, while hillside development would require cut and fill, manufactured slopes, and changes to the natural topography. Compliance with the CBC and the recommendations of individual geotechnical investigations would reduce geologic hazards for new development. Overall, Alternative 3 will not significantly increase the community's impacts from or associated with prevailing geotechnical conditions in the Coachella Valley. Therefore, cumulative impacts would be comparable to those associated with implementation of the pursuant to the Proposed Project and would not be cumulatively considerable.

3.8.4. Environmental Superior Alternative

The same geological and soils threats and conditions are applicable to all of the project alternatives. Those that are most site specific area associated with rockfall and landslide hazards, and at an in proximity of earthquake faults. In this regard, Alternative 2 (Less Intense Alternative) appears to be environmentally superior to the others. It reduces the extent of residential and commercial development in proximity to faults in the northern portions of the City. It also results in a lower overall number of housing units and City population at buildout. With these exceptions, potential environmental effects are comparable to one another. Therefore, Alternative 2 is arguably the environmentally superior to the others evaluated in this EIR.

3.9. Hazards, Hazardous Materials and Wildfires

3.9.1. Introduction

This section of the EIR describes the potential for the General Plan alternatives to create hazards to the public or residents of the area through the transport, use, or disposal of hazardous materials, exposure of persons to existing onsite hazardous materials or soil contamination, or exposure to potential wildland fires.

3.9.2. Existing Conditions

Hazardous Materials and Hazardous Waste

US Interstate 10 (I-10), East Palm Canyon Drive (State Highway 111), and Union Pacific Railroad pass through the Coachella Valley, including the City of Cathedral City, and may be used for the transport of hazardous cargo into and out of the area. Hazardous materials include chemicals, petroleum products, and variety of waste products and other potentially harmful and hazardous materials. The California Highway Patrol (CHP) and the California Department of Transportation (Caltrans) have primary responsibility for enforcing federal and state hazardous materials regulations and responding to transportation emergencies. The Cathedral City Fire Department responds to local hazardous materials emergencies, such as chemical leakages, spills, and fires.

Riverside County operates a Household Hazardous Waste (HHW) program to provide permanent and temporary HHW facilities at various locations to dispose of household hazardous wastes. The County also operates a Business Hazardous Waste program which provides disposal and recycling services to its residents. Businesses and government agencies that generate small quantities of hazardous waste can participate in the Riverside County Department of Waste Resources' Very Small Quantity Generator (VSQG) Program to properly dispose of their hazardous waste. In addition to these programs, Cathedral City also offers a Bulky Item (Large Item) Collection Program, Electronic and Tire Recycling Programs, Safe Syringe & Needle Disposal Programs, and Medication TakeAway Program to properly collect and/or recycle wastes.

Wildfires

CALFIRE designates areas as very high fire hazard severity (VHFHS) zones or non-VHFHS zones.¹ A small southwestern portion and an equally small area in the southeast in the vicinity of East Palm Canyon are designated as a VHFHS fire hazard zone within the Local Responsibility Area and State or Federal Responsibility Area, the State of California. No wildland fires have occurred within the planning area. The two mapped areas that delineate urbanized lands as occurring within a VHFHS zone may be a mapping error but may also meet certain criteria for being so mapped.² The City will continue to coordinate with CALFIRE on refinements to current fire hazard mapping in the City.

Generally, there is a low potential for wildfire to occur along the Santa Rosa Mountains foothills within the planning area according to CALFIRE mapping. To reduce the wildfire risk, the City of Cathedral City has adopted the 2016 edition of the California Building Standards Code and the 2016 edition of the California Fire Code. Also, see Section 2.9 for more information on wildfire threats in the City and vicinity.

¹ CalFire Fire Hazard Zone Map, 2010. See Exhibit 2.9-1 of this EIR.

² Personal communication, David Sapsis, Wildland Fire Scientist, Fire and Resource Assessment Program, CALFIRE. July 11, 2019

3.9.3. Alternatives Impact Analysis

3.9.3.1. Alternative 1

3.9.3.1.1. Alternative 1 Impacts

- a) *Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?*
- b) *Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?*

Future development pursuant to Alternative 1 may utilize or generate hazardous materials or wastes; however, they are not expected to occur in quantities that would pose a significant hazard to the public or the environment. Alternative 1 does not propose heavy industry or other land uses that would generate or use large quantities of hazardous materials. Existing regulations provide guidelines to prevent potential risks associated with hazardous materials.

Similar to the Proposed Project, development under Alternative 1 would be subject to the same local, county, state and federal regulations for the handling and transport of hazardous materials. Within the City, the use, storage and handling of these materials would also be guided by the policies and programs set forth in the General Plan. Implementation of existing regulations and adherence to the policies proposed in the General Plan Hazards and Hazardous Materials Sub-Element would reduce impacts to less than significant levels.

- c) *Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?*

Alternative 1 allows various land uses close to the existing or new schools. The California Education Code (section 17210 et seq.) outlines the requirements of siting school facilities near or on known or suspected hazardous materials sites, or near facilities that emit hazardous air emissions, handle hazardous or acutely hazardous materials, substances, or waste. As with the Proposed Project, no existing or future school site are or will be located within one-quarter mile of a site that may emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste. Therefore, impacts from the buildout of Alternative 1 would be less than significant.

- d) *Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?*

According to a California Department of Toxic Substances Control Cortese and EnviroStor database search (see Section 2.9), there are no active “cleanup sites” or “Hazardous Waste and Substances Sites” pursuant to Government Code Section 65962.5 in the City. Therefore, Alternative 1 would not facilitate development or other projects on such sites that would create a significant hazard to the public or the environment. No impact would occur.

- e) *For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?*

The Palm Springs International Airport (PSP) is located within two miles of many portions of Cathedral City and provides an important access point for helicopter and fixed-wing aircraft. Alternative 1 would result in new development that could occur in the vicinity of PSP but would occur outside the restrictive land use compatibility zones as established by the Riverside County Airport Land Use Commission. Existing and future airport 60 CNEL noise contours affect only a very small portion of the City and future 60 CNEL noise contours are projected to be

further removed from City lands Policies, and programs set forth in the Hazards and Hazardous Materials and Emergency Preparedness Sub-Elements also serve to promote a safe community and environment for its residents, including the land uses located close to the airport. Policy 8 in the Emergency Preparedness Sub-Element requires the City to minimize the risk of hazards associated with aircraft operations of the Palm Springs International Airport through the adoption and implementation of land use plans and policies consistent with the County Airport Land Use Compatibility Plan. Alternative 1 will not result in or create an airport-related safety hazard or excessive noise for people residing or working in the project area.

f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

The City has a developed roadway network that provides emergency access and evacuation routes to existing development. Compared to the Proposed Project, implementation of Alternative 1 could generate an increase in the residential and employee population in the City as a result of the construction of new housing, and commercial/retail and industrial growth. New developments could, in turn, result in increased traffic. These new potential sources of congestion on local roads and freeways could increase response times for medical or other emergencies and could delay the evacuation of the population in an emergency. Policy 10 in the Emergency Preparedness Sub-Element guides the City to review its emergency preparedness plans to ensure that it includes programs that address the need for social and emotional support following a major disaster or emergency. Implementation of the General Plans goals, policies, and programs would ensure that development facilitated by Alternative 1 would not physically interfere with an adopted emergency response plan or emergency evacuation plan. Similar to the Proposed Project, Alternative 1 impacts would be less than significant.

g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

As is the case with the Proposed Project, the majority of the City is located on the low-lying valley floor, and outside of the mapped VHFHS wildfire hazard zone. As shown in Exhibit 2.9-1, a limited area of southwestern and southeast City limits is within this VHFHS fire hazard severity zone. They occur on the slopes of the Santa Rosa Mountains and extend into urbanized portions of the City. The proposed General Plan designates these area as Business Park (BP) and General Commercial (CG) and designates upslope lands as Open Space–Other (OS-O) with limited areas in Hillside Reserve, which would minimize potential risks to people or structures. Those portions mapped in the VHFHS and referenced as State or Federal Responsibility Area are within already urbanized areas and mapping may be in error. Alternative 1 will not expose people or structures to a significant risk of loss, injury or death involving wildland fires, and less than significant impact is anticipated.

Wildfire

a) Substantially impair an adopted emergency response plan or emergency evacuation plan?

The City has a developed roadway network that provides emergency access and evacuation routes to existing development. Compared to the Proposed Project, implementation of Alternative 1 could generate an increase in the residential and employee population in the City as a result of the construction of new housing, and commercial/retail and industrial growth. New developments could, in turn, result in increased traffic. These new potential sources of congestion on local roads and freeways could increase response times for medical or other emergencies and could delay the evacuation of the population in an emergency. Goal 1 of the Emergency Preparedness Sub-Element identifies policies and programs to update hazard mitigation and emergency services and maximizes response capabilities of the various agencies within the planning area. Policy 3 requires the City to identify and establish emergency evacuation and supply routes and plans to preserve or reestablish the use of East Palm Canyon Drive, Dinah Shore Drive, Ramon Road, Vista Chino, Interstate-10 and other essential transportation routes.

Implementation of the General Plans goals, policies, and programs would ensure that development facilitated by Alternative 1 would not physically interfere with an adopted emergency response plan or emergency evacuation plan. Similar to the Proposed Project, Alternative 1 impacts would be less than significant.

b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

Alternative 1 will facilitate future development in the planning area, and development must occur in a manner that is sensitive to wildfire risks and the potential exposure of occupants to pollutant concentrations and uncontrolled spread of wildfire. Wildfire hazards to a developed community are highest in areas near the wildland-urban interface (WUI). As noted in Section 2.9, CALFIRE designates areas as very high fire hazard severity (VHFHS) zones or non-VHFHS zones.³ Small portions of the City adjacent to the southwestern and southeastern city limits are designated as a VHFHS fire hazard zone within the Local Responsibility Area and State and Federal Responsibility Area by the State of California. No wildland fires have occurred within the planning area.

Alternative 1 would facilitate future development on vacant land on the valley floor where strong, sustained winds can occur. During construction, strict adherence to safety regulations would ensure that contractors minimize wildfire risks, and in turn, pollutant concentrations associated with wildfire. Future development projects would be evaluated and monitored on a project-by-project basis to assure regulations are properly implemented. Consistent with the Proposed Project, implementation of Alternative 1 would result in less than significant impacts associated with wildfire risks.

c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

Potential impacts of future development and redevelopment projects within the planning area under Alternative 1 would be evaluated on a project-by-project basis and would be required to meet applicable safety requirements so as to minimize fire risks and environment impacts to the greatest extent practical. Policy 1 of the Safety Element requires the City to promote the enhanced resilience of future water, sewer, electric and other utilities, the retrofit and rehabilitation of existing weak structures and lifeline utilities, and the relocation or strengthening of certain critical facilities to increase public safety and minimize. Assuming compliance with the policies embedded in the proposed General Plan, future development and redevelopment associated with Alternative 1 would not result in significant adverse impacts associated with utility infrastructures. Impacts associated with Alternative 1 would be less than significant.

d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

A small southwestern portion and an equally small area in the southeast in the vicinity of East Palm Canyon are designated as a VHFHS fire hazard zone within the Local Responsibility Area and State or Federal Responsibility Area, by the State of California. They occur on the slopes of the Santa Rosa Mountains where there is also a moderate to high potential for seismically-induced rock falls and landslides. As such, this area and downslope lands may be susceptible to slope instability and flooding after a wildfire.

Similar to the proposed General Plan, Alternative 1 would designate identified fire hazard areas as Business Park (BP) and General Commercial (CG) and designates upslope lands as Open Space–Other (OS-O), which would minimize potential risks to people or structures. The West Cathedral Canyon Wash would be designated as Open

³ CalFire Fire Hazard Zone Map, 2010. See Exhibit 2.9-1 of this EIR.

Space, preserving its functionality and capacity to protect nearby development from flooding. The Wash would also act as a buffer between the slopes of the Santa Rosa Mountains and downslope development by absorbing much of the potential damage from landslides and rock falls and providing some level of protection to habitable development.

Policies 3 and 4 of the Geotechnical Sub-Element requires new development to investigate geological and geotechnical investigations before construction. It also requires new development to be constructed according to the Uniform Building Code. Assuming compliance with the policies embedded in the General Plan, future development and redevelopment would not result in significant adverse impacts associated with post-fire risks. Implementation of Alternative 1 would not expose people or structures to significant downslope or downstream flooding or landslides, post-fire slope instability, or drainage changes.

3.9.3.1.2. Alternative 1 Mitigation Measures

In addition to the policies and programs set forth in the General Plan, Alternative 1 would adhere to the same mitigation measures set forth in Section 2.9.7 which will serve to avoid, minimize and mitigate potential impacts to City lands, buildings and other structures and human lives from the hazards and hazardous materials identified in this EIR.

3.9.3.1.3. Alternative 1 Significance After Mitigation

With mitigation measures set forth in Section 2.9.7, Alternative 1 impacts will be less than significant.

3.9.3.1.4. Alternative 1 Cumulative Impacts

Hazards and Hazardous Materials

The protections granted by local, state, and federal agencies and their requirements for the use of hazardous materials ensure the overall cumulative impact would not be significant, and Alternative 1's incremental contribution to cumulative hazards and hazardous materials impacts would be less than cumulatively considerable.

Wildfires

The majority of the City and surrounding communities are located on the low-lying valley floor, which are outside of wildfire hazard areas and, therefore, have little to no potential for hazards resulting from post-wildfire flooding, landslide, or slope instability. Also, these areas are designated predominantly as open space to further reduce potential wildfire hazards. Alternative 1's contribution to increased wildfire hazards would not be cumulatively considerable.

Alternative 1 would have the same level of cumulative impacts with regards to hazards, hazardous materials, and wildfires as the Proposed Project.

3.9.3.2. Alternative 2

3.9.3.2.1. Alternative 2 Impacts

- a) *Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?*
- b) *Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?*

Future development pursuant to Alternative 2 may utilize or generate hazardous materials or wastes; however, they are not expected to occur in quantities that would pose a significant hazard to the public or the environment. Alternative 1 does not propose heavy industry or other land uses that would generate or use large quantities of hazardous materials. Existing regulations provide guidelines to prevent potential risks associated with hazardous materials.

Similar to the Proposed Project, development under Alternative 2 would be subject to the same local, county, state and federal regulations for the handling and transport of hazardous materials. Within the City, the use, storage and handling of these materials would also be guided by the policies and programs set forth in the General Plan. Implementation of existing regulations and adherence to the policies proposed in the General Plan Hazards and Hazardous Materials Sub-Element would reduce impacts to less than significant levels.

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

Alternative 2 also allows various land uses close to the existing or new schools. The California Education Code (section 17210 et seq.) outlines the requirements of siting school facilities near or on known or suspected hazardous materials sites, or near facilities that emit hazardous air emissions, handle hazardous or acutely hazardous materials, substances, or waste. As with the Proposed Project, no existing or future school site are or will be located within one-quarter mile of a site that may emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste. Therefore, impacts from the buildout of Alternative 2 would be less than significant.

d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

According to a California Department of Toxic Substances Control Cortese and EnviroStor database search (see Section 2.9), there are no active “cleanup sites” or “Hazardous Waste and Substances Sites” pursuant to Government Code Section 65962.5 in the City. Therefore, Alternative 2 would not facilitate development or other projects on such sites that would create a significant hazard to the public or the environment. No impact would occur.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?

The Palm Springs International Airport (PSP) is located within two miles of many portions of Cathedral City and provides an important access point for helicopter and fixed-wing aircraft. Alternative 2 would result in new development that could occur in the vicinity of PSP but would occur outside the restrictive land use compatibility zones as established by the Riverside County Airport Land Use Commission. Existing and future airport 60 CNEL noise contours affect only a very small portion of the City and future 60 CNEL noise contours are projected to be further removed from City lands. Policies, and programs set forth in the Hazards and Hazardous Materials and Emergency Preparedness Sub-Elements also serve to promote a safe community and environment for its residents, including the land uses located close to the airport. Policy 8 in the Emergency Preparedness Sub-Element requires the City to minimize the risk of hazards associated with aircraft operations of the Palm Springs International Airport through the adoption and implementation of land use plans and policies consistent with the County Airport Land Use Compatibility Plan. Alternative 2 will not result in or create an airport-related safety hazard or excessive noise for people residing or working in the project area.

f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

The City has a developed roadway network that provides emergency access and evacuation routes to existing development. Compared to the Proposed Project, implementation of Alternative 2 could generate an increase in the residential and employee population in the City as a result of the construction of new housing, and commercial/retail and industrial growth. New developments could, in turn, result in increased traffic. These new potential sources of congestion on local roads and freeways could increase response times for medical or other emergencies and could delay the evacuation of the population in an emergency. Policy 10 in the Emergency Preparedness Sub-Element guides the City to review its emergency preparedness plans to ensure that it includes programs that address the need for social and emotional support following a major disaster or emergency. Implementation of the General Plans goals, policies, and programs would ensure that development facilitated by Alternative 2 would not physically interfere with an adopted emergency response plan or emergency evacuation plan. Similar to the Proposed Project, Alternative 2 impacts would be less than significant.

g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

As is the case with the Proposed Project, the majority of the City is located on the low-lying valley floor, and outside of the mapped VHFHS wildfire hazard zone. As shown in Exhibit 2.9-1, a limited area of southwestern and southeast City limits is within this VHFHS fire hazard severity zone. They occur on the slopes of the Santa Rosa Mountains and extend into urbanized portions of the City. The proposed General Plan designates these area as Business Park (BP) and General Commercial (CG) and designates upslope lands as Open Space–Other (OS-O) with limited areas in Hillside Reserve, which would minimize potential risks to people or structures. Those portions mapped in the VHFHS and referenced as Local Responsibility and State or Federal Responsibility Area are within already urbanized areas and mapping may be in error. Alternative 2 will not expose people or structures to a significant risk of loss, injury or death involving wildland fires, and less than significant impact is anticipated.

Wildfire

a) Substantially impair an adopted emergency response plan or emergency evacuation plan?

The City has a developed roadway network that provides emergency access and evacuation routes to existing development. Compared to the Proposed Project, implementation of Alternative 2 would generate an decrease in the residential and employee population in the City as a result of the construction of new housing, and commercial/retail and industrial growth. New developments could, in turn, result in increased traffic. These new potential sources of congestion on local roads and freeways could increase response times for medical or other emergencies and could delay the evacuation of the population in an emergency. Goal 1 of the Emergency Preparedness Sub-Element identifies policies and programs to update hazard mitigation and emergency services and maximizes response capabilities of the various agencies within the planning area. Policy 3 requires the City to identify and establish emergency evacuation and supply routes and plans to preserve or reestablish the use of East Palm Canyon Drive, Dinah Shore Drive, Ramon Road, Vista Chino, Interstate-10 and other essential transportation routes. Implementation of the General Plans goals, policies, and programs would ensure that development facilitated by Alternative 2 would not physically interfere with an adopted emergency response plan or emergency evacuation plan. Similar to the Proposed Project, Alternative 2 impacts would be less than significant.

b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

Alternative 2 will facilitate future development in the planning area, and development must occur in a manner that is sensitive to wildfire risks and the potential exposure of occupants to pollutant concentrations and uncontrolled spread of wildfire. Wildfire hazards to a developed community are highest in areas near the wildland-urban interface (WUI). As noted in Section 2.9, CALFIRE designates areas as very high fire hazard severity (VHFHS) zones or

non-VHFHS zones.⁴ Two small portion of the City adjacent to the southwestern and southeastern city limits are designated as a VHFHS fire hazard zone within the Local Responsibility Area and State and Federal Responsibility Area by the State of California. No wildland fires have occurred within the planning area.

Alternative 2 would facilitate future development on vacant land on the valley floor where strong, sustained winds can occur. During construction, strict adherence to safety regulations would ensure that contractors minimize wildfire risks, and in turn, pollutant concentrations associated with wildfire. Future development projects would be evaluated and monitored on a project-by-project basis to assure regulations are properly implemented. Consistent with the Proposed Project, implementation of Alternative 2 would result in less than significant impacts associated with wildfire risks.

- c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?***

Potential impacts of future development and redevelopment projects within the planning area under Alternative 2 would be evaluated on a project-by-project basis and would be required to meet applicable safety requirements so as to minimize fire risks and environment impacts to the greatest extent practical. Policy 1 of the Safety Element requires the City to promote the enhanced resilience of future water, sewer, electric and other utilities, the retrofit and rehabilitation of existing weak structures and lifeline utilities, and the relocation or strengthening of certain critical facilities to increase public safety and minimize. Assuming compliance with the policies embedded in the General Plan, future development and redevelopment associated with Alternative 2 would not result in significant adverse impacts associated with utility infrastructures. Impacts associated with Alternative 2 would be less than significant.

- d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?***

A small southwestern portion and an equally small area in the southeast in the vicinity of East Palm Canyon are designated as a VHFHS fire hazard zone within the Local Responsibility Area and State or Federal Responsibility Area, the State of California. They occur on the slopes of the Santa Rosa Mountains where there is also a moderate to high potential for seismically-induced rock falls and landslides. As such, this area and upslope lands may be susceptible to slope instability and flooding after a wildfire.

Similar to the proposed General Plan, Alternative 2 would designate these areas as Business Park (BP) and General Commercial (CG) and designates upslope lands as Open Space–Other (OS-O), which would minimize potential risks to people or structures. The West Cathedral Canyon Wash would be designated as Open Space, preserving its functionality and capacity to protect nearby development from flooding. The wash would also act as a buffer between the slopes of the Santa Rosa Mountains and downslope development by absorbing much of the potential damage from landslides and rock falls and providing some level of protection to habitable development.

Policies 3 and 4 of the Geotechnical Sub-Element requires new development to investigate geological and geotechnical investigations before construction. It also requires new development to be constructed according to the Uniform Building Code. Assuming compliance with the policies embedded in the General Plan, future development and redevelopment would not result in significant adverse impacts associated with post-fire risks. Implementation of Alternative 2 would not expose people or structures to significant downslope or downstream flooding or landslides, post-fire slope instability, or drainage changes.

⁴ CalFire Fire Hazard Zone Map, 2010. See Exhibit 2.9-1 of this EIR.

3.9.3.2.2. Alternative 2 Mitigation Measures

In addition to the policies and programs set forth in the General Plan, Alternative 2 would adhere to the same mitigation measures set forth in Section 2.9.7 which will serve to avoid, minimize and mitigate potential impacts to City lands, buildings and other structures and human lives from the hazards and hazardous materials, as well as wildfire hazards identified in this EIR.

3.9.3.2.3. Alternative 2 Significance After Mitigation

As discussed in Section 2.9, the policies and programs set forth in the various General Plan elements serve to avoid, minimize and mitigate potential impacts of hazards, hazardous materials and wildfires in and near the City. In addition to the policies and programs set forth in the Safety Element, the mitigation measures set forth in Section 2.9.7 will serve to further avoid, minimize and mitigate potential impacts to City lands, buildings and other structures and human lives from the hazards and hazardous materials identified in this EIR. Alternative 2 impacts will be less than significant.

3.9.3.2.4. Alternative 2 Cumulative Impacts

Hazards and Hazardous Materials

The protections granted by local, state, and federal agencies and their requirements for the use of hazardous materials ensure the overall cumulative impact would not be significant, and Alternative 2's incremental contribution to cumulative hazards and hazardous materials impacts would be less than cumulatively considerable.

Wildfires

The majority of the City and surrounding communities are located on the low-lying valley floor, which are outside of wildfire hazard areas and, therefore, have little to no potential for hazards resulting from post-wildfire flooding, landslide, or slope instability. Also, these areas are designated predominantly as open space to further reduce potential wildfire hazards. Two urbanized areas mapped within a fire hazard zone are already developed and Alternative 2 does not add to existing wildfire hazards in the City. Alternative 2's contribution to increased wildfire hazards would not be cumulatively considerable. Alternative 2 would have the same level of cumulative impacts with regards to hazards, hazardous materials, and wildfires as the Proposed Project.

3.9.3.3. Alternative 3

3.9.3.3.1. Alternative 3 Impacts

- a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?*
- b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?*

Future development pursuant to Alternative 3 may utilize or generate hazardous materials or wastes; however, they are not expected to occur in quantities that would pose a significant hazard to the public or the environment. Alternative 3 does not propose heavy industry or other land uses that would generate or use large quantities of hazardous materials. Existing regulations provide guidelines to prevent potential risks associated with hazardous materials.

Similar to the Proposed Project, development under Alternative 3 would be subject to the same local, county, state and federal regulations for the handling and transport of hazardous materials. Within the City, the use, storage and handling of these materials would also be guided by the policies and programs set forth in the General Plan. Implementation of existing regulations and adherence to the policies proposed in the General Plan Hazards and Hazardous Materials Sub-Element would reduce impacts to less than significant levels.

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

This alternative allows various land uses close to the existing or new schools. The California Education Code (section 17210 et seq.) outlines the requirements of siting school facilities near or on known or suspected hazardous materials sites, or near facilities that emit hazardous air emissions, handle hazardous or acutely hazardous materials, substances, or waste. As with the Proposed Project, no existing or future school site are or will be located within one-quarter mile of a site that may emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste. Therefore, impacts from the buildout of Alternative 3 would be less than significant.

d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

According to a California Department of Toxic Substances Control Cortese and EnviroStor database search (see Section 2.9), there are no active “cleanup sites” or “Hazardous Waste and Substances Sites” pursuant to Government Code Section 65962.5 in the City. Therefore, Alternative 3 would not facilitate development or other projects on such sites that would create a significant hazard to the public or the environment. No impact would occur.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?

The Palm Springs International Airport (PSP) is located within two miles of many portions of Cathedral City and provides an important access point for helicopter and fixed-wing aircraft. Alternative 3 would result in new development that could occur in the vicinity of PSP but would occur outside the restrictive land use compatibility zones as established by the Riverside County Airport Land Use Commission. Existing and future airport 60 CNEL noise contours affect only a very small portion of the City and future 60 CNEL noise contours are projected to be further removed from City lands Policies, and programs set forth in the Hazards and Hazardous Materials and Emergency Preparedness Sub-Elements also serve to promote a safe community and environment for its residents, including the land uses located close to the airport. Policy 8 in the Emergency Preparedness Sub-Element requires the City to minimize the risk of hazards associated with aircraft operations of the Palm Springs International Airport through the adoption and implementation of land use plans and policies consistent with the County Airport Land Use Compatibility Plan. Alternative 3 will not result in or create an airport-related safety hazard or excessive noise for people residing or working in the project area.

f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

The City has a developed roadway network that provides emergency access and evacuation routes to existing development. Compared to the Proposed Project, implementation of Alternative 3 could generate an increase in the residential and employee population in the City as a result of the construction of new housing, and commercial/retail and industrial growth. New developments could, in turn, result in increased traffic. These new potential sources of congestion on local roads and freeways could increase response times for medical or other emergencies and could

delay the evacuation of the population in an emergency. Policy 10 in the Emergency Preparedness Sub-Element guides the City to review its emergency preparedness plans to ensure that it includes programs that address the need for social and emotional support following a major disaster or emergency. Implementation of the General Plans goals, policies, and programs would ensure that development facilitated by Alternative 3 would not physically interfere with an adopted emergency response plan or emergency evacuation plan. Similar to the Proposed Project, Alternative 3 impacts would be less than significant.

g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

As with the Proposed Project, the majority of the City is located on the low-lying valley floor, and outside of the mapped VHFHS wildfire hazard zone. As shown in Exhibit 2.9-1, a limited area of southwestern and southeast City limits is within this VHFHS fire hazard severity zone. They occur on the slopes of the Santa Rosa Mountains and extend into urbanized portions of the City. The proposed General Plan designates these area as Business Park (BP) and General Commercial (CG) and designates upslope lands as Open Space–Other (OS-O) with limited areas in Hillside Reserve, which would minimize potential risks to people or structures. Those portions mapped in the VHFHS and referenced as State or Federal Responsibility Area are within already urbanized areas and mapping may be in error. Alternative 3 will not expose people or structures to a significant risk of loss, injury or death involving wildland fires, and less than significant impact is anticipated.

Wildfire

a) Substantially impair an adopted emergency response plan or emergency evacuation plan?

The City has a developed roadway network that provides emergency access and evacuation routes to existing development. Compared to the Proposed Project, implementation of Alternative 3 could generate an increase in the residential and employee population in the City as a result of the construction of new housing, and commercial/retail and industrial growth. New developments could, in turn, result in increased traffic. These new potential sources of congestion on local roads and freeways could increase response times for medical or other emergencies and could delay the evacuation of the population in an emergency. Goal 1 of the Emergency Preparedness Sub-Element identifies policies and programs to update hazard mitigation and emergency services and maximizes response capabilities of the various agencies within the planning area. Policy 3 requires the City to identify and establish emergency evacuation and supply routes and plans to preserve or reestablish the use of East Palm Canyon Drive, Dinah Shore Drive, Ramon Road, Vista Chino, Interstate-10 and other essential transportation routes. Implementation of the General Plans goals, policies, and programs would ensure that development facilitated by Alternative 3 would not physically interfere with an adopted emergency response plan or emergency evacuation plan. Similar to the Proposed Project, Alternative 3 impacts would be less than significant.

b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

Alternative 3 will facilitate future development in the planning area, and development must occur in a manner that is sensitive to wildfire risks and the potential exposure of occupants to pollutant concentrations and uncontrolled spread of wildfire. Wildfire hazards to a developed community are highest in areas near the wildland-urban interface (WUI). As noted in Section 2.9, CALFIRE designates areas as very high fire hazard severity (VHFHS) zones or non-VHFHS zones.⁵ Small portions of the City adjacent to the southwestern and southeastern city limits are designated as a VHFHS fire hazard zone within the Local Responsibility Area and State and Federal Responsibility, by the State of California. No wildland fires have occurred within the planning area.

⁵ CalFire Fire Hazard Zone Map, 2010. See Exhibit 2.9-1 of this EIR.

Alternative 3 would facilitate future development on vacant land on the valley floor where strong, sustained winds can occur. During construction, strict adherence to safety regulations would ensure that contractors minimize wildfire risks, and in turn, pollutant concentrations associated with wildfire. Future development projects would be evaluated and monitored on a project-by-project basis to assure regulations are properly implemented. Consistent with the Proposed Project, implementation of Alternative 3 would result in less than significant impacts associated with wildfire risks.

- c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?***

Potential impacts of future development and redevelopment projects within the planning area under Alternative 3 would be evaluated on a project-by-project basis and would be required to meet applicable safety requirements so as to minimize fire risks and environment impacts to the greatest extent practical. Policy 1 of the Safety Element requires the City to promote the enhanced resilience of future water, sewer, electric and other utilities, the retrofit and rehabilitation of existing weak structures and lifeline utilities, and the relocation or strengthening of certain critical facilities to increase public safety and minimize. Assuming compliance with the policies embedded in the General Plan, future development and redevelopment associated with Alternative 3 would not result in significant adverse impacts associated with utility infrastructures. Impacts associated with Alternative 3 would be less than significant.

- d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?***

A small southwestern portion and an equally small area in the southeast in the vicinity of East Palm Canyon are designated as a VHFHS fire hazard zone within the Local Responsibility Area and State or Federal Responsibility Area, the State of California. They occur on the slopes of the Santa Rosa Mountains where there is also a moderate to high potential for seismically-induced rock falls and landslides. As such, this area and downslope lands may be susceptible to slope instability and flooding after a wildfire.

Similar to the proposed General Plan, Alternative 3 would designate this area as Business Park (BP) and General Commercial (CG) and designates upslope lands as Open Space–Other (OS-O), which would minimize potential risks to people or structures. The West Cathedral Canyon Wash would be designated as Open Space, preserving its functionality and capacity to protect nearby development from flooding. The wash would also act as a buffer between the slopes of the Santa Rosa Mountains and downslope development by absorbing much of the potential damage from landslides and rock falls and providing some level of protection to habitable development.

Policies 3 and 4 of the Geotechnical Sub-Element requires new development to investigate geological and geotechnical investigations before construction. It also requires new development to be constructed according to the Uniform Building Code. Assuming compliance with the policies embedded in the General Plan, future development and redevelopment would not result in significant adverse impacts associated with post-fire risks. Implementation of Alternative 3 would not expose people or structures to significant downslope or downstream flooding or landslides, post-fire slope instability, or drainage changes.

3.9.3.3.2. Alternative 3 Mitigation Measures

As discussed in Section 2.9, the policies and programs set forth in the various General Plan elements serve to avoid, minimize and mitigate potential impacts of hazards, hazardous materials and wildfires in and near the City. In addition to the policies and programs set forth in the Safety Element, the mitigation measures set forth in Section 2.9.7 will serve to further avoid, minimize and mitigate potential impacts to City lands, buildings and other structures and human lives from the hazards and hazardous materials identified in this EIR. Therefore, Alternative 3 impacts will be less than significant.

3.9.3.3.3. Alternative 3 Significance After Mitigation

Alternative 3 impacts will be less than significant.

3.9.3.3.4. Alternative 3 Cumulative Impacts

Hazards and Hazardous Materials

The protections granted by local, state, and federal agencies and their requirements for the use of hazardous materials ensure the overall cumulative impact would not be significant, and Alternative 3's incremental contribution to cumulative hazards and hazardous materials impacts would be less than cumulatively considerable.

Wildfires

The majority of the City and surrounding communities are located on the low-lying valley floor, which are outside of wildfire hazard areas and, therefore, have little to no potential for hazards resulting from post-wildfire flooding, landslide, or slope instability. Also, these areas are designated predominantly as open space to further reduce potential wildfire hazards. Two urbanized areas mapped within a fire hazard zone are already developed and Alternative 2 does not add to existing wildfire hazards in the City. Alternative 2's contribution to increased wildfire hazards would not be cumulatively considerable. Alternative 2 would have the same level of cumulative impacts with regards to hazards, hazardous materials, and wildfires as the Proposed Project.

3.9.4. Environmental Superior Alternative

All Alternatives, including the Proposed Project, would result in less than significant impacts related to hazards and wildfires. Alternative 1 land use density increases could potentially increase buildout population, thus increasing traffic during an emergency situation. Therefore, if a population increase would have a greater impact on emergency response times, Alternative 2 would be considered environmentally superior due to the lower population density projections.

3.10. Hydrology and Water Quality

3.10.1. Introduction

This section of the EIR analyzes the potential impacts associated with the alternatives to the proposed Cathedral City General Plan Update based on regional and local hydrological settings and water quality. The planning area is located within the Coachella Valley which lies in the Whitewater River Watershed. The principal drainage through the watershed is the Whitewater River which emanates from the San Bernardino Mountains northwest of the Coachella Valley and drains southeast to the Salton Sea. A variety of other drainages discharge primarily into the Whitewater River, drainages the surrounding San Jacinto, Santa Rosa, and Little San Bernardino Mountains

Over the past century, the Coachella Valley has seen extensive urban development which has affected water quality due to the introduction of pollutants and erosion due to agriculture, surface mining, and urban development. Developed and expanses of pavement result in increased runoff and higher velocities in creeks, streams, and channels and in turn cause erosion. Urban pollutants may include toxic metals, hydrocarbons, nutrients, suspended solids, and a variety of other chemicals. In this section, the project's potential impacts are discussed, and mitigation measures are set forth where needed. The analysis concludes with a discussion of residual and cumulative impacts.

3.10.2. Existing Conditions

Hydrology

As described in Section 2.10.4, the City is located within the Coachella Valley which lies within the Whitewater River Watershed, which is generally defined by the boundaries of the Whitewater Hydrologic Unit as described in the Water Quality Control Plan for the Colorado River Basin Regional Water Quality Control Board (Basin Plan). Much of the watershed consists of sparsely populated mountains, desert, and agricultural lands. Urbanized areas are principally located on the valley floor between the San Gorgonio Pass Palm Springs and the Salton Sea. The watershed is generally bounded on the south by the San Jacinto and Santa Rosa Mountains, on the west by the Santa Ana Watershed, on the east by the Salton Sea, on the northeast by the Cottonwood Mountains, and on the north east by the Little San Bernardino Mountains and Southern Mojave Watershed.

The Whitewater River has a total drainage area of approximately 850 square miles and is typically dry but flows southeasterly when it carries water. Over the last 50 years, the Whitewater River has been impacted by increasing development within the watershed. The lower river was channelized into a levee flood control structure following damaging floods in the valley in 1939 and 1979. This flood control project, developed in cooperation with the U.S. Army Corps of Engineers (ACOE), included rip-rap levee banks, removal of all vegetation from the banks, and dredging of the river channel bottom. West of Point Happy in La Quinta, it is called the Whitewater River Stormwater Channel (WWRSC). East of Point Happy, it is referred to as the Coachella Valley Stormwater Channel.

Water Resources

The Whitewater River Groundwater Basin generally extends from the Whitewater River in the northwest to the Salton Sea in the southeast. The aquifer is naturally subdivided by fault barriers into subbasins, which are further divided into subareas. Desert Water Agency (DWA) and the Coachella Valley Water District (CVWD) jointly utilize and manage a replenishment program for the local groundwater basin, the Upper Whitewater River Subbasin.

In total, the subbasins underlying the Coachella Valley contain approximately 39.2 million acre-feet of water in storage,¹ of which about 28.8 million are within the Whitewater River subbasin.² Recharge comes from limited precipitation and mountain runoff, but most is from artificial recharge with imported Colorado River and State Water Project (exchange) water, and recycled water from treatment plants.

¹ Whitewater River Region Stormwater Management Plan, prepared in June 2014 and Revised in January 2015.

² Groundwater Replenishment and Assessment Program for the West Whitewater River Basin, Mission Creek Subbasin, and Garnet Hill Subbasin Areas of Benefit by DWA (2018-2019 Engineer's Report).

During the twentieth century, the Coachella Valley experienced a rapid depletion of its groundwater in storage. DWA and CVWD data show that significant increases in total water demand in the Coachella Water Valley occurred during over the decades from 92,400 acre-feet/year (AFY) in 1936 to 376,000 AFY in 1999.³ The increase in water demand reflects both municipal water and agricultural irrigation. This is consistent with the growth of two primary economic activities in the Coachella Valley: agriculture and tourism.

3.10.3. Alternatives Impact Analysis

3.10.3.1. Alternative 1

3.10.3.1.1. Alternative 1 Impacts

a) *Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?*

Similar to the Proposed Project, development under the Alternative 1 would result in the following: 1) substantial additional sources of polluted runoff which would have short-term impacts on surface water, 2) pollutants, such as soils, debris, and other materials, in quantities that would potentially exceed water quality standards and otherwise significantly degrade water quality; and 3) non-point source pollution into surface and groundwater bodies. When compared to the Proposed Project, the Alternative 1 would have higher residential densities and generally more intense development with more population growth, resulting in more point- and non-point source pollutants. Alternative 1 have a potential to violate groundwater quality standards comparable to that associated with the Proposed Project and would be subject to the same regulations. Overall, Alternative 1 would modestly increase urban runoff and related waste discharges compared to the Proposed Project. As with the Proposed Project, General Plan policies and programs, and other applicable regulations will ensure that impacts are less than significant. Measures in Section 2.10.7 further ensure that Alternative 1 impacts will be less than significant.

b) *Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?*

Similar to the Proposed Project, Alternative 1 would allow more intense land use and very modestly increase groundwater groundwater demand. Using CVWD’s annual water consumption factors, buildout of the proposed Alternative 1 could result in the demand for approximately 20,843 acre-feet per year (AFY) of domestic water, a 0.4 percent increase when compared to the Proposed Project. (see Table 3.10-1). Alternative 1 would not affect or interfere with local or regional groundwater recharge.

**Table 3.10-1
 Estimated Water Demand at Alternative 1 Buildout**

| Land Use | CVWD Water Consumption Factor* | Conditions at General Plan Buildout (2040) | Total Water Demand (AFY) at General Plan Buildout (2040) |
|---------------------------|--|--|--|
| Single-Family Residential | 2.31 acre-feet per acre per year (AFY) | 6,628.58 acres | 15,312.02 |
| Multi-Family Residential | 2.06 acre-feet per acre per year (AFY) | 864.93 acres | 1,781.76 |
| Commercial | 1.92 acre-feet per acre per year (AFY) | 1,635.06 acres | 3,139.32 |
| Industrial | 0.51 acre-feet per acre per year (AFY) | 1,195.41 acres | 609.66 |
| TOTAL | | | 20,842.76 |

* CVWD’s annual water consumption factors from Supplemental Water Supply Program and Fee Study Prepared for the City of Coachella in 2016.

³ Coachella Valley Water Management Plan Update Draft Report prepared for CVWD in December 2010 by MWH.

As with the Proposed Project, General Plan policies and programs, and other applicable regulations will ensure that impacts to groundwater and related supplies, and to groundwater recharge, will be less than significant. Measures in Section 2.10.7 further ensure that Alternative 1 impacts will be less than significant.

- c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:***
- (i) result in substantial erosion or siltation on- or off-site;***

Development under Alternative 1 would result in the construction of new residential, commercial, and industrial buildings, roadways, landscaping, and other features within the planning area that could result in permanent alterations to existing drainage patterns by converting areas within the planning area from pervious surfaces to impervious surfaces. Permanent development of impervious surfaces within the planning area would increase runoff and potentially increase erosion or worsen existing areas of erosion. When compared to the Proposed Project, the Alternative 1 would accommodate more intense development but essentially on the same land area. Therefore, Alternative 1 would not result in increased erosion or siltation compared to the Proposed Project.

Compliance with federal, state, regional and local regulations and policies included in the proposed General Plan update would minimize the potential for erosion and siltation in the planning area. Overall, these impacts would be reduced to less than significant levels for all project alternatives. In summary, planned development and improvements associated with and facilitated by Alternative 1 would not significantly alter existing drainage patterns nor would it result in the development of additional impervious surfaces that would substantially increase soil erosion or siltation within the City or in any downstream areas. Therefore, resulting erosion and siltation associated with Alternative 1 would be less than significant. Mitigation identified in Section 2.10.7 would further ensure that impacts are less than significant.

- (ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;***

The rate and amount of runoff associated with Alternative 1 would essentially be the same as that associated with the Proposed Project. As with the Proposed Project, this alternative does not propose alterations to the course of a stream, river, or improved channel. Neither would new lands be subject to development under Alternative 1, but might be more intensively developed. Therefore, Alternative 1 would not substantially increase the rate or amount of surface runoff that would result in flooding either within the City or regionally. While mitigation is not required, Section 2.10.7 includes avoidance, minimization and other measures that will further assure that potential flooding impacts will be less than significant.

- (iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or***

- (iv) impede or redirect flood flows?***

Alternative 1 is not expected to increase the amount of impermeable surfaces, or if so only modestly. Neither is Alternative 1 expected to impede or redirect flood flows, or create or contribute volumes of runoff that would exceed the capacity of local or regional drainage facilities. Existing City regulations and those of the Regional Water Quality Control Board, along with and include required Water Quality Management Plans, will ensure that new development for all of the project alternatives are not substantial sources of polluted runoff. Development projects enabled under Alternative 1 would also be conditioned pursuant to the policies and programs set forth in the Flooding and Hydrology Sub-Element of the General Plan. Therefore, impacts would be compared to the Proposed Project and will be less than significant. While mitigation is not required, Section 2.10.7 includes avoidance, minimization and other measures that will further assure that potential flooding and water quality impacts will be less than significant.

d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

Due to the inland location of the planning area, implementation of the Alternative 1 would not expose people or structures to hazards associated with inundation by a tsunami or seiche. Implementation of the Alternative 1 would result in land uses or development within areas subject to flooding from Santa Rosa foothills and in the northern portions of the City. With completion of the Eagle Canyon Dam, much of the southwest portion of the City that was subject to 100-year flood has been removed from this threat. All future development projects would be required to comply with all applicable federal, state, and local regulations related to flood hazards. Compliance with such regulations would ensure that impacts related to flooding are less than significant. To reduce the potential impact from seiche in water reservoirs, these facilities are built with battling that dampens such motion. Also, lands downstream of water reservoirs are designated generally in Open Space and in proximity to existing drainages. In addition, future development proposals would be evaluated on a case-by-case basis to assure that potential impacts associated with seiche would be minimized. Impacts associated with Alternative 1 would be less than significant.

e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Similar to the Proposed Project, Alternative 1 would increase the demand for domestic water, but it is not anticipated to conflict with Regional Water Control Board standards. Individual development projects developed under Alternative 1 will be assessed on a case-by-case basis for potential impacts related to water supplies and quality. Projects will be required to demonstrate adherence to applicable plans, policies, and regulations adopted for the purposed of reducing water quality impacts. Therefore, development facilitated by Alternative 1 would not conflict with or obstruct implementation of local or regional water quality control plans or sustainable groundwater management plans, and impacts to water quality and supplies would be less than significant.

3.10.3.1.2. Alternative 1 Mitigation Measures

No mitigation measures are required to address potential impacts associated with Alternative 1. As noted in Section 2.10, the General Plan Flooding and Hydrology Sun-Element and the Water Resources Sub-Elements include policies and programs that will serve to effectively avoid, minimize and otherwise mitigate potentially significant impacts to water resources or water quality, or from existing and future flood hazards that could result from implementation of each of the project alternatives. Implementation of the avoidance, minimization and other measures set forth in Section 2.10.7 of this EIR and relevant policies and programs set forth in the Hydrology and Water Quality Sub-Element of the in the proposed General Plan Update and compliance with standard conditions of development, no significant adverse impacts on water supplies or quality will occur under Alternative 1.

3.10.3.1.3. Alternative 1 Significance After Mitigation

Residual environmental effects associated with the implementation of the Alternative 1 project would essentially be the same as those for the Proposed Project. Through the application of the applicable General Plan policies and programs, and the mitigation measures set forth in Section 2.10.7 of this EIR, potential impacts can be avoided, minimized and/or reduced to levels that are less than significant.

3.10.3.1.4. Alternative 1 Cumulative Impacts

A consideration of cumulative effects associated with local and regional drainage, water resources and water quality includes the degree to which a project may contribute to the cumulative impacts from water usage and water pollution. Future development associated with the Alternative 1 project would require domestic water which would be withdrawn from the subsurface groundwater basin. Under Alternative 1, future development and redevelopment within the watershed would increase impermeable surfaces and decrease water percolation areas.

However, growth facilitated by the Alternative 1 would occur gradually over many years. Increased runoff and groundwater consumption would be expected to be similar to that of neighboring communities. Similar to the Proposed Project, future development projects would be required to implement standard measures to protect water supplies and quality. Overall, the Alternative 1 project will not significantly increase the community impacts associated with local or regional drainage, water resources or water quality in the City or Coachella Valley. Therefore, cumulative impacts would not be cumulatively considerable.

3.10.3.2. Alternative 2

3.10.3.2.1. Alternative 2 Impacts

a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

Similar to the Proposed Project, development under the Alternative 2 would result in the following: 1) substantial additional sources of polluted runoff which would have short-term impacts on surface water, 2) pollutants, such as soils, debris, and other materials, in quantities that would potentially exceed water quality standards and otherwise significantly degrade water quality; and 3) non-point source pollution into surface and groundwater bodies. When compared to the Proposed Project, the Alternative 2 would have lower residential densities and generally less intense development with less population growth, resulting in less point- and non-point source pollutants. Alternative 2 has a potential to violate groundwater quality standards comparable to that associated of the Proposed Project and would be subject to the same regulations. Overall, Alternative 2 would reduce urban runoff and related waste discharges compared to the Proposed Project. As with the Proposed Project, General Plan policies and programs, and other applicable regulations will ensure that impacts are less than significant. Measures in Section 2.10.7 further ensure that Alternative 2 impacts will be less than significant.

b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

Similar to the Proposed Project, Alternative 2 would provide for less intense land use and very modestly decreases groundwater demand compared to the Proposed Project. Using CVWD’s annual water consumption factors, buildout of the proposed Alternative 2 could result in the demand for approximately 20,897 acre-feet per year (AFY) of domestic water, a 0.6 percent demand increase when compared to the Proposed Project. (see Table 3.10-1). Alternative 2 would not affect or interfere with local or regional groundwater recharge. Using CVWD’s annual water consumption factors, buildout of the proposed Alternative 2 could result in the demand for approximately 20,897 acre-feet per year (AFY) of domestic water (Table 3.10-2).

**Table 3.10-2
 Estimated Water Demand at Alternative 2 Buildout**

| Land Use | CVWD Water Consumption Factor* | Conditions at General Plan Buildout (2040) | Total Water Demand (AFY) at General Plan Buildout (2040) |
|---------------------------|--|--|--|
| Single-Family Residential | 2.31 acre-feet per acre per year (AFY) | 6,845.00 acres | 15,811.95 |
| Multi-Family Residential | 2.06 acre-feet per acre per year (AFY) | 697.16 acres | 1,436.15 |
| Commercial | 1.92 acre-feet per acre per year (AFY) | 1,582.51 acres | 3,038.42 |
| Industrial | 0.51 acre-feet per acre per year (AFY) | 1,196.66 acres | 610.30 |
| | | TOTAL | 20,896.82 |

* CVWD’s annual water consumption factors from Supplemental Water Supply Program and Fee Study Prepared for the City of Coachella in 2016.

As with the Proposed Project, General Plan policies and programs, and other applicable regulations will ensure that impacts to groundwater and related supplies, and to groundwater recharge, will be less than significant. Measures in Section 2.10.7 further ensure that Alternative 1 impacts will be less than significant.

- c) *Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:***
- (i) *result in substantial erosion or siltation on- or off-site;***

Development under Alternative 2 would result in the construction of new features within the planning area that could result in permanent alterations to existing drainage patterns by converting areas within the planning area from pervious surfaces to impervious surfaces. Permanent development of impervious surfaces within the planning area would increase runoff and potentially increase erosion or worsen existing areas of erosion. When compared to the Proposed Project, the Alternative 2 would accommodate more less development but essentially on the same land area. Therefore, Alternative 2 would not result in increased erosion or siltation compared to the Proposed Project.

Compliance with federal, state, regional and local regulations and policies included in the proposed General Plan update would minimize the potential for erosion and siltation in the planning area. Overall, this impact would be reduced to less than significant levels for all project alternatives. In summary, planned development and improvements associated with and facilitated by Alternative 2 would not significantly alter existing drainage patterns nor would it result in the development of additional impervious surfaces that would substantially increase soil erosion or siltation within the City or in any downstream areas. Therefore, resulting erosion and siltation associated with Alternative 2 would be less than significant. Mitigation identified in Section 2.10.7 would further ensure that impacts are less than significant.

- (ii) *substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;***

The rate and amount of runoff associated with Alternative 2 would essentially be the same as that associated with the Proposed Project. As with the Proposed Project, this alternative does not propose alterations to the course of a stream, river, or improved channel. Neither would new lands be subject to development under Alternative 2, but might be less intensively developed. Therefore, Alternative 2 would not substantially increase the rate or amount of surface runoff that would result in flooding either within the City or regionally. While mitigation is not required, Section 2.10.7 includes avoidance, minimization and other measures that would further assure that potential flooding impacts associated with Alternative 2 would be less than significant.

- (iii) *create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or***
- iv) *impede or redirect flood flows?***

Alternative 2 is not expected to decrease the amount of impermeable surfaces, or if so only modestly. Neither is Alternative 2 expected to impede or redirect flood flows, or create or contribute volumes of runoff that would exceed the capacity of local or regional drainage facilities. Existing City regulations and those of the Regional Water Quality Control Board, along with and include required Water Quality Management Plans, will ensure that new development for all of the project alternatives are not substantial sources of polluted runoff. Development projects enabled under Alternative 2 would also be conditioned pursuant to the policies and programs set forth in the Flooding and Hydrology Sub-Element of the General Plan. Therefore, impacts would be compared to the Proposed Project and would be less than significant. While mitigation is not required, Section 2.10.7 includes avoidance, minimization and other measures that would further assure that potential flooding and water quality impacts associated with Alternative 2 would be less than significant.

d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

Due to the inland location of the planning area, implementation of the Alternative 2 would not expose people or structures to hazards associated with inundation by a tsunami or seiche. Implementation of the Alternative 2 would result in land uses or development within areas subject to flooding from Santa Rosa foothills and in the northern portions of the City. With completion of the Eagle Canyon Dam, much of the southwest portion of the City that was subject to 100-year flood has been removed from this threat. All future development projects would be required to comply with all applicable federal, state, and local regulations related to flood hazards. Compliance with such regulations would ensure that impacts related to flooding are less than significant. To reduce the potential impact from seiche in water reservoirs, these facilities are built with battling that dampens such motion. Also, lands downstream of water reservoirs are designated generally in Open Space and in proximity to existing drainages. In addition, future development proposals would be evaluated on a case-by-case basis to assure that potential impacts associated with seiche would be minimized. Impacts associated with Alternative 2 would be less than significant.

e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Comparable to the Proposed Project, Alternative 2 would somewhat decrease the demand for domestic water, and it is not anticipated to conflict with Regional Water Control Board standards. Individual development projects developed under Alternative 2 would be assessed on a case-by-case basis for potential impacts related to water supplies and quality. Projects would be required to demonstrate adherence to applicable plans, policies, and regulations adopted for the purposed of reducing water quality impacts. Therefore, development facilitated by Alternative 2 would not conflict with or obstruct implementation of local or regional water quality control plans or sustainable groundwater management plans, and impacts to water quality and supplies would be less than significant.

3.10.3.2.2. Alternative 2 Mitigation Measures

No mitigation measures are required to address potential impacts associated with Alternative 2. As noted in Section 2.10, the General Plan Flooding and Hydrology Sun-Element and the Water Resources Sub-Elements include policies and programs that will serve to effectively avoid, minimize and otherwise mitigate potentially significant impacts to water resources or water quality, or from existing and future flood hazards that could result from implementation of each of the project alternatives. Implementation of the avoidance, minimization and other measures set forth in Section 2.10.7 of this EIR and relevant policies and programs set forth in the Hydrology and Water Quality Sub-Element of the in the proposed General Plan Update and compliance with standard conditions of development, no significant adverse impacts on water supplies or quality will occur under Alternative 2.

3.10.3.2.3. Alternative 2 Significance After Mitigation

Residual environmental effects associated with the implementation of the Alternative 1 project would essentially be the same as those for the Proposed Project. Through the application of the applicable General Plan policies and programs, and the mitigation measures set forth in Section 2.10.7 of this EIR, potential impacts can be avoided, minimized and/or reduced to levels that are less than significant.

3.10.3.2.4. Alternative 2 Cumulative Impacts

A consideration of cumulative effects associated with local and regional drainage, water resources and water quality includes the degree to which a project may contribute to the cumulative impacts from water usage and water pollution. Future development associated with the Alternative 2 project would require domestic water which would be drawn from the subsurface groundwater basin. Under Alternative 2, future development and redevelopment within the watershed would increase impermeable surfaces and decrease water percolation areas.

However, growth facilitated by the Alternative 2 would occur gradually over many years. Increased runoff and groundwater consumption would be expected to be similar to that of neighboring communities. Similar to the Proposed Project, future development projects would be required to implement standard measures to protect water supplies and quality. Overall, the Alternative 2 project will not significantly decrease the community impacts associated with local or regional drainage, water resources or water quality in the City or Coachella Valley. Therefore, cumulative impacts would not be cumulatively considerable.

3.10.3.3. Alternative 3

3.10.3.3.1. Alternative 3 Impacts

a) *Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?*

Similar to the Proposed Project, development under the Alternative 3 (No Project) would result in the following: 1) substantial additional sources of polluted runoff which would have short-term impacts on surface water, 2) pollutants, such as soils, debris, and other materials, in quantities that would potentially exceed water quality standards and otherwise significantly degrade water quality; and 3) non-point source pollution into surface and groundwater bodies. When compared to the Proposed Project, the Alternative 2 would have modestly lower residential densities and generally less intense development with less population growth, resulting in potentially less point- and non-point source pollutants. Alternative 3 would have a potential to violate groundwater quality standards comparable to that associated with the Proposed Project and would be subject to the same regulations. Overall, Alternative 3 could modestly decrease urban runoff and related waste discharges compared to the Proposed Project. As with the Proposed Project, General Plan policies and programs, and other applicable regulations will ensure that impacts are less than significant. Measures in Section 2.10.7 further ensure that Alternative 3 impacts will be less than significant.

c) *Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?*

Similar to the Proposed Project, Alternative 3 would allow somewhat less intense land use and very modestly decrease groundwater demand compared to the Proposed Project. Using CVWD’s annual water consumption factors, buildout of the proposed Alternative 3 could result in the demand for approximately 21,043 acre-feet per year (AFY) of domestic water, a 1.3 percent increase in demand compared to the Proposed Project. (see Table 3.10-3). Alternative 3 would not affect or interfere with local or regional groundwater recharge. Using CVWD’s annual water consumption factors, buildout of the proposed Alternative 3 could result in the demand for approximately 21,043 acre-feet per year (AFY) of domestic water (Table 3.10-3).

**Table 3.10-3
 Estimated Water Demand at Alternative 3 Buildout**

| Land Use | CVWD Water Consumption Factor* | Conditions at General Plan Buildout (2040) | Total Water Demand (AFY) at General Plan Buildout (2040) |
|---------------------------|--|--|--|
| Single-Family Residential | 2.31 acre-feet per acre per year (AFY) | 6,824.03 | 15,763.51 |
| Multi-Family Residential | 2.06 acre-feet per acre per year (AFY) | 785.51 | 1,618.15 |
| Commercial | 1.92 acre-feet per acre per year (AFY) | 1,636.32 | 3,141.73 |
| Industrial | 0.51 acre-feet per acre per year (AFY) | 1,018.15 | 519.26 |
| TOTAL | | | 21,042.65 |

* CVWD’s annual water consumption factors from Supplemental Water Supply Program and Fee Study Prepared for the City of Coachella in 2016.

As with the Proposed Project, General Plan policies and programs, and other applicable regulations will ensure that impacts to groundwater and related supplies, and to groundwater recharge, will be less than significant. Measures in Section 2.10.7 further ensure that Alternative 3 impacts will be less than significant.

- c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:***
- (i) result in substantial erosion or siltation on- or off-site;***

Development under Alternative 3 would result in the construction of new features within the planning area that could result in permanent alterations to existing drainage patterns by converting areas within the planning area from pervious surfaces to impervious surfaces. Permanent development of impervious surfaces within the planning area would increase runoff and potentially increase erosion or worsen existing areas of erosion. When compared to the Proposed Project, the Alternative 3 would accommodate more somewhat less development but essentially on the same land area. Therefore, Alternative 3 would not result in increased erosion or siltation compared to the Proposed Project.

Compliance with federal, state, regional and local regulations and policies included in the proposed General Plan update would minimize the potential for erosion and siltation in the planning area. Overall, these impacts would be reduced to less than significant levels for all project alternatives. In summary, planned development and improvements associated with and facilitated by Alternative 3 would not significantly alter existing drainage patterns nor would it result in the development of additional impervious surfaces that would substantially increase soil erosion or siltation within the City or in any downstream areas. Therefore, resulting erosion and siltation associated with Alternative 3 would be less than significant. Mitigation identified in Section 2.10.7 would further ensure that impacts are less than significant.

- (ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;***

The rate and amount of runoff associated with Alternative 3 would essentially be the same as that associated with the Proposed Project. As with the Proposed Project, this alternative does not propose alterations to the course of a stream, river, or improved channel. Neither would new lands be subject to development under Alternative 3, but could be less intensively developed. Therefore, Alternative 3 would not substantially increase the rate or amount of surface runoff that would result in flooding either within the City or regionally. While mitigation is not required, Section 2.10.7 includes avoidance, minimization and other measures that will further assure that potential flooding impacts will be less than significant.

- (iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or***

- (iv) impede or redirect flood flows?***

Alternative 3 is not expected to decrease the amount of impermeable surfaces, or if so only modestly. Neither is Alternative 3 expected to impede or redirect flood flows, or create or contribute volumes of runoff that would exceed the capacity of local or regional drainage facilities. Existing City regulations and those of the Regional Water Quality Control Board, along with and include required Water Quality Management Plans, will ensure that new development for all of the project alternatives are not substantial sources of polluted runoff. Development projects enabled under Alternative 3 would also be conditioned pursuant to the policies and programs set forth in the Flooding and Hydrology Sub-Element of the General Plan. Therefore, Alternative 3 impacts would be compared to the Proposed Project and will be less than significant. While mitigation is not required, Section 2.10.7 includes avoidance, minimization and other measures that will further assure that potential flooding and water quality impacts will be less than significant.

d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

Due to the inland location of the planning area, implementation of the Alternative 3 would not expose people or structures to hazards associated with inundation by a tsunami or seiche. Implementation of the Alternative 31 would result in land uses or development within areas subject to flooding from Santa Rosa foothills and in the northern portions of the City. With completion of the Eagle Canyon Dam, much of the southwest portion of the City that was subject to 100-year flood has been removed from this threat. All future development projects would be required to comply with all applicable federal, state, and local regulations related to flood hazards. Compliance with such regulations would ensure that impacts related to flooding are less than significant. To reduce the potential impact from seiche in water reservoirs, these facilities are built with battling that dampens such motion. Also, lands downstream of water reservoirs are designated generally in Open Space and in proximity to existing drainages. In addition, future development proposals would be evaluated on a case-by-case basis to assure that potential impacts associated with seiche would be minimized. Impacts associated with Alternative 3 would be less than significant.

e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Similar to the Proposed Project, Alternative 3 would somewhat decrease the demand for domestic water, and it is not anticipated to conflict with Regional Water Control Board standards. Individual development projects developed under Alternative 3 will be assessed on a case-by-case basis for potential impacts related to water supplies and quality. Projects will be required to demonstrate adherence to applicable plans, policies, and regulations adopted for the purpose of reducing water quality impacts. Therefore, development facilitated by Alternative 3 would not conflict with or obstruct implementation of local or regional water quality control plans or sustainable groundwater management plans, and impacts to water quality and supplies would be less than significant.

3.10.3.3.2. Alternative 3 Mitigation Measures

No mitigation measures are required to address potential impacts associated with Alternative 3. As noted in Section 2.10, the General Plan Flooding and Hydrology Sub-Element and the Water Resources Sub-Elements include policies and programs that will serve to effectively avoid, minimize and otherwise mitigate potentially significant impacts to water resources or water quality, or from existing and future flood hazards that could result from implementation of each of the project alternatives. Implementation of the avoidance, minimization and other measures set forth in Section 2.10.7 of this EIR and relevant policies and programs set forth in the Hydrology and Water Quality Sub-Element of the in the proposed General Plan Update and compliance standard conditions of development, no significant adverse impacts on water supplies or quality will occur under Alternative 3.

3.10.3.3.3. Alternative 3 Significance After Mitigation

Residual environmental effects associated with the implementation of the Alternative 3 project would essentially be the same as those for the Proposed Project. Through the application of the applicable General Plan policies and programs, and the mitigation measures set forth in Section 2.10.7 of this EIR, potential impacts can be avoided, minimized and/or reduced to levels that are less than significant.

3.10.3.3.4. Alternative 3 Cumulative Impacts

A consideration of cumulative effects associated with local and regional drainage, water resources and water quality includes the degree to which a project may contribute to the cumulative impacts from water usage and water pollution. Future development associated with the Alternative 3 project would require domestic water which would be drawn from the subsurface groundwater basin. Under Alternative 3, future development and redevelopment within the watershed would increase impermeable surfaces and decrease water percolation areas. However, growth facilitated by the Alternative 3 would occur gradually over many years.

Increased runoff and groundwater consumption would be expected to be similar to that of neighboring communities. Similar to the Proposed Project, future development projects would be required to implement standard measures to protect water supplies and quality. Overall, the Alternative 3 project will not significantly increase the community impacts associated with local or regional drainage, water resources or water quality in the City or Coachella Valley. Therefore, cumulative impacts would not be cumulatively considerable.

3.10.4. Environmental Superior Alternative

Based simply on the extent and intensity of development facilitated under each of the alternatives analyzed, including the Proposed Project, Alternative 2 would appear to have the least potential to generate significant impacts to local and regional drainage systems, to the local and regional water supply, or to surface and sub-surface water quality. However, all would be subject to applicable laws, regulations and guidelines, as well as the various policies and programs set forth in the Flooding and Hydrology Sub-Element and the Water Resources Sub-Element of the proposed General Plan. Nonetheless, in the overall, Alternative 2 would appear to be modestly superior to the other alternatives.

3.11. Land Use Planning

3.11.1. Introduction

Section 3.0 provides mapping and land use allocation tables for the three alternatives analysed in this section of the EIR and evaluates the compatibility of and potential impacts of the project alternatives. It is assumed that the same General Plan policies and programs set forth in the Proposed Project are applicable to the alternatives. Potential land use impacts from implementation of the alternatives are described in general terms. It should be noted that design elements of the proposed General Plan that avoid or minimize impacts are also applicable to the alternatives.

3.11.2. Existing Conditions

As noted in Section 2.11, large portions of the City are already developed with a full mix of land uses. Several areas in the already urbanized portions of the City are vacant and available primarily for in-fill development. These include lands abutting the Santa Rosa foothills on the south, portions of the City Downtown both north and south of East Palm Canyon Drive, lands along the west side of Date Palm Drive between Ramon Road and Dinah Shore Drive, and lands adjacent to and near the Whitewater River north and south of Ramon Road. Larger undeveloped lands in the southern portion of the City include the northwest corner of Gerald Ford Drive and Da Vall Drive, east of Date Palm Drive and north of 30th Avenue, and areas west of Date Palm Drive and north of Vista Chino. North of the Union Pacific Railroad/Interstate-10 corridor, lands are essentially vacant, with the exception of two water reservoirs, wind turbines on the west slope of Edom Hill and electrical transmission towers. Lands in the extreme eastern portion of the City at the intersection of I-10 and Bob Hope Drive are just beginning to develop.

3.11.3. Alternatives Impact Analysis

3.11.3.1. Alternative 1

3.11.3.1.1. Alternative 1 Impacts

a) Physically divide an established community?

Alternative 1 differs from the Proposed Project in that it increases the permitted residential densities for some of the residential land use categories, increasing the possible number of dwelling units. None of the Alternative 1 land use designation, nor the goals, policies or programs set forth in the Land Use Element will act to physically divide an established community. As with the Proposed Project, Alternative 1 provides for mixed-use and transit-oriented development and the repurposing of vacated buildings and underutilized sites. It does not include any new arterial roadways or other potential neighborhood-dividing development. Policies and programs set forth in the proposed General Plan are applicable to the Alternative 1 scenario, and this alternative continues to encourage the expansion of the City's multi-modal transportation system, including the implementation of *Complete Streets* design principles and the new *Active Transportation Plan*, which is also integral part of the Proposed Project. Therefore, the implementation of Alternative 1 would not physically divide an established community.

b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

The City's corporate limits abut the Santa Rosa and San Jacinto Mountains National Monument (SRSJMNM). As with the proposed General Plan, Alternative 1 designates public lands in these areas as Open Space-Public and the limited private lands that occur there as Hillside Reserve (1 du/20 acres). Areas of steep terrain and with other development constraints are well regulated by the proposed general Plan, which will not conflict with the plans and regulations of the National Monument. Alternative 1 also does not change land use designations in proximity to any Conservation Area established by the Coachella Valley Multiple Species Habitat Conservation Plan and would be required to conform to that Plan's *Land Use Adjacency Guidelines*. Therefore, Alternative 1 is in conformance and will not conflict with the MSHCP.

With regard to the compatibility of Alternative 1 with the Palm Springs International Airport master plan, most of the City occurs within Compatibility Zones D and E, which are the least restrictive. A small portion is located within Zone C but primarily are lands in the Whitewater River where no development will occur; however, a small developed portion of the “Dream Homes” neighborhood would remain in this zone but outside the long-term 60 CNEL noise contour. Implementation of Alternative 1 does not conflict with the airport land use plan.

The Agua Caliente Band of Cahuilla Indians (ACBCI) has Tribal, allottee and fee lands within the Cathedral City limits and the Tribe and the City have entered into a Land Use Contract for the planning and management of these lands. The Tribe authorizes the City to manage the development of these lands, although it reserves the right to exercise its own authority in rare cases. The Tribe recognizes the City’s General Plan and Land Use Plan; therefore, Alternative 1 does not conflict with a Tribal land use plan.

In summary, Alternative 1 does not conflict with any other land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. Therefore, potential impacts with regard to land use planning will be less than significant.

3.11.3.1.2. Alternative 1 Mitigation Measures

No mitigation is required. Nonetheless, as provided for in Section 2.11.7, individual development projects, including those involving a mix of residential and other uses, and those located nearby or adjacent to sensitive lands or uses, will be fully evaluated during the City’s project review process to assure that all land use compatibility issues are addressed and mitigated.

3.11.3.1.3. Alternative 1 Significance After Mitigation

The Alternative 1 project will not result in or create any significant land use conflicts nor will it divide an existing community or neighborhood or one that may be created pursuant to the proposed General Plan. Therefore, no mitigation is required and there will be no significant residual environmental effects.

3.11.3.1.4. Alternative 1 Cumulative Impacts

The implementation of the Alternative 1 project would not contribute to the physical creation of divided or isolated communities. As with the Proposed Project, it will serve to ensure that such impacts do not occur in the future and will also serve to better integrate and unify the City’s existing neighborhoods. Neither will Alternative 1 cause any significant environmental impacts due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. Therefore, Alternative 1 will not result in impacts that cumulatively considerable.

3.11.3.2. Alternative 2

3.11.3.2.1. Alternative 1 Impacts

a) Physically divide an established community?

Alternative 2 differs from the Proposed Project in that it decreases the permitted residential densities for some of the residential land use categories, increasing the possible number of dwelling units. It also changes land use assignments, including a change in the northern portions of the City from Mix-Use Neighborhood to Industrial within the North City Extended Specific Plan but in an area that is bounded on one side by future stormwater retention facilities and on the other by planned public streets. None of the Alternative 2 land use designation, nor the goals, policies or programs set forth in the Land Use Element of the Proposed Project will act to physically divide an established community.

As with the Proposed Project, Alternative 2 continues to provide for mixed-use and transit-oriented development, albeit with minor reductions, and the repurposing of vacated buildings and underutilized sites. It does not include any new arterial roadways or other potential neighborhood-dividing development. Policies and programs set forth in the proposed General Plan are applicable to the Alternative 2 scenario, and this alternative continues to encourage the expansion of the City’s multi-modal transportation system, including the implementation of *Complete Streets* design principles and the new *Active Transportation Plan*, which is also integral part of the Proposed Project. Therefore, the implementation of Alternative 2 would not physically divide an established community.

b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

The City’s corporate limits abut the Santa Rosa and San Jacinto Mountains National Monument (SRSJMNM). As with the proposed General Plan, Alternative 2 designates public lands in these areas as Open Space-Public and the limited private lands that occur there as Hillside Reserve (1 du/20 acres). Areas of steep terrain and with other development constraints are well regulated by the proposed General Plan, which will not conflict with the plans and regulations of the National Monument. Alternative 1 also does not change land use designations in proximity to any Conservation Area established by the Coachella Valley Multiple Species Habitat Conservation Plan and would be required to conform to that Plan’s *Land Use Adjacency Guidelines*. Therefore, Alternative 2 is in conformance and will not conflict with the MSHCP.

With regard to the compatibility of Alternative 2 with the Palm Springs International Airport master plan, most of the City occurs within Compatibility Zones D and E, which are the least restrictive. A small portion is located within Zone C but primarily are lands in the Whitewater River where no development will occur; however, a small developed portion of the “Dream Homes” neighborhood would remain in this zone but outside the long-term 60 CNEL noise contour. Implementation of Alternative 2 does not conflict with the airport land use plan.

The Agua Caliente Band of Cahuilla Indians (ACBCI) has Tribal, allottee and fee lands within the Cathedral City limits and the Tribe and the City have entered into a Land Use Contract for the planning and management of these lands. The Tribe authorizes the City to manage the development of these lands, although it reserves the right to exercise its own authority in rare cases. The Tribe recognizes the City’s General Plan and Land Use Plan; therefore, Alternative 1 does not conflict with a Tribal land use plan.

In summary, Alternative 2 does not conflict with any other land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. Therefore, potential impacts with regard to land use planning will be less than significant.

3.11.3.2.2. Alternative 2 Mitigation Measures

No mitigation is required. Nonetheless, as provided for in Section 2.11.7, individual development projects, including those involving a mix of residential and other uses, and those located nearby or adjacent to sensitive lands or uses, will be fully evaluated during the City’s project review process to assure that all land use compatibility issues are addressed and mitigated.

3.11.3.2.3. Alternative 2 Significance After Mitigation

The Alternative 2 project will not result in or create any significant land use conflicts nor will it divide an existing community or neighborhood or one that may be created pursuant to the proposed General Plan. Therefore, no mitigation is required and there will be no significant residual environmental effects.

3.11.3.2.4. Alternative 2 Cumulative Impacts

The implementation of the Alternative 2 project would not contribute to the physical creation of divided or isolated communities. As with the Proposed Project, Alternative 2 will serve to ensure that such impacts do not occur in the future and will also serve to better integrate and unify the City's existing neighborhoods. Neither will Alternative 2 cause any significant environmental impacts due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. Therefore, Alternative 2 will not result in impacts that cumulatively considerable.

3.11.3.3. Alternative 3

3.11.3.3.1. Alternative 3 Impacts

a) Physically divide an established community?

Alternative 3, the No Project Alternative, differs from the Proposed Project in that it modestly increases residential buildout overall, increasing potential industrial development and decreases commercial land use designations. None of the Alternative 3 land use designation, nor the goals, policies or programs set forth in the proposed General Plan Land Use Element will act to physically divide an established community. As with the Proposed Project, Alternative 3 provides for mixed-use and transit-oriented development and the repurposing of vacated buildings and underutilized sites. It does not include any new arterial roadways or other potential neighborhood-dividing development. Policies and programs set forth in the proposed General Plan are applicable to the Alternative 3 scenario, and this alternative continues to encourage the expansion of the City's multi-modal transportation system, including the implementation of *Complete Streets* design principles and the new *Active Transportation Plan*, which is also integral part of the Proposed Project. Therefore, the implementation of Alternative 3 would not physically divide an established community.

b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

The City's corporate limits abut the Santa Rosa and San Jacinto Mountains National Monument (SRSJMNM). As with the proposed General Plan, Alternative 3 designates public lands in these areas as Open Space-Public and the limited private lands that occur there as Hillside Reserve (1 du/20 acres). Areas of steep terrain and with other development constraints are well regulated by the proposed General Plan, which will not conflict with the plans and regulations of the National Monument. Alternative 3 also does not change land use designations in proximity to any Conservation Area established by the Coachella Valley Multiple Species Habitat Conservation Plan and would be required to conform to that Plan's *Land Use Adjacency Guidelines*. Therefore, Alternative 3 is in conformance and will not conflict with the MSHCP.

3.11.3.3.2. Alternative 3 Mitigation Measures

No mitigation is required. Nonetheless, as provided for in Section 2.11.7, individual development projects, including those involving a mix of residential and other uses, and those located nearby or adjacent to sensitive lands or uses, will be fully evaluated during the City's project review process to assure that all land use compatibility issues are addressed and mitigated.

3.11.3.3.3. Alternative 3 Significance After Mitigation

The Alternative 3 project will not result in or create any significant land use conflicts nor will it divide an existing community or neighborhood or one that may be created pursuant to the proposed General Plan. Therefore, no mitigation is required and there will be no significant residual environmental effects.

3.11.3.3.4. Alternative 3 Cumulative Impacts

The implementation of the Alternative 3 project would not contribute to the physical creation of divided or isolated communities. As with the Proposed Project, Alternative 3 serves to ensure that such impacts do not occur in the future and also serves to integrate and unify the City's existing neighborhoods. Neither will Alternative 3 cause any significant environmental impacts due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. Therefore, Alternative 3 will not result in impacts that cumulatively considerable.

3.11.4. Environmental Superior Alternative

Judged strictly on the basis of which alternative poses the least threat in terms of dividing neighborhoods or communities, or to causing significant environmental impacts due to conflicts with other land use plans, policies, or regulations that avoid or mitigate environmental effects, all three alternative are equal. Alternative 3 does not incorporate some of the land use changes that further the development of mixed-use neighborhoods, and in this regard could be construed as being inferior to the other project alternatives and the Proposed Project.

3.12. Noise

3.12.1. Introduction

This section of the EIR analyzes the potential impacts of the three project alternatives with regard to the local noise environment within the City planning area and compares these potential impacts to surrounding sensitive receptors compared to the Proposed Project and each other. Continued buildout of the City will take place adjacent to noise-sensitive land uses and, therefore, will introduce both temporary and long-term noise increases to the existing ambient noise environment. The analysis centers on future traffic noise and on vibratory noise associated with operations on Union Pacific Railroad (UPRR) lines, and also addresses stationary sources of community noise. A detailed discussion of noise, noise measurement and other data and information can be found in Section 2.12 and in Appendix D.

3.12.2. Existing Conditions

Existing conditions in the community noise environment were measured on multiple levels: along major City roadways, along the Union Pacific Railroad/US Interstate-10 transportation corridor, along the rail line during train passages, and in the vicinity of the Palm Springs International Airport. Measurements were a combination of short and long duration and included 24-hour measurements at several locations in the community.

In summary, community traffic noise ranges from about 53.6 dBA Leq to 72.2 dBA Leq, and from 59.2 CNEL (Community Noise Equivalency Level) to 69.7 (see Table 2.12-2). On a CNEL basis, airport noise is substantially lower, at approximately 60 CNEL or less at the western city limits. While individual aircraft operations can generate intrusive short-term noise levels, these generally occur during the day, which is the least sensitive period. Railroad operations generate a unique vibratory noise profile that is measured in decibels and noted as Vdb. This profile is associated with rolling and impact vibrations from railroad engines and cars and ranges from approximately 66 Vdb to 78 Vdb at 100 feet from the train. Please see Section 2.12 for a detailed discussion of the existing noise environment.

3.12.3. Alternatives Impact Analysis

It should be noted that the future community noise environment will be similarly impacted in the Alternative 1 (More Intense), 2 (Less Intense) and 3 (No Project) project alternatives. Therefore, future impacts, mitigation measures, post-mitigation residual impacts, and cumulative impacts are covered in one discussion. Please also see Section 2.12 for details on how future noise sources and levels will impact the community and how they are mitigated.

3.12.3.1. Alternatives 1, 2 & 3

3.12.3.1.1. Alternatives 1, 2 and 3 Impacts

- a) Generation of substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?*

Community exterior noise levels are primarily affected by vehicular traffic with the highest volumes and noise levels occurring during the least sensitive times of the day. Traffic noise levels can generate significant noise impacts to nearby sensitive receptors. Residences located closest to the UPRR/I-10 corridor will experience the worst noise intrusion due to higher night-time truck volumes and intermittent train noise, which will occur during the most sensitive times of the evening.

Nonetheless, buildout of the alternatives and the proposed General Plan, compared to existing conditions, will generate traffic noise level changes ranging from decreases of 0.7 to increases of 0.6 dBA CNEL on the study area roadways. This is well below the 3 dBA CNEL impact that is noticeable. With noise management policies and programs set forth in the General Plan Noise Sub-Element, and the noise avoidance, minimization and mitigation measures in Section 2.12.7, the on-site transportation noise levels at future development within the City can be reduced to a range of “normally acceptable to normally unacceptable”. If future developments are properly conditioned, interior noise levels satisfying the 45 dBA CNEL interior noise level standard for noise-sensitive uses can be achieved.

b) Generation of excessive groundborne vibration or groundborne noise levels?

Rail activities are projected to generate vibration levels of up to 84 VdB at 50 feet from trains traveling at 50 mph. At the typical speed of 70 mph of rail activities on rail lines passing through the City, the reference vibration level is increased by 2.9 VdB, and results in estimated vibration impacts of 86.9 VdB at 50 feet from the railroad tracks. The analysis shows that noise-sensitive and non-noise-sensitive uses within the City could be located within 50 to 150 feet of the UPRR railroad tracks and, therefore, may experience vibration levels which would exceed the noise-sensitive 72 VdB and non-noise-sensitive 75 VdB criteria for frequent rail events identified by the FTA. Policies and programs set forth in the Noise Sub-Element, including Program 1.D, require identification and application of all practicable measures to satisfy the 72 VdB criterium. The avoidance and minimization measures set forth in Section 2.2.7 will also reduce or otherwise mitigate these potential impacts to less than significant levels.

c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

Mapping of future (2025) noise conditions generated by the Palm Springs International Airport (PSP) indicate that the 60 dBA CNEL noise level contour boundary will shift to partially overlap with City boundaries east of San Joaquin Drive and north of Mission Drive. As a result, noise levels due to aircraft flyover events associated with Palm Springs International Airport under Future (2025) conditions are anticipated to be equal to or less than those identified under Existing (2002) conditions. Given the location of the 2025 60 dBA CNEL PSP noise contour, little or no specific mitigation would be required to ensure that new residential development satisfies the 45 dBA CNEL interior noise level standard. Therefore, while noise from aircraft operations will likely be heard, they will not significantly impact noise-sensitive uses in the City.

3.12.3.1.2. Alternatives 1, 2 and 3 Mitigation Measures

General Plan Noise Policy 1, and Program 1.B and 1.C will ensure that future development institutes all practicable noise mitigation measures to reduce community noise levels to acceptable levels. Policies 2 and 3, and Programs 2.A, 2.B and 2.C further ensure that adequate noise analysis and mitigation will be implemented to ensure that proposed uses are compatible with the future noise environment. Therefore, through the application of General Plan policies and programs, as well as the City’s noise ordinance, on-site traffic noise impacts can be considered less than significant. Applicable General Plan programs are also cited in Section 2.12.7 below.

With regard to railroad noise, policies and programs set forth in the Noise Sub-Element, including Program 1.D, require identification and application of all practicable measures to satisfy the 72 VdB criterium. The avoidance and minimization measures set forth in Section 2.2.7 will also reduce or otherwise mitigate these potential impacts to less than significant levels.

Based on applicable PSP land use policies, “*dwelling may require incorporation of special noise level reduction measures into their design to ensure (compliance with) the interior noise limit of 45 dB CNEL*”. These features would be incorporated into new residential construction as part of the building permit process, and based on the exterior noise levels approaching and around 60 dBA CNEL, are anticipated to reduce aircraft flyover noise to below the 45 dBA CNEL interior noise level standard for residential uses with standard building construction. Given the location of the 2025 60 dBA CNEL PSP noise contour, little or no specific mitigation would be required to ensure that new residential development satisfies the 45 dBA CNEL interior noise level standard. Therefore, while noise from aircraft operations will likely be heard, they will not significantly impact noise-sensitive uses in the City. In summary and as noted above, the General Plan Noise Sub-Element and the Circulation and Mobility Elements include policies and programs that will serve to effectively avoid, minimize and otherwise mitigate potentially significant noise impacts to the community that could result from implementation of the General Plan update. Additional measures set forth in Section 2.12 further serve to reinforce actions to be taken by the City and applicants to ensure that the community noise environment is compatible with planned land uses.

3.12.3.1.3. Alternatives 1, 2 and 3 Significance After Mitigation

The Noise Sub-Element policies and programs, as well as many of those set forth in the Circulation and Mobility Element, will ensure that the community has a long-term noise environment that is compatible with planned land uses. With implementation of the General Plan policies and programs, and the avoidance, minimization and other measures set forth in Section 2.12.7 of the EIR, significant, unmitigated impacts to the noise environment or noise sensitive land uses can be avoided.

3.12.3.1.4. Alternative 1, 2 and 3 Cumulative Impacts

The cumulative impacts analysis for noise is based upon the General Plan alternatives’ incremental effect and whether they are cumulatively considerable, as defined in CEQA Section 15130(a)(1), and include an evaluation of the cumulative effects of other projects in the planning area. As described in Section 2.12, noise impacts are essentially local and quickly dissipate with distance but can be compounding in areas close to a particular noise source. Indicative of the limited cumulative impact from the buildout of the proposed General Plan and the alternatives is that, compared to existing conditions, they will generate traffic noise level changes ranging from decreases of 0.7 to increases of 0.6 dBA CNEL on the study area roadways. This is well below the 3 dBA CNEL impact that is noticeable. The future 60 dBA CNEL airport noise contour will actually contract and be further removed from the City by the year 2025. And rail traffic will increase modestly and remain an intermittent noise generator. Therefore, the implementation of the updated General Plan will not result in impacts to the noise environment that are cumulatively considerable.

3.12.4. Environmentally Superior Alternative

Alternative 2 is arguably the environmentally superior alternative when compared to the Proposed Project and other alternatives. However, while Alternative 2 may result in modestly lower traffic volumes and noise levels on some local streets, none of the alternatives will affect traffic on US Interstate-10 or the UPRR lines. Nor will Alternative 2 have any measurable effect on noise levels generated by the airport.

3.13. Parks and Recreational Resources

3.13.1. Introduction

This section of the EIR analyzes the potential impacts to parks and recreational resources associated with the alternatives to the proposed Cathedral City General Plan update based on regional and local park lands and facilities. The planning area is located within the Coachella Valley which provides a wide range of recreational opportunities to residences and visitors. The analysis considers whether and to what extent buildout of the alternatives and their associated populations would have on these local and regional parks and other recreational facilities.

3.13.2. Existing Conditions

Regional and Local Parks and Recreational facilities

The planning area is located within the Coachella Valley where each city operates and maintains local parks and other recreational open space and facilities. The valley is also host to a wide range of county, state and federal open space lands and parks, including Joshua Tree National Park, Mt. San Jacinto State Park, the Santa Rosa and San Jacinto Mountains National Monument and other public parks, monuments and open space areas. The Coachella valley and City are also host to a significant number of private and public golf courses, and a wide range of other private recreational facilities. Cathedral City has eleven developed parks and one adjacent to the new CV Link that total more than 73 acres, and the City also has an additional 146± acres of currently undeveloped park lands. In addition to the above, the City has developed nearly 30 miles of bike paths, trails and lanes on local streets.

3.13.3. Alternatives Impact Analysis

3.13.3.1. Alternative 1

3.13.3.1.1. Alternative 1 Impacts

- a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?*

Buildout of the Alternative 1 will result in a limited increase in the number of residential units and permanent population within the City compared to the Proposed Project, but the long-term increase under this alternative would nonetheless be substantial. Under Alternative 1, the proposed General Plan update would increase the City's population by approximately 115,593 residents based on 100 percent occupancy of all new residential units. These residents would create a demand for approximately 200 additional acres of parks and other recreational lands beyond that currently available for future development. Future residents would likely use both existing and planned parks and recreational facilities in the City and could also avail themselves of local, regional and state in the vicinity.

Similar to the Proposed Project, Alternative 1 demand for parks and other recreational space and facilities would grow over time and the City will need to plan to incrementally acquire these lands to accommodate future growth. Based on the current inventory of undeveloped parks lands in the City, it could accommodate an additional population of approximately 48,000 before additional lands would be needed. Under Alternative 1 and the other alternatives, the City should be able to incrementally acquire additional park lands and address future needs before they arise. Therefore, impacts would be less than significant, and comparable to the level of impact as the Proposed Project.

b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

As noted above, approximately 200 additional acres of future parkland could be needed to accommodate maximum City growth through buildout. The City should expect to acquire these lands through development exactions and in-kind land contributions as part of development impact assessments as provided for in the City Municipal Code. Approximately 3,600 acres of vacant land is currently available for residential planning and development or about 5.5 percent of these lands. The City also has extensive areas of lands dedicated to or planned for open space conservation, and portions of these lands may also be available for hiking and other “passive” recreational use without compromising the conservation value of these lands. Therefore, buildout of the Alternative 1 scenario can be accomplished without having an adverse effect on the environment and such impacts would be less than significant.

3.13.3.1.2. Alternative 1 Mitigation Measures

No mitigation measures are required. As noted above, the General Plan Parks and Recreation Element and the Open Space and Conservation Elements include policies and programs that will serve to effectively avoid, minimize and otherwise mitigate potentially significant impacts to community parks and recreation facilities and lands that could result from implementation of Alternative 1. Section 2.13.7 also includes avoidance, minimization and other measures that further ensure that the community’s future demand for parks and recreation lands will be met and in an environmentally responsible manner.

3.13.3.1.3. Alternative 1 Significance After Mitigation

Residual environmental effects associated with the implementation of the Alternative 1 project would essentially be the same as those for the Proposed Project. Through the implementation of applicable General Plan policies and programs, and the measures set forth in Section 2.13.7 of this EIR, potential impacts can be avoided, minimized and/or reduced to levels that are less than significant.

3.13.3.1.4. Alternative 1 Cumulative Impacts

A consideration of cumulative effects associated with parks and recreation resources includes the degree to which a project may trigger the construction or expansion of recreational facilities and would cause physical deterioration to the existing parks and recreation facilities. Future development associated with the Alternative 1 project would generate more population and demand for parks and related open space and facilities. As noted above, sufficient lands have already been acquired to accommodate a major portion of future demand and additional lands will be available to meet all of the City’s obligations. The significant areas of public lands and associated opportunities for recreation also ensure that the impacts associated with Alternative 1 will not be cumulatively considerable.

3.13.3.2. Alternative 2

3.13.3.2.1. Alternative 2 Impacts

a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

Buildout of the Alternative 2 will result in a limited increase in the number of residential units and permanent population within the City compared to the Proposed Project, but the long-term increase under this alternative would nonetheless be substantial. Under Alternative 2, the proposed General Plan update would increase the City’s population by approximately 82,435 residents based on 100 percent occupancy of all new residential units. These

residents would create a demand for approximately 100 additional acres of parks and other recreational lands beyond that currently available for future development. Future residents would likely use both existing and planned parks and recreational facilities in the City and could also avail themselves of local, regional and state in the vicinity.

Similar to the Proposed Project, Alternative 2 demand for parks and other recreational space and facilities would grow over time and the City will need to plan to incrementally acquire these lands to accommodate future growth. Based on the current inventory of undeveloped parks lands, the City could accommodate an additional population of approximately 48,000 before additional lands would be needed. Under Alternative 2 and the other alternatives, the City should be able to incrementally acquire additional park lands and address future needs before they arise. Therefore, impacts would be less than significant, and comparable to the level of impact as the Proposed Project.

b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

Buildout of Alternative 2 would require approximately 100 additional acres of future parkland to accommodate maximum City growth through buildout. The City should expect to acquire these lands through development exactions and in-kind land contributions as part of development impact assessments as provided for in the City Municipal Code. Approximately 3,600 acres of vacant land is currently available for residential planning and development or about 5.5 percent of these lands. The City also has extensive areas of lands dedicated to or planned for open space conservation, and portions of these lands may also be available for hiking and other “passive” recreational use without compromising the conservation value of these lands. Therefore, buildout of the Alternative 2 scenario can be accomplished without having an adverse effect on the environment and such impacts would be less than significant.

3.13.3.2.2. Alternative 2 Mitigation Measures

No mitigation measures are required. The General Plan Parks and Recreation Element and the Open Space and Conservation Elements include policies and programs that will serve to effectively avoid, minimize and otherwise mitigate potentially significant impacts to community parks and recreation facilities and lands that could result from implementation of Alternative 2. Section 2.13.7 also includes avoidance, minimization and other measures that further ensure that the community’s future demand for parks and recreation lands under Alternative 2 can be met and in an environmentally responsible manner.

3.13.3.2.3. Alternative 2 Significance After Mitigation

Residual environmental effects associated with the implementation of the Alternative 2 project would essentially be the same as those for the Proposed Project. Through the implementation of applicable General Plan policies and programs, and the measures set forth in Section 2.13.7 of this EIR, potential impacts can be avoided, minimized and/or reduced to levels that are less than significant.

3.13.3.2.4. Alternative 2 Cumulative Impacts

Cumulative effects associated with parks and recreation resources are gauged by the degree to which a project may trigger the construction or expansion of recreational facilities and would cause physical deterioration to the existing parks and recreation facilities. Future development associated with the Alternative 2 project would generate less population and demand for parks and related open space and facilities when compared to the other alternatives. As noted, sufficient lands have already been acquired to accommodate more than half of the future demand generated by Alternative 2, and additional lands will be available to meet all of the City’s obligations. The significant areas of public lands and associated opportunities for recreation also ensure that the impacts associated with Alternative 2 will not be cumulatively considerable.

3.13.3.3. Alternative 3

3.13.3.3.1. Alternative 3 Impacts

- a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?*

Buildout of the Alternative 3 will result in a limited decrease in the number of residential units and permanent population within the City compared to the Proposed Project, but the long-term increase under this alternative would nonetheless be substantial. Under Alternative 3, the proposed General Plan update would increase the City's population by approximately 103,756 residents based on 100 percent occupancy of all new residential units. These residents would create a demand for approximately 163 additional acres of parks and other recreational lands beyond that currently available for future development. Future residents would likely use both existing and planned parks and recreational facilities in the City and could also avail themselves of local, regional and state in the vicinity.

Similar to the Proposed Project, Alternative 3 demand for parks and other recreational space and facilities would grow over time and the City will need to plan to incrementally acquire these lands to accommodate future growth. Based on the current inventory of undeveloped parks lands, the City could accommodate an additional population of approximately 48,000 before additional lands would be needed. Under Alternative 3 and the other alternatives, the City should be able to incrementally acquire additional park lands and address future needs before they arise. Therefore, impacts would be less than significant, and comparable to the level of impact as the Proposed Project.

- b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?*

Buildout of Alternative 3 would require approximately 163 additional acres of future parkland to accommodate maximum City growth through buildout. The City can expect to acquire these lands through development exactions and in-kind land contributions as part of development impact assessments as provided for in the City Municipal Code. Approximately 3,600 acres of vacant land is currently available for residential planning and development or about 5.5 percent of these lands. The City also has extensive areas of lands dedicated to or planned for open space conservation, and portions of these lands may also be available for hiking and other "passive" recreational use without compromising the conservation value of these lands. Therefore, buildout of the Alternative 3 scenario can be accomplished without having an adverse effect on the environment and such impacts would be less than significant.

3.13.3.3.2. Alternative 3 Mitigation Measures

No mitigation measures are required. The General Plan Parks and Recreation Element and the Open Space and Conservation Elements include policies and programs that will serve to effectively avoid, minimize and otherwise mitigate potentially significant impacts to community parks and recreation facilities and lands that could result from implementation of Alternative 3. Section 2.13.7 also includes avoidance, minimization and other measures that further ensure that the community's future demand for parks and recreation lands under Alternative 3 can be met and in an environmentally responsible manner.

3.13.3.3.3. Alternative 3 Significance After Mitigation

Residual environmental effects associated with the implementation of the Alternative 3 project would essentially be the same as those for the Proposed Project. Through the implementation of applicable General Plan policies and programs, and the measures set forth in Section 2.3.7 of this EIR, potential impacts can be avoided, minimized and/or reduced to levels that are less than significant.

3.13.3.3.4. Alternative 3 Cumulative Impacts

Cumulative effects associated with parks and recreation resources are gauged by the degree to which a project may trigger the construction or expansion of recreational facilities and would cause physical deterioration to the existing parks and recreation facilities. Future development associated with the Alternative 3 project would generate slightly less population and demand for parks and related open space and facilities when compared to the Proposed Project. As noted, sufficient lands have already been acquired to accommodate close to half of the future demand generated by Alternative 3, and additional lands will be available to meet all of the City's obligations. The significant areas of public lands and associated opportunities for recreation also ensure that the impacts associated with Alternative 3 will not be cumulatively considerable.

3.13.4. Environmental Superior Alternative

At buildout, Alternative 2 would result in the fewest dwelling units and smallest population within the same area as the other alternatives. As a result, it would be expected to require the least amount of infrastructure and parks and recreational facilities and services expansion. In this regard, Alternative 2 is environmentally superior to the other project alternatives. However, by assigning low-density residential designations on some parcels of land that could be designated for more intensive uses, it does not fully capture the development potential of those parcels and could limit the amount of land available for parks and other recreation lands.

3.14 Population, Housing, and Socio-Economic Resources

3.14.1 Introduction

This section of the EIR analyzes the potential impacts associated with the project alternatives based on regional and local population, housing, and socio-economic conditions. It also addresses impacts associated with environmental justice in a broad context the considers whether the physical changes associated with each alternative would result in indirect adverse social or economic impacts. As with the other alternatives analysed, all are limited to changes to their respective land use maps and allocation models.

3.14.2 Existing Conditions

Population

Cathedral City is within the Coachella Valley region of central Riverside County. Riverside County has experienced rapid growth over recent decades; its 2018 population was estimated at 2.44 million.¹ The Coachella Valley includes nine incorporated cities and unincorporated land with a combined population of approximately 413,000.²

Cathedral City is the second most populous city in the Coachella Valley. Its 2018 population estimate was 54,466.³ The median age is 37.3 years. The City's population ethnicity is predominantly (76.9%) "white," with approximately 59.4% identifying themselves as Hispanic or Latino of any race.⁴

Housing

The Coachella Valley has a strong second home and vacation rental market. Regional housing products include a mix of single- and multi-family homes, and a smaller number of mobile homes. Cathedral City includes approximately 21,219 housing units, the majority (55.8%) of which are single-family detached units, and an average of 3.16 persons per household.⁵

Employment and Income

The Coachella Valley has a strong tourism and hospitality economy anchored by world-class hotels and spas, professional golf course and tennis tournaments, outdoor recreational opportunities, and music and film festivals. The eastern valley is characterized by agricultural operations that have made the Coachella Valley a top national producer of a variety of crops. The economy is also supported by a strong healthcare industry that includes several regional hospitals and treatment centers.

The two largest employment sectors in Cathedral City are "arts/entertainment, recreation, accommodation, and food service industries," which employs approximately 20% of the civilian labor force, and "educational services, health care, and social assistance," which also employs approximately 20%.⁶

¹ Population Estimates for Cities, Counties, and the State (Report E-1), January 1, 2018 and 2019, California Department of Finance.

² Population Estimates for Cities, Counties, and the State (Report E-1), January 1, 2018 and 2019, California Department of Finance; and 2013-2017 American Community Survey 5-Year Estimates.

³ City/County Population and Housing Estimates (Report E-5), January 1, 2018, California Department of Finance.

⁴ 2013-2017 American Community Survey 5-Year Estimates.

⁵ City/County Population and Housing Estimates (Report E-5), January 1, 2018, California Department of Finance.

⁶ 2013-2017 American Community Survey 5-Year Estimates.

Disadvantaged Communities

As defined by the California Environmental Protection Agency, “disadvantaged communities” include, but are not limited to, 1) areas disproportionately affected by environmental pollution and other hazards that can lead to negative health effects, exposure, or environmental degradation, 2) areas with concentrations of people that are of low income, high unemployment, low levels of home ownership, high rent burden, sensitive populations, or low levels of educational attainment. They also include “low-income areas” in which household incomes are at or below 80 percent of the statewide median income or household incomes are at or below the threshold designated as low income by the Department of Housing and Community Development.

Most of the Coachella Valley has no disadvantaged communities. However, several are designated in the eastern Coachella Valley communities of Indio, Coachella, and Mecca.⁷ There are none in Cathedral City.

3.14.3 Alternatives Impact Analysis

3.14.3.1 Alternative 1

3.14.3.1.1 Alternative 1 Impacts

- a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?*

Like the Proposed Project, implementation of Alternative 1 would facilitate new development in the City, as well as the extension of roads and other infrastructure, that would directly and indirectly result in substantial, *planned* population growth through 2040.

Impacts to Housing

As shown in the following table, buildout of Alternative 1 is projected to result in 36,580 new dwelling units. When combined with 21,219 existing units, there would be approximately 57,799 total units at buildout. This is 3,184 (6%) more dwelling units than projected at buildout of the proposed General Plan.

At buildout of Alternative 1, the two land use categories having the most dwelling units would be Mixed Use-Urban (18,195 units or 31.5%) and Low Density Residential (14,354 units or 24.8%). These land use categories and percentages are largely the same as the Proposed Project.

**Table 3.14-1
 Alternative 1 Projected Housing Units at Buildout**

| Land Use Category | Existing Units | Potential New Units | Buildout Units |
|--|----------------|---------------------|----------------|
| Hillside Reserve (1du/20ac) | - | 23 | 23 |
| Estate Residential (0-2du/ac) | 1 | 632 | 633 |
| Low Density Residential (2-4.5du/ac) | 11,841 | 2,513 | 14,354 |
| Resort Residential (3-6.5du/ac) | 5,153 | 3,450 | 8,603 |
| Medium Density Residential (4.5-10du/ac) | 4,224 | 2,807 | 7,031 |
| Medium-High Density Resid. (11-20du/ac) | - | 903 | 903 |
| High Density Residential (20-24du/ac) | - | 863 | 863 |
| Mixed Use – Neighborhood (25 du/ac) | - | 7,195 | 7,195 |
| Mixed Use – Urban (45 du/ac) | - | 18,195 | 18,195 |
| Total: | 21,219 | 36,580 | 57,799 |

⁷ CalEnviroScreen 3.0 database, June 2018 Update.

As with the Proposed Project, much of the new growth would occur north of I-10. Land use designations north of I-10 are the same under both the Proposed Project and Alternative 1, consistent with the approved land use plans of the North City Specific Plan and North City Extended Specific Plan. Future development in this part of the City would be subject to the development standards and provisions in the Specific Plans.

Impacts to Population

There are currently 54,466 residents in Cathedral City. Assuming 36,580 new units and 3.16 persons per household⁸, buildout of Alternative 1 is projected to result in an additional 115,593 residents, which assume 100 percent occupancy of all new dwelling units. At buildout, the total City population would be approximately 170,059 residents. This is 10,061 (6%) more residents than projected at maximum buildout of the proposed General Plan. This level of growth can be considered substantial; however, as explained in Section 2.14.6.a, given recent regional growth rates, it is unlikely that it would all occur by 2040.

Alternative 1 would be a long-range plan for future growth. Like the Proposed Project, growth would be *planned* and occur over many years; therefore, impacts would be less than significant, the same level of impact as the Proposed Project.

b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

As with the Proposed Project, Alternative 1 would not displace any existing people or housing, and no replacement housing would be needed. And, consistent with the Proposed Project, no impact would occur.

Environmental Justice

As explained above and in Section 2.14.5, there are no disadvantaged communities in Cathedral City. Therefore, like the Proposed Project, Alternative 1 would have no impact on disadvantaged communities.

Alternative 1 would result in implementation of the same policies and programs as the Proposed Project, which are expected to have positive impacts on issues associated with environmental justice. Like the Proposed Project, the Alternative 1 land use plan locates industrial land uses away from residential land uses, to the greatest extent practical. It would result in a complete streets network and enhanced multi-modal transportation links that benefit all segments of the population. It would include the Environmental Justice Element and the Healthy and Sustainable Community Element and their policies and programs that directly address potential social inequities. Alternative 1 impacts on environmental justice would be expected to be positive in the overall, the same as the proposed General Plan.

3.14.3.1.2 Alternative 1 Mitigation Measures

As with the Proposed Project, implementation of Alternative 1 would not require mitigation.

3.14.3.1.3 Alternative 1 Significance After Mitigation

As with the Proposed Project, the impacts of Alternative 1 would be less than significant.

3.14.3.1.4 Alternative 1 Cumulative Impacts

A consideration of cumulative effects associated with population, housing, and socio-economic conditions includes buildout of the Alternative 1 land use plan. Similar to the Proposed Project, it is very unlikely that buildout will actually occur within the Plan's 20-year horizon. Historically strong rates of development have been approximately

⁸ City/County Population and Housing Estimates (Report E-5), January 1, 2018, California Department of Finance.

one-third those required to see City buildout by 2040. Therefore, implementation of Alternative 1 would not result in either cumulatively considerable unplanned housing or population growth or displace existing housing in Cathedral City over the coming 20-year time frame.

3.14.3.2 Alternative 2

3.14.3.2.1 Alternative 2 Impacts

- a) *Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?*

Like the Proposed Project, Alternative 2 would facilitate new development in the City, as well as extension of roads and other infrastructure, that would directly and indirectly result in substantial, *planned* population growth through 2040.

Impacts to Housing

As shown in the following table, buildout of Alternative 2 is projected to result in 26,087 new dwelling units. When combined with 21,219 existing units, there would be approximately 47,306 total units at buildout. This is 7,309 (13%) fewer dwelling units than projected at buildout of the proposed General Plan.

At buildout of Alternative 2, the two land use categories having the most dwelling units would be Mixed Use-Urban (14,151 units or 30.0%) and Low Density Residential (15,799 units or 33.4%). Under Alternative 2, the greatest percentage of units would be low-density. Under the Proposed Project, the greatest percentage of units would be Mixed Use-Urban.

**Table 3.14-2
 Alternative 2 Projected Housing Units at Buildout**

| Land Use Category | Existing Units | Potential New Units | Buildout Units |
|--|----------------|---------------------|----------------|
| Hillside Reserve (1du/20ac) | - | 23 | 23 |
| Estate Residential (0-2du/ac) | 1 | 632 | 633 |
| Low Density Residential (2-4.5du/ac) | 11,841 | 3,958 | 15,799 |
| Resort Residential (3-6.5du/ac) | 5,153 | 3,467 | 8,620 |
| Medium Density Residential (4.5-10du/ac) | 4,224 | 955 | 5,179 |
| Medium-High Density Resid. (11-20du/ac) | - | 170 | 170 |
| High Density Residential (20-24du/ac) | - | 684 | 684 |
| Mixed Use – Neighborhood (25 du/ac) | - | 2,048 | 2,048 |
| Mixed Use – Urban (45 du/ac) | - | 14,151 | 14,151 |
| Total: | 21,219 | 26,087 | 47,306 |

Like the Proposed Project, much of the new growth would occur north of I-10. Land use designations north of I-10 are the same under both the Proposed Project and Alternative 2, consistent with the approved land use plans of the North City Specific Plan and North City Extended Specific Plan. Future development in this part of the City would be subject to the development standards and provisions in the Specific Plans.

Impacts to Population

There are currently 54,466 residents in Cathedral City. Assuming 26,087 new units and 3.16 persons per household⁹, buildout of Alternative 2 is projected to result in an additional 82,435 residents. At buildout, the total City population would be approximately 136,901 residents. This is 23,097 (14%) fewer residents than projected at buildout of the proposed General Plan. This level of growth can be considered substantial; however, as explained in Section 2.14.6.a, given recent regional growth rates, it is unlikely that it would all occur by 2040.

⁹ City/County Population and Housing Estimates (Report E-5), January 1, 2018, California Department of Finance.

Alternative 2 would be a long-range plan for future growth. Like the Proposed Project, growth would be *planned* and occur over many years; therefore, impacts would be less than significant, the same level of impact as the Proposed Project.

b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

Like the Proposed Project, Alternative 2 would not displace substantial numbers of existing people or housing or require the construction of replacement housing elsewhere. Like the Proposed Project, no impact would occur.

Environmental Justice

As stated previously, Cathedral City contains no disadvantaged communities, as defined by the California Environmental Protection Agency. Therefore, as with the Proposed Project, Alternative 2 would have no impact on disadvantage communities.

As with the proposed General Plan, Alternative 2 would be expected to have a positive impact on issues associated with environmental justice. Its land use plan locates industrial land uses away from residential uses to the greatest extent practical. It would include an Environmental Justice Element and Healthy and Sustainable Community Element that address issues of social equity and would include policies and programs directed at implementing a complete streets network that expands transportation opportunities for all segments of the population.

3.14.3.2.2 Alternative 2 Mitigation Measures

As with the Proposed Project, no mitigation measures would be necessary.

3.14.3.2.3 Alternative 2 Significance After Mitigation

As with the Proposed Project, the impacts of Alternative 2 would be less than significant.

3.14.3.2.4 Alternative 2 Cumulative Impacts

The cumulative impacts of Alternative 2 are similar to the Proposed Project, in that it is very unlikely that buildout will actually occur within the Plan's 20-year horizon. Historically strong rates of development have been approximately one-third those required to see City buildout by 2040. Therefore, implementation of Alternative 2 would not result in either cumulatively considerable unplanned housing or population growth or displace existing housing in Cathedral City over the coming 20-year time frame.

3.14.3.3 Alternative 3 (No Project)

3.14.3.3.1 Alternative 3 Impacts

a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

As with the Proposed Project, the No Project Alternative 3 would facilitate new development in the City, as well as extension of roads and other infrastructure, that would directly and indirectly result in substantial, *planned* population growth through 2040.

Impacts to Housing

As shown in the following table, buildout of the No Project Alternative 3 is projected to result in 32,834 new dwelling units. When combined with 21,219 existing units, there would be approximately 54,053 total units at buildout. This is 562 (1%) fewer dwelling units than projected at buildout of the proposed General Plan.

At buildout of the No Project Alternative 3, the two land use categories having the most dwelling units would be Mixed Use-Urban (18,194 units or 33.7%) and Low Density Residential (15,140 units or 28.0%). These land use categories and percentages are very close to those of the Proposed Project.

**Table 3.14-3 No Project Alternative
 Projected Housing Units at Buildout**

| Land Use Category | Existing Units | Potential New Units | Buildout Units |
|--|----------------|---------------------|----------------|
| Hillside Reserve (1du/20ac) | - | 23 | 23 |
| Estate Residential (0-2du/ac) | 1 | 632 | 633 |
| Low Density Residential (2-4.5du/ac) | 11,841 | 3,299 | 15,140 |
| Resort Residential (3-6.5du/ac) | 5,153 | 4,604 | 9,757 |
| Medium Density Residential (4.5-10du/ac) | 4,224 | 751 | 4,975 |
| Medium-High Density Resid. (11-20du/ac) | - | 212 | 212 |
| High Density Residential (20-24du/ac) | - | 696 | 696 |
| Mixed Use – Neighborhood (25 du/ac) | - | 4,423 | 4,423 |
| Mixed Use – Urban (45 du/ac) | | 18,194 | 18,194 |
| Total: | 21,219 | 32,834 | 54,053 |

As with the Proposed Project, much of the new growth would occur north of I-10. Land use designations north of I-10 are the same under both the Proposed Project and the No Project Alternative, consistent with the approved land use plans of the North City Specific Plan and North City Extended Specific Plan. Future development in this part of the City would be subject to the development standards and provisions on the Specific Plans.

Impacts to Population

There are currently 54,466 residents in Cathedral City. Assuming 32,834 new units and 3.16 persons per household¹⁰, buildout of the No Project Alternative is projected to result in an additional 103,756 residents. At buildout, the total City population would be approximately 158,222 residents. This is 1,776 (1%) fewer residents than projected at buildout of the proposed General Plan. This level of growth can be considered substantial; however, as explained in Section 2.14.6.a, given recent regional growth rates, it is unlikely that it would all occur by 2040.

The No Project Alternative 3 represents the continued implementation of the current General Plan, an adopted long-range plan for future growth. Like the Proposed Project, buildout growth would be *planned* and occur over many years; therefore, impacts would be less than significant, the same level of impact as the Proposed Project.

c) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

The No Project Alternative 3 would not result in the displacement of people or housing, necessitating the construction of replacement housing elsewhere. Like the Proposed Project, no impact would occur.

¹⁰ City/County Population and Housing Estimates (Report E-5), January 1, 2018, California Department of Finance.

Environmental Justice

As stated previously, Cathedral City contains no disadvantaged communities, as defined by the California Environmental Protection Agency. Therefore, like the Proposed Project, the No Project Alternative would have no impact on disadvantaged communities.

The current General Plan was drafted and adopted before Senate Bill 1000 was enacted, requiring California cities to include an Environmental Justice Element in their General Plans and to identify “disadvantaged communities” and strategies to mitigate and reduce environment-related health risks to them. Therefore, it does not directly address the issue. The current General Plan Housing Element describes affordable housing programs, needs, and constraints and includes policies and programs to address them, and the Circulation Element includes policies to provide multi-modal access to all parts of the community. However, these efforts are limited compared to those of the Proposed Project, which evaluates community health indicators and addresses a broad range of social inequities, such as food insecurity, climate change, and community resilience. Whereas the Proposed Project would have a net positive impact on environmental justice issues, the No Project Alternative would be expected to have a neutral or even negative impact on them.

3.14.3.3.2 Alternative 3 Mitigation Measures

As with the Proposed Project, no mitigation measures would be necessary.

3.14.3.3.3 Alternative 3 Significance After Mitigation

As with the Proposed Project, the impacts of Alternative 3 would be less than significant.

3.14.3.3.4 Alternative 3 Cumulative Impacts

The cumulative impacts of Alternative 3 are similar to the Proposed Project, in that it is very unlikely that buildout will actually occur within the Plan’s 20-year horizon. Historically strong rates of development have been approximately one-third those required to see City buildout by 2040. Therefore, implementation of Alternative 3 would not result in either cumulatively considerable housing or population growth in Cathedral City over the coming 20-year time frame.

3.14.4 Environmental Superior Alternative

Population

At buildout, Alternative 2 would result in the fewest dwelling units and smallest population within the same area as the other alternatives. As a result, it would be expected to require the least amount of infrastructure and public services expansion, such as the extension of roads and utilities or enrollments at local schools. In this regard, Alternative 2 is environmentally superior to the other project alternatives. However, by assigning low-density residential designations on some parcels of land that could be designated for more intensive uses, it does not fully capture the development potential of those parcels.

Environmental Justice

All project alternatives would include targeted policies and programs that specifically address environmental justice, in compliance with Senate Bill 1000. In this regard, there is no superior alternative. On the basis of land use allocation models and the numbers and densities of housing that would be facilitated by each alternative, Alternative 1 would be somewhat superior to the other project alternatives in that it could create more opportunities for affordable market rate housing that could better benefit those of lower incomes.

3.15. Public Utilities and Service Systems

3.15.1. Introduction

This section of the EIR evaluates the potential for the project alternatives to directly affect public and utility services due to the to the proposed Cathedral City General Plan update. Public services include fire protection, police protection, school services, and library services. Utility systems include water, wastewater, and solid waste facilities, as well as electricity, natural gas, and telecommunications services within the General Plan area and the surrounding region. The analysis considers whether implementation of the project alternatives would affect the ability of service providers to maintain acceptable service or other performance objectives, resulting in the need for new or expanded facilities, staffing or other capabilities.

3.15.2. Existing Conditions

Fire Protection Services

The Cathedral City Fire Department provides fire protection services to the General Plan planning area. Its staff currently includes 43 sworn fire personnel (42 firefighters and 1 Fire Chief), including 14 firefighters on-duty 24/7/365, 2 administrative personnel, and 1 full-time fire inspector. Current firefighter staffing levels represent a ratio of about 0.77 firefighters to every 1,000 residents. (See Section 2.15.5 for details).

Law Enforcement Services

The Cathedral City Police Department provides police protection to the planning area. The Cathedral City Police Station is located at 68-700 Avenida Lalo Guerrero. The Police Department's Strategic Plan 2016-2020 recommends a minimum officer-to-resident population ratio of no less than one officer per thousand residents.¹ With 52 sworn officers, the City currently provides approximately 0.90 officers for every 1,000 residents. According to the Strategic Plan, the public considers an emergency police response time within 6 minutes or less to be acceptable. The City's Police Department currently has an emergency (Priority 1) response time of 7 minutes or less. Emergency and non-emergency calls for Police and Fire are received by the city's Emergency Communications Center. The Cathedral City Dispatch Center is staffed 24 hours a day, 7 days a week, to answer emergency and non-emergency phone calls. (See Section 2.15.5 for details).

Education

The Palm Springs Unified School District (PSUSD) provides kindergarten through 12th grade public educational services and facilities to the City of Cathedral City. In 2019, PSUSD schools enrolled approximately 21,680 students in 28 schools and an independent study program. PSUSD operates nine schools within Cathedral City, including five elementary, two middle, one high, and one continuation high school. (See Section 2.15.5 for details).

Parks and Recreational Services

Parks and recreation services within the City of Cathedral City are owned and managed by the City. Discussion of City parks is provided in Sections 2.13 and 3.13, Parks and Recreational Facilities, of this DEIR.

Domestic Water

Domestic water for the City of Cathedral City is provided by two water agencies: Coachella Valley Water District (CVWD) and Desert Water Agency (DWA). These service providers provide production wells, storage and a range of water distribution lines throughout the City and provide a high level of service to meet domestic demand and fire flows (See Section 2.15.5 for details).

¹ Cathedral City Police Department Strategic Plan 2016-2020.

Wastewater Collection and Treatment

CVWD and DWA provide wastewater collection services to the planning area. Wastewater treatment is provided by CWD, which collects flows from its system and that of DWA and conveys wastewater to its water reclamation plant located on Cook Street in Palm Desert (See Section 2.15.5 for details).

Electricity

Southern California Edison (SCE) provides electrical service to the City of Cathedral City and many areas of the Coachella Valley, serving approximately fifteen (15) million people within a service area of approximately 50,000 square miles. Within the City, SCE maintains substations and a full range of transmission and distribution lines, including high voltage lines in the northern portion of the City (See Section 2.15.5 for details).

Natural Gas

Southern California Gas (SoCalGas; The Gas Company) provides natural gas services and facilities to Cathedral City. Within Cathedral City, major high-pressure gas lines are located within the rights-of-way of Date Palm Drive, Vista Chino, Varner Road and Mountain View Road, and along East Palm Canyon Drive. Medium-pressure distribution lines typically consist of plastic pipes (older pipes may be constructed of steel) with pressures less than 60 psi. Most residences are fed through pipes rated at 25 to 40 psi. The Cove and most other residential neighborhoods in the planning area are connected to medium-pressure distribution lines. (See Section 2.15.5 for details).

Telecommunications

Cable television and internet services are provided to the City by Spectrum and Frontier. The City also has access to Channel 17, a public service channel, which it uses to broadcast City Council meetings. (See Section 2.15.5 for details).

Solid Waste Management

Burrtec Waste Industries provides solid waste collection and disposal services to Cathedral City through a franchise agreement. The City's recycling program has proven beneficial in the preservation of landfill space for non-recyclable materials. Green waste is recycled at BioMass in Thermal. Other recyclables, including glass, plastic and newspaper are transported by a third-party hauler to a recycling company in Los Angeles. (See Section 2.15.5 for details).

3.15.3. Alternatives Impact Analysis

3.15.3.1. Alternative 1

3.15.3.1.1. Alternative 1 Impacts

Public Services

a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

- i) Fire protection?*
- ii) Police protection?*
- iii) Schools?*
- iv) Parks?*
- v) Other public facilities?*

Utilities and Service Systems

- a) *Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects. (see Section 2.10 addressing stormwater)*
- b) *Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years.*
- c) *Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments.*
- d) *Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals.*
- e) *Comply with federal, state, and local management and reduction statutes and regulations related to solid waste.*

Fire Protection, Police, School, Parks and other Public Facilities

Compared to the Proposed Project, new development under the Alternative 1 would increase demand for fire protection services, police services, school services, and library services. To maintain or achieve acceptable service standards, new or physically altered fire, police, school, parks and other public facilities would be required. When compared to the Proposed Project, Alternative 1 would accommodate the most residential units and population growth of all the alternatives and, therefore, would result in an increased need for fire and police staffing and facilities, more or enlarged schools, additional parks and other public facilities to be constructed or expanded. Therefore, impacts would be increased as compared to the Proposed Project. However, impacts would still be considered significant and the mitigation identified in Section 2.15.7 would be required. After mitigation, impacts related to school facilities would be less than significant.

- a) *Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects. (see Section 2.10 addressing stormwater)*

Domestic Water and Wastewater Treatment

Implementation of Alternative 1 would allow new development which would require an expanded domestic water system, and additional connections to the wastewater collection and treatment system. Similar to the Proposed Project, all future development projects facilitated by Alternative 1 would be required to comply with all applicable federal, state, and local regulations related to domestic water and waste water disposal, including CVWD and DWA standards. Compliance with such regulations, policies and programs set forth in the Public Services and Utilities Sub-Element, and Section 2.15.7 of this EIR would ensure that impacts related to domestic water and wastewater disposal are less than significant. Therefore, the Alternative 1 would result in a similar impact to wastewater disposal systems as compared to the Proposed Project.

Electricity

New development under the Alternative 1 scenario would increase the demand for electricity beyond that associated with the Proposed Project. To maintain or achieve acceptable service standards, new or physically altered electric power stations, whether from conventional or renewable sources, would be required, and additional distribution and

transmission lines and substations could also be needed. Compared to the Proposed Project, Alternative 1 would accommodate more residential units and population growth, and more industrial space; therefore, it would result in an increased need for sources of electricity and related facilities. Therefore, impacts would be increased compared to the Proposed Project and the other project alternatives. However, implementation of policies and programs set forth in the Public Services and Utilities Sub-Element and Section 2.15.7 of this EIR would ensure impacts related to electricity and related facilities would be less than significant.

Natural Gas

New development under the Alternative 1 scenario would increase the future demand for natural gas and related services in the planning area, compared to the other project alternatives and the Proposed Project. New or physically altered natural gas pumping/compressing stations would be required to maintain or achieve acceptable supplies and meet service requirement for new development. When compared to the Proposed Project, Alternative 1 would accommodate more residential units and population growth, and more industrial space. Therefore, Alternative 1 would result in an increased potential demand for natural gas and related facilities. Therefore, impacts would be somewhat greater under Alternative 1 compared to the Proposed Project. However, implementation of policies and programs set forth in the Public Services and Utilities Sub-Element and Section 2.15.7 of this EIR would ensure impacts related to natural gas and related services and facilities would be less than significant.

Telecommunications

New or physically altered cable television and internet services would be required for the new developments in the City under Alternative 1. When compared to the Proposed Project, Alternative 1 would accommodate more residential units and population growth and, therefore, would result in an increased need for cable television, internet services and related facilities to be constructed or expanded. Therefore, impacts would be increased as compared to the Proposed Project. However, implementation of policies and programs set forth in the Public Services and Utilities Sub-Element and Section 2.15.7 of this EIR would ensure impacts related to telecommunications services and related facilities would be less than significant.

Solid Waste Management

Compared to the Proposed Project, Alternative 1 would accommodate more residential units and population growth, and would also accommodate more industrial development. Therefore, this alternative would generate an increased need for solid waste collection and disposal services, and could accelerate the need for additional landfill space. Therefore, impacts would be somewhat greater compared to the Proposed Project. However, implementation of policies and programs set forth in the Public Services and Utilities Sub-Element and Section 2.15.7 of this EIR would ensure impacts related to the solid waste collection and disposal services, as well as the possible increased demand for landfill space, would be less than significant.

b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

As discussed above, CVWD and DWA provide domestic water to Cathedral City. Future development facilitated by the Alternative 1 scenario would increase City population and commercial and industrial space, as well as park lands, in the planning area. At Alternative 1 buildout, a total of approximately 57,799 residential units could be developed within the planning area. Commercial uses could increase to 13,639,337 square feet, and industrial uses could increase to approximately 17,052,102 square feet. Implementation of Alternative 1 would result in a total citywide population of 170,059 persons at buildout. This increase in growth and development would result in an increase in domestic water demand beyond that projected for the Proposed Project. Using CVWD's annual water consumption factors, buildout Alternative 1 could result in the demand for approximately 20,843 acre-feet per year (AFY) of domestic water (Table 3.15-2).

**Table 3.15-1 Alternative 1
 Estimated Water Demand at Buildout**

| Land Use | CVWD Water Consumption Factor* | Conditions at Alternative 1 Buildout (2040) | Total Water Demand (AFY) at Alternative 1 Buildout (2040) |
|---------------------------|--|---|---|
| Single-Family Residential | 2.31 acre-feet per acre per year (AFY) | 6,628.58 acres | 15,312.02 |
| Multi-Family Residential | 2.06 acre-feet per acre per year (AFY) | 864.93 acres | 1,781.76 |
| Commercial | 1.92 acre-feet per acre per year (AFY) | 1,635.06 acres | 3,139.32 |
| Industrial | 0.51 acre-feet per acre per year (AFY) | 1,195.41 acres | 609.66 |
| TOTAL | | | 20,842.76 |

* CVWD’s annual water consumption factors from Supplemental Water Supply Program and Fee Study Prepared for the City of Coachella in 2016.

The planning area is served by CVWD and DWA. According to CVWD’s 2015 Urban Water Management Plan (UWMP), the urban water demands in the CVWD service area are estimated to grow from 114,600 AFY in 2020 to 194,300 AFY in 2040.² According to DWA’s 2015 UWMP, the urban water demands in the DWA service area are estimated to grow from 42,708 AFY in 2020 to 50,575 AFY in 2040.³ At Alternative 1 buildout, the water demand in Cathedral City would represent approximately 8.5 percent of the total projected 2040 water demand of 244,875 AF for both CVWD and DWA combined.

According to CVWD’s and DWA’s 2015 UWMP, available water supplies are sufficient to meet the anticipated demand for 2020 through 2040 during normal, single dry, and multiple dry water years for Alternative 1 and all of the project alternatives, including the Proposed Project. This result is based on the volume of water available in the aquifer, CVWD’s Colorado River contract supply, State Water Project (SWP) Table A amounts, water rights and water supply contracts, and CVWD’s and DWA’s commitments to eliminate overdraft and reduce per capita water use in CVWD’s and DWA’s service area.

In addition, the Alternative 1 scenario includes policies and implementation programs that seek to reduce water demand and protect water resources in the planning area. Policy 6.2 of the Water, Sewer and Utilities Sub-Element requires the City to monitor resource management activities of the CVWD, DWA, and CRWQCB to preserve and protect water resources and quality.

In summary, implementation of Alternative 1 would result in increased demand for domestic water as the population increases and additional development occurs in the planning area. The City will work with water agencies to assure sufficient water resources would be available in the future during normal, single dry and multiple dry years. Implementation of policies and programs set forth in the Public Services and Utilities Sub-Element and Section 2.15.7 of this EIR would ensure impacts related to water supplies, would be less than significant.

- c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project’s projected demand in addition to the provider’s existing commitments?**

² 2015 Urban Water Management Plan (UWMP) for CVWD, Prepared by MWH in July 2016.

³ 2015 Urban Water Management Plan (UWMP) for DWA, Prepared by Krieger and Stewart Engineering Consultants in June 2016.

Projected development under Alternative 1 would increase the generation of wastewater compared to the Proposed Project and the other alternatives. All wastewater collected in Cathedral City is treated at CVWD's Cook Street water reclamation plant (WRP-10), which currently treats approximately 15 million gallons of wastewater per day.⁴ CVWD continually increases the capacity of its wastewater reclamation facilities by constructing new treatment ponds, aeration plants, and other structures.

Alternative 1 would accommodate a total of up to 57,799 residential units, 13,639,337 square feet of commercial uses, and 17,052,102 square feet of industrial space, in addition to existing development. Depending on location, new connections would receive wastewater treatment through CVWD facilities. Currently, the majority of the planning area is developed, and the main wastewater treatment lines and infrastructure are already in place. Future development under Alternative 1 would be required to connect to existing main wastewater collection system. To ensure adequate collection and treatment system capacity to meet the growing needs of the City, CVWD and DWA have established long-range plans to address future demands that can adequately address the needs of all project alternatives and the Proposed Project.

In addition, policies and programs set forth in the Proposed Project also apply to Alternative 1 and address potential impacts to wastewater treatment facilities in the City. Policy 6.1 of the Water, Sewer and Utilities Sub-Element encourages CVWD and DWA to implement short- and long-term plans for an integrated, city-wide sewer system. Program 6.1.1 requires the City and service agencies to evaluate a wide range of methods to finance the expansion of the sewer system. Policies 6.2 and 6.3 of the Water, Sewer and Utilities Sub-Element require the City to monitor resource management activities of the CVWD, DWA, and CRWQCB to preserve and protect water resources and quality.

Overall, new wastewater treatment facilities or expansion of existing wastewater treatment facilities could be required as the population and corresponding demand for services increases. However, each wastewater treatment facility would be evaluated on a project-by-project basis to assure that environmental impacts are minimized or mitigated, as needed. Implementation of policies and programs set forth in the Public Services and Utilities Sub-Element and measures set forth in Section 2.15.7 of this EIR would ensure impacts related to water supplies, would be less than significant. Therefore, buildout of Alternative 1 would result in less than significant impacts related to wastewater treatment facilities; no mitigation is required.

- d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?*
- e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?*

The City contracts with Burrtec for solid waste collection and disposal services. Future residential development facilitated by the Alternative 1 scenario would increase the population in the planning area and also increase the demand for services from additional industrial development. At Alternative 1 buildout, approximately 57,799 residential units could be built within the planning area. Commercial uses could total 13,639,337 square feet, and industrial uses could total 17,781,959 square feet. Implementation of the Alternative 1 scenario would result in a population increase of approximately 115,593 new residents, resulting in a total citywide population of 170,059 persons at buildout of Alternative 1. This increase in growth and development would result in an increase in solid waste generation, and increased demand for solid waste services throughout the City. Using solid waste generation factor provided by CalRecycle, buildout of Alternative 1 could result in the generation of approximately 85,428 tons per year of solid waste, assuming a 50% diversion rate (Table 3.15-2).

⁴ CVWD's 2015 Urban Water Management Plan (Page 6-22).

**Table 3.15-2 Alternative 1
 Estimated Solid Waste Disposal at Alternative 1 Buildout**

| Land Use | CIWMB Disposal Rates | Conditions at Alternative 1 Buildout (2040) | Solid Waste Disposal (pounds per day) | Solid Waste Disposal (tons per year) |
|----------------------------|----------------------------------|---|---------------------------------------|--------------------------------------|
| Residential | 5.2 pounds/resident/day* | 170,059 persons | 884,307 | 161,386 |
| Commercial | 5 pounds/1000 square feet /day** | 13,639,337 square feet | 68,197 | 12,446 |
| Industrial | 5 pounds/1000 square feet /day** | 17,052,102 square feet | 85,261 | 15,560 |
| TOTAL | | | 1,037,765 | 189,392 |
| TOTAL (with 50% diversion) | | | 518,883 | 94,696 |

* California’s 2017 Per Capita Disposal Rate, using SB 1016’s measurement system, by CalRecycle.

**Estimated Solid Waste Generation Rates by CalRecycle.

As shown in Table 3.15-2, buildout of the Alternative 1 scenario would result in solid waste disposal of approximately 1,037,765 pounds per day, or 189,392 tons per year. State law (AB 939) requires a 50 percent diversion of solid waste from landfills; after diversion, solid waste disposal with Alternative 1 buildout is projected to be 518,883 pounds per day, or 94,696 tons per year. As discussed above, the three landfills serving the region have a combined remaining capacity of 178.8 million cubic yards. Waste generated by the development under Alternative 1 would not exceed the capacity of these landfills.

Cathedral City, Burrtec Waste Industries, and landfills serving Cathedral City are required to comply with applicable solid waste management and reduction statutes and regulations. Alternative 1 would have no significant impact on their compliance with these requirements.

Overall, with continuing adherence to the requirements of AB 939 and implementation of policies and programs set forth in the Public Services and Utilities Sub-Element and measures set forth in Section 2.15.7 of this EIR, impacts related to solid waste management would be less than significant.

3.15.3.1.2. Alternative 1 Mitigation Measures

As discussed above, existing service providers and utilities have established near and long-term plans to meet the demands of future development in the City and the region. With the implementation of the policies and programs set forth in the Public Services and Utilities Sub-Element of the General Plan, and the avoidance, minimization and other measures set forth in Section 2.15.7 of this EIR, implementation of the Alternative 1 scenario would result in less than significant impacts.

3.15.3.1.3. Alternative 1 Significance After Mitigation

Residual environmental effects associated with the implementation of the Alternative 1 project would be comparable to those for the Proposed Project. Through the application of the applicable General Plan policies and programs, and the mitigation measures set forth in Section 2.15.7 of this EIR, potential impacts can be avoided, minimized and/or reduced to levels that are less than significant.

3.15.3.1.4. Alternative 1 Cumulative Impacts

Public Services

Future development associated with the Alternative 1 project would require the expansion of public services and facilities. However, implementation of Alternative 1 would gradually increase population in the planning area, which would increase the demand for public services, thus requiring additional staffing, equipment, and facilities. Such growth would be consistent with anticipated long-term, regional growth in the Coachella Valley and would

contribute incrementally to a broader increase in demand for these services. While some services are solely managed by the City, others are provided by other agencies (Riverside County Library District and Palm Springs Unified School District) that also serve surrounding communities and must balance resources to serve a broader area that extends beyond the city boundaries. Proposed General Plan policies and programs that are applicable to Alternative 1 require the City to monitor growth and expand services as needed, and to work collaboratively with various agencies to assure adequate services are provided. Proposed programs and policies ensure impacts will be less than significant and the project's impacts will be less than cumulatively considerable.

Utilities and Service Systems

Development facilitated by Alternative 1, in combination with all other development within the service boundaries of utility providers, would result in increased demand for electricity, natural gas, water, wastewater, and solid waste resources and services. As private companies, SCE and SoCalGas continuously plan for growth and expand their infrastructure according to demand. Quasi-public agencies, such as CVWD and DWA, work with regional communities, including Cathedral City, to plan for growth. Alternative 1 would implement policies and programs that require the City to coordinate with local service providers to plan for future growth, require developers to contribute to the installation and operation of expanded infrastructure, and implement measures to reduce consumption of resources. Alternative 1 would minimize potential impacts such that they would not be cumulatively considerable.

3.15.3.2. Alternative 2

Public Services

- a) *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:*
 - i) *Fire protection?*
 - ii) *Police protection?*
 - iii) *Schools?*
 - iv) *Parks?*
 - v) *Other public facilities?*

Utilities and Service Systems

- a) *Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects. (see Section 2.10 addressing stormwater)*
- b) *Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years.*
- c) *Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments.*
- d) *Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals.*

- e) *Comply with federal, state, and local management and reduction statutes and regulations related to solid waste.*

Fire Protection, Police, School, Parks and other Public Facilities

Alternative 2 would decrease demand for fire protection services, police services, school services, and library services when compared to the Proposed Project, but would result in an increased demand for service compared to current conditions. To maintain or achieve acceptable service standards, new or physically altered fire, police, school, parks and other public facilities would be required. When compared to the proposed project, Alternative 2 would accommodate fewer residential units and lower population growth and less commercial square footage, and fewer new jobs. This would require a lower demand for fire and police staffing and facilities, fewer new or expanded schools, and less land for parks and other public facilities. Therefore, impacts would be lower as compared to the Proposed Project. However, because of growth over current conditions, impacts would still be considered significant and the mitigation identified in Section 2.15.7 would be required. After mitigation, impacts related to school facilities would be less than significant.

- a) *Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects. (see Section 2.10 addressing stormwater)*

Domestic Water and Wastewater Treatment

Implementation of Alternative 2 would allow new development which would require an expanded domestic water system, and additional connections to the wastewater collection and treatment system, but to a lesser extent. Similar to the Proposed Project, all future development projects facilitated by Alternative 2 would be required to comply with all applicable federal, state, and local regulations related to domestic water and waste water disposal, including CVWD and DWA standards. Compliance with such regulations, policies and programs set forth in the Public Services and Utilities Sub-Element, and Section 2.15.7 of this EIR would ensure that impacts related to domestic water and wastewater disposal are less than significant. Therefore, Alternative 2 would result in a reduced impact to wastewater disposal systems as compared to the Proposed Project or Alternative 1.

Electricity

New development under Alternative 2 would decrease the demand for electricity when compared to that associated with the Proposed Project. To accommodate the growth under this Alternative, however, and to maintain or achieve acceptable service standards, new or physically altered electric power stations, whether from conventional or renewable sources, would be required, and additional distribution and transmission lines and substations could also be needed. Compared to the Proposed Project, Alternative 2 would accommodate fewer residential units and population growth, less commercial square footage, and more industrial space; therefore, it would result in a decreased need for sources of electricity and related facilities when compared to the Proposed Project. Therefore, impacts would be reduced compared to the Proposed Project. However, implementation of policies and programs set forth in the Public Services and Utilities Sub-Element and Section 2.15.7 of this EIR would still be applicable, and impacts related to electricity and related facilities would be less than significant.

Natural Gas

New development under Alternative 2 would decrease the future demand for natural gas and related services in the planning area, compared to the other project alternatives and the Proposed Project. New or physically altered natural gas pumping/compressing stations would be required to maintain or achieve acceptable supplies and meet service requirement for new development. When compared to the Proposed Project, Alternative 2 would accommodate fewer residential units and population growth, less commercial development and more industrial space. Therefore, Alternative 2 would result in a decreased potential demand for natural gas and related facilities. Therefore, impacts would be reduced under Alternative 2 compared to the Proposed Project. However, implementation of policies and programs set forth in the Public Services and Utilities Sub-Element and Section 2.15.7 of this EIR would still be required to ensure impacts related to natural gas and related services and facilities would be less than significant.

Telecommunications

New or physically altered cable television and internet services would be required for the new developments in the City under Alternative 2. When compared to the proposed project, Alternative 2 would accommodate fewer residential units and population growth, and less commercial square footage, and would result in a decreased need for cable television, internet services and related facilities to be constructed or expanded. Therefore, impacts would be decreased as compared to the proposed project. However, implementation of policies and programs set forth in the Public Services and Utilities Sub-Element and Section 2.15.7 of this EIR would still be required, and would ensure that impacts related to telecommunications services and related facilities would be less than significant.

Solid Waste Management

Compared to the Proposed Project, Alternative 2 would accommodate fewer residential units and population growth, less commercial square footage and more industrial development. Therefore, this alternative would generate a decreased need for solid waste collection and disposal services, when compared to the Proposed Project. This Alternative, however, would still result in a need for additional landfill space. Therefore, impacts would be less when compared to the Proposed Project. Implementation of policies and programs set forth in the Public Services and Utilities Sub-Element and Section 2.15.7 of this EIR would still be required to ensure that impacts related to the solid waste collection and disposal services would be less than significant.

b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

As discussed above, CVWD and DWA provide domestic water to Cathedral City. Future development under the Alternative 2 scenario would decrease City population and commercial space, and increase industrial space. Additional park lands would still be required in the planning area. At Alternative 2 buildout, a total of approximately 47,306 residential units could be developed within the planning area. Commercial uses could decrease to 13,135,740 square feet, and industrial uses could increase to approximately 17,070,615 square feet. Implementation of Alternative 2 would result in a total citywide population of 136,901 persons at buildout. This decrease in growth and development would result in a decrease in domestic water demand than that projected for the Proposed Project, and all other alternatives. Using CVWD’s annual water consumption factors, buildout of Alternative 2 could result in the demand for approximately 20,897 acre-feet per year (AFY) of domestic water (Table 3.15-3).

**Table 3.15-3 Alternative 2
 Estimated Water Demand at Buildout**

| Land Use | CVWD Water Consumption Factor* | Conditions at Alternative 2 Buildout (2040) | Total Water Demand (AFY) at Alternative 2 Buildout (2040) |
|---------------------------|--|---|---|
| Single-Family Residential | 2.31 acre-feet per acre per year (AFY) | 6,845.00 acres | 15,811.95 |
| Multi-Family Residential | 2.06 acre-feet per acre per year (AFY) | 697.16 acres | 1,436.15 |
| Commercial | 1.92 acre-feet per acre per year (AFY) | 1,582.51 acres | 3,038.42 |
| Industrial | 0.51 acre-feet per acre per year (AFY) | 1,196.66 acres | 610.30 |
| TOTAL | | | 20,896.82 |

* CVWD’s annual water consumption factors from Supplemental Water Supply Program and Fee Study Prepared for the City of Coachella in 2016.

The planning area is served by CVWD and DWA. According to CVWD's 2015 Urban Water Management Plan (UWMP), the urban water demands in the CVWD service area are estimated to grow from 114,600 AFY in 2020 to 194,300 AFY in 2040.⁵ According to DWA's 2015 UWMP, the urban water demands in the DWA service area are estimated to grow from 42,708 AFY in 2020 to 50,575 AFY in 2040.⁶ At Alternative 2 buildout, the water demand in Cathedral City would represent approximately 8.5 percent of the total projected 2040 water demand of 244,875 AF for both CVWD and DWA combined. This Alternative would result in the lowest increase in demand for water, because of the overall reduction in development potential, when compared to the Proposed Project and all other alternatives.

According to CVWD's and DWA's 2015 UWMP, available water supplies are sufficient to meet the anticipated demand for 2020 through 2040 during normal, single dry, and multiple dry water years for Alternative 2 and all of the project alternatives, including the Proposed Project. This result is based on the volume of water available in the aquifer, CVWD's Colorado River contract supply, State Water Project (SWP) Table A amounts, water rights and water supply contracts, and CVWD's and DWA's commitments to eliminate overdraft and reduce per capita water use in CVWD's and DWA's service area.

In addition, Alternative 2 would implement the policies and programs that seek to reduce water demand and protect water resources in the planning area. Policy 6.2 of the Water, Sewer and Utilities Sub-Element requires the City to monitor resource management activities of the CVWD, DWA, and CRWQCB to preserve and protect water resources and quality.

In summary, implementation of Alternative 2 would result in a decreased demand for domestic water when compared to the Proposed Project and other alternatives, but would still result in an increase in water demand. The City would work with water agencies to assure sufficient water resources would be available in the future during normal, single dry and multiple dry years. Implementation of policies and programs set forth in the Public Services and Utilities Sub-Element and Section 2.15.7 of this EIR would ensure impacts related to water supplies, would be less than significant.

c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

Projected development under Alternative 2 would decrease the generation of wastewater compared to the Proposed Project and all other alternatives. All wastewater collected in Cathedral City is treated at CVWD's Cook Street water reclamation plant (WRP-10), which currently treats approximately 15 million gallons of wastewater per day.⁷ CVWD continually increases the capacity of its wastewater reclamation facilities by constructing new treatment ponds, aeration plants, and other structures.

Alternative 2 would accommodate a total of up to 47,306 residential units, 13,135,740 square feet of commercial uses, and 17,070,615 square feet of industrial space, in addition to existing development. Depending on location, new connections would receive wastewater treatment through CVWD facilities. Currently, the majority of the planning area is developed, and the main wastewater treatment lines and infrastructure are already in place. Future development under Alternative 2 would be required to connect to the existing main wastewater collection system, as it would under all alternatives. To ensure adequate collection and treatment system capacity to meet the growing needs of the City, CVWD and DWA have established long-range plans to address future demands that can adequately address the needs of all project alternatives and the Proposed Project.

⁵ 2015 Urban Water Management Plan (UWMP) for CVWD, Prepared by MWH in July 2016.

⁶ 2015 Urban Water Management Plan (UWMP) for DWA, Prepared by Krieger and Stewart Engineering Consultants in June 2016.

⁷ CVWD's 2015 Urban Water Management Plan (Page 6-22).

In addition, policies and programs set forth for the Proposed Project also apply to Alternative 2 to address potential impacts to wastewater treatment facilities in the City. Policy 6.1 of the Water, Sewer and Utilities Sub-Element encourages CVWD and DWA to implement short- and long-term plans for an integrated, city-wide sewer system. Program 6.1.1 requires the City and service agencies to evaluate a wide range of methods to finance the expansion of the sewer system. Policies 6.2 and 6.3 of the Water, Sewer and Utilities Sub-Element require the City to monitor resource management activities of the CVWD, DWA, and CRWQCB to preserve and protect water resources and quality.

Overall, new wastewater treatment facilities or expansion of existing wastewater treatment facilities could be required as the population and corresponding demand for services increases. In the case of Alternative 2, this expansion would be the least insofar as this Alternative generates the least demand for additional capacity. However, each wastewater treatment facility would be evaluated on a project-by-project basis to assure that environmental impacts are mitigated, as needed. Implementation of policies and programs set forth in the Public Services and Utilities Sub-Element and measures set forth in Section 2.15.7 of this EIR would be applicable to Alternative 2, and would ensure impacts related to water supplies, would be less than significant. Therefore, buildout of the Alternative 2 scenario would result in less than significant impacts related to wastewater treatment facilities.

- d) *Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?*
- e) *Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?*

The City contracts with Burrtec for solid waste collection and disposal services. Future residential development facilitated by Alternative 2 would decrease the population in the planning area when compared to the Proposed Project, but increase the demand for services from additional industrial development. At Alternative 2 buildout, approximately 47,306 residential units could be built within the planning area. Commercial uses could total 13,135,740 square feet, and industrial uses could total 17,070,615 square feet. Implementation of Alternative 2 would result in a population increase of approximately 82,435 new residents, resulting in a total citywide population of 136,901 persons at buildout. Although less than the Proposed Project, this increase in growth and development would result in an increase in solid waste generation, and increased demand for solid waste services throughout the City. Using solid waste generation factors provided by CalRecycle, buildout of Alternative 2 could result in the generation of approximately 78,741 tons per year of solid waste, assuming a 50% diversion rate (Table 3.15-4).

**Table 3.15-4 Alternative 2
 Estimated Solid Waste Disposal at Buildout**

| Land Use | CIWMB Disposal Rates | Conditions at Alternative 2 Buildout (2040) | Solid Waste Disposal (pounds per day) | Solid Waste Disposal (tons per year) |
|----------------------------|----------------------------------|---|---------------------------------------|--------------------------------------|
| Residential | 5.2 pounds/resident/day* | 136,901 persons | 711,885 | 129,919 |
| Commercial | 5 pounds/1000 square feet /day** | 13,135,740 square feet | 65,679 | 11,986 |
| Industrial | 5 pounds/1000 square feet /day** | 17,070,615 square feet | 85,353 | 15,577 |
| TOTAL | | | 862,917 | 157,482 |
| TOTAL (with 50% diversion) | | | 431,459 | 78,741 |

* California's 2017 Per Capita Disposal Rate, using SB 1016's measurement system, by CalRecycle.

**Estimated Solid Waste Generation Rates by CalRecycle.

As shown in Table 3.15-4, buildout of the Alternative 2 scenario would result in solid waste disposal of approximately 862,917 pounds per day, or 157,482 tons per year. State law (AB 939) requires a 50 percent diversion of solid waste from landfills; after diversion, solid waste disposal at Alternative 2 buildout is projected to be 431,459 pounds per day, or 78,741 tons per year. As discussed above, the three landfills serving the region have a combined remaining capacity of 178.8 million cubic yards. Waste generated by the development under Alternative 2 would not exceed the capacity of these landfills.

Cathedral City, Burrtec Waste Industries, and landfills serving Cathedral City are required to comply with applicable solid waste management and reduction statutes and regulations. Alternative 2 would have no significant impact on their compliance with these requirements.

Overall, with continuing adherence to the requirements of AB 939 and implementation of policies and programs set forth in the Public Services and Utilities Sub-Element and measures set forth in Section 2.15.7 of this EIR, impacts related to solid waste management would be less than significant.

3.15.3.2.1. Alternative 2 Mitigation Measures

With the implementation of the mitigation measures set forth in Section 2.15.7 of this EIR and relevant policies and programs set forth in the Public Utilities and Service Systems of the proposed General Plan Update and compliance with the standard conditions, no significant adverse impacts on these services are anticipated.

3.15.3.2.2. Alternative 2 Significance After Mitigation

Residual environmental effects associated with the implementation of Alternative 2 would be lower than those for the Proposed Project. Through the application of the applicable General Plan policies and programs, and the mitigation measures set forth in Section 2.15.7 of this EIR, potential impacts can be avoided, minimized and/or reduced to levels that are less than significant.

3.15.3.2.3. Alternative 2 Cumulative Impacts

Public Services

Future development associated with Alternative 2 would require public services. However, implementation of this Alternative would gradually increase population in the planning area, which would increase the demand for public services, thus requiring additional staffing, equipment, and facilities, but to a lower degree than the Proposed Project or any of the other Alternatives. Such growth would be consistent and slightly less intense than with anticipated long-term, regional growth in the Coachella Valley and would contribute incrementally to a broader increased demand for services. The General Plan includes numerous policies and programs that require the City to monitor growth and expand services as needed, and to work collaboratively with various agencies to assure adequate services are provided. The proposed programs and policies ensure impacts will be less than significant and that Alternative 2's impacts will not be cumulatively considerable.

Utilities and Service Systems

Under Alternative 2, development in combination with all other development within the service boundaries of utility providers, would result in increased demand for electricity, natural gas, water, wastewater, and solid waste resources and services, but to a lesser intensity than the Proposed Project. As private companies, SCE and SoCalGas continuously plan for growth and expand their infrastructure according to demand. Quasi-public agencies, such as CVWD and DWA, work with regional communities, including Cathedral City, to plan for growth. The proposed General Plan includes policies and programs, to which Alternative 2 would be subject, that require the City to coordinate with local service providers to plan for future growth, require developers to contribute to the installation and operation of expanded infrastructure, and implement measures to reduce consumption of resources. Since this Alternative would be subject to General Plan policies and programs, it would also minimize potential impacts such that they would not be cumulatively considerable.

3.15.3.3. Alternative 3

Public Services

- a) *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:*
- i) *Fire protection?*
 - ii) *Police protection?*
 - iii) *Schools?*
 - iv) *Parks?*
 - v) *Other public facilities?*

Utilities and Service Systems

- a) *Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects. (see Section 2.10 addressing stormwater)*
- b) *Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years.*
- c) *Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments.*
- d) *Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals.*
- e) *Comply with federal, state, and local management and reduction statutes and regulations related to solid waste.*

Fire Protection, Police, School, Parks and other Public Facilities

Alternative 3 would decrease demand for fire protection services, police services, school services, and library services when compared to the Proposed Project, but would result in an increased demand for service compared to current conditions. To maintain or achieve acceptable service standards, new or physically altered fire, police, school, parks and other public facilities would be required. When compared to the Proposed Project, Alternative 3 would accommodate fewer residential units and lower population growth and less commercial square footage, and fewer new jobs. This would require a lower demand for fire and police staffing and facilities, fewer new or expanded schools, and less land for parks and other public facilities, but more than Alternative 2. Therefore, impacts would be lower as compared to the Proposed Project or Alternative 1, but somewhat greater than Alternative 2. However, because of growth over current conditions, impacts would still be considered significant and the mitigation identified in Section 2.15.7 would be required. After mitigation, impacts related to school facilities would be less than significant.

- a) *Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects. (see Section 2.10 addressing stormwater)*

Domestic Water and Wastewater Treatment

Implementation of Alternative 3 would allow new development which would require an expanded domestic water system, and additional connections to the wastewater collection and treatment system, but to a lesser extent. Similar to the Proposed Project and all other alternatives, all future development projects facilitated by Alternative 3 would be required to comply with all applicable federal, state, and local regulations related to domestic water and waste water disposal, including CVWD and DWA standards. Compliance with such regulations, policies and programs set forth in the Public Services and Utilities Sub-Element, and Section 2.15.7 of this EIR would ensure that impacts related to domestic water and wastewater disposal are less than significant. Therefore, Alternative 3 would result in a similar but somewhat reduced impact to wastewater disposal systems as compared to the Proposed Project or Alternative 1.

Electricity

New development under Alternative 3 would decrease the demand for electricity when compared to that associated with the Proposed Project and Alternative 1. To accommodate the growth under this Alternative, however, and to maintain or achieve acceptable service standards, new or physically altered electric power stations, whether from conventional or renewable sources, would be required, and additional distribution and transmission lines and substations could also be needed. Compared to the Proposed Project, Alternative 3 would accommodate fewer residential units and population growth, less commercial square footage, and more industrial space; therefore, it would result in a decreased need for sources of electricity and related facilities when compared to the Proposed Project and Alternative 1. Therefore, impacts would be reduced compared to the Proposed Project. However, implementation of policies and programs set forth in the Public Services and Utilities Sub-Element and Section 2.15.7 of this EIR would still be applicable, and impacts related to electricity and related facilities would be less than significant.

Natural Gas

New development under Alternative 3 would decrease the future demand for natural gas and related services in the planning area, compared to the other project alternatives and the Proposed Project. New or physically altered natural gas pumping/compressing stations would be required to maintain or achieve acceptable supplies and meet service requirement for new development. When compared to the Proposed Project and Alternative 1, Alternative 3 would accommodate fewer residential units and population growth, less commercial development and more industrial space. Therefore, Alternative 3 would result in a decreased potential demand for natural gas and related facilities. Impacts would be reduced under Alternative 3 compared to the Proposed Project and Alternative 1, and somewhat greater than Alternative 2. However, implementation of policies and programs set forth in the Public Services and Utilities Sub-Element and Section 2.15.7 of this EIR would still be required to ensure impacts related to natural gas and related services and facilities would be less than significant.

Telecommunications

New or physically altered cable television and internet services would be required for the new developments in the City under Alternative 3. When compared to the Proposed Project or Alternative 1, Alternative 3 would accommodate fewer residential units and population growth, and less commercial square footage, and would result in a decreased need for cable television, internet services and related facilities to be constructed or expanded. Therefore, impacts would be decreased as compared to the Proposed Project. However, implementation of policies and programs set forth in the Public Services and Utilities Sub-Element and Section 2.15.7 of this EIR would still be required, and would ensure that impacts related to telecommunications services and related facilities would be less than significant.

Solid Waste Management

Compared to the Proposed Project, Alternative 3 would accommodate fewer residential units and population growth, less commercial square footage and more industrial development. Therefore, this alternative would generate a decreased need for solid waste collection and disposal services, when compared to the Proposed Project and

Alternative 1. This Alternative, however, would still result in a need for additional landfill space. Therefore, impacts would be less when compared to the Proposed Project and Alternative 1, but somewhat greater than Alternative 2. Implementation of policies and programs set forth in the Public Services and Utilities Sub-Element and Section 2.15.7 of this EIR would still be required to ensure that impacts related to the solid waste collection and disposal services would be less than significant.

b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

As discussed above, CVWD and DWA provide domestic water to Cathedral City. Future development under Alternative 3 would decrease City population and commercial space, and increase industrial space. Additional park lands would still be required in the planning area. At Alternative 3 buildout, a total of approximately 54,053 residential units could be developed within the planning area. Commercial uses could decrease to 13,651,604 square feet, and industrial uses could increase to approximately 14,426,811 square feet. Implementation of Alternative 3 would result in a total citywide population of 158,222 persons at buildout. This decrease in growth and development would result in a decrease in domestic water demand than that projected for the Proposed Project, and Alternative 1, and somewhat greater demand than Alternative 2. Using CVWD’s annual water consumption factors, buildout of Alternative 3 could result in the demand for approximately 21,043 acre-feet per year (AFY) of domestic water (Table 3.15-5).

**Table 3.15-5 Alternative 3
 Estimated Water Demand at Buildout**

| Land Use | CVWD Water Consumption Factor* | Conditions at Alternative 3 Buildout (2040) | Total Water Demand (AFY) at Alternative 3 Buildout (2040) |
|---------------------------|--|---|---|
| Single-Family Residential | 2.31 acre-feet per acre per year (AFY) | 6,824.03 | 15,763.51 |
| Multi-Family Residential | 2.06 acre-feet per acre per year (AFY) | 785.51 | 1,618.15 |
| Commercial | 1.92 acre-feet per acre per year (AFY) | 1,636.32 | 3,141.73 |
| Industrial | 0.51 acre-feet per acre per year (AFY) | 1,018.15 | 519.26 |
| TOTAL | | | 21,042.65 |

* CVWD’s annual water consumption factors from Supplemental Water Supply Program and Fee Study Prepared for the City of Coachella in 2016.

The planning area is served by CVWD and DWA. According to CVWD’s 2015 Urban Water Management Plan (UWMP), the urban water demands in the CVWD service area are estimated to grow from 114,600 AFY in 2020 to 194,300 AFY in 2040.⁸ According to DWA’s 2015 UWMP, the urban water demands in the DWA service area are estimated to grow from 42,708 AFY in 2020 to 50,575 AFY in 2040.⁹ At Alternative 3 buildout, the water demand in Cathedral City would represent approximately 8.6 percent of the total projected 2040 water demand of 244,875 AF for both CVWD and DWA combined. This Alternative would result in a lower increase in demand for water, because of the overall reduction in development potential, when compared to the Proposed Project and Alternative 1.

According to CVWD’s and DWA’s 2015 UWMP, available water supplies are sufficient to meet the anticipated demand for 2020 through 2040 during normal, single dry, and multiple dry water years for Alternative 3 and all of the project alternatives, including the Proposed Project. This result is based on the volume of water available in the

⁸ 2015 Urban Water Management Plan (UWMP) for CVWD, Prepared by MWH in July 2016.

⁹ 2015 Urban Water Management Plan (UWMP) for DWA, Prepared by Krieger and Stewart Engineering Consultants in June 2016.

aquifer, CVWD's Colorado River contract supply, State Water Project (SWP) Table A amounts, water rights and water supply contracts, and CVWD's and DWA's commitments to eliminate overdraft and reduce per capita water use in CVWD's and DWA's service area.

In addition, Alternative 3 would implement the policies and programs that seek to reduce water demand and protect water resources in the planning area. Policy 6.2 of the Water, Sewer and Utilities Sub-Element requires the City to monitor resource management activities of the CVWD, DWA, and CRWQCB to preserve and protect water resources and quality.

In summary, implementation of Alternative 3 would result in a decreased demand for domestic water when compared to the Proposed Project and Alternative 1, but would still result in an increase in water demand. The City would work with water agencies to assure sufficient water resources would be available in the future during normal, single dry and multiple dry years. Implementation of policies and programs set forth in the Public Services and Utilities Sub-Element and Section 2.15.7 of this EIR would ensure impacts related to water supplies would be less than significant.

c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

Projected development under Alternative 3 would decrease the generation of wastewater compared to the Proposed Project and Alternative 1, but be somewhat greater than Alternative 2. All wastewater collected in Cathedral City is treated at CVWD's Cook Street water reclamation plant (WRP-10), which currently treats approximately 15 million gallons of wastewater per day.¹⁰ CVWD continually increases the capacity of its wastewater reclamation facilities by constructing new treatment ponds, aeration plants, and other structures.

Alternative 3 would accommodate a total of up to 54,053 residential units, 13,651,604 square feet of commercial uses, and 14,426,811 square feet of industrial space, in addition to existing development. Depending on location, new connections would receive wastewater treatment through CVWD facilities. Currently, the majority of the planning area is developed, and the main wastewater treatment lines and infrastructure are already in place. Future development under Alternative 3 would be required to connect to the existing main wastewater collection system, as it would under all alternatives. To ensure adequate collection and treatment system capacity to meet the growing needs of the City, CVWD and DWA have established long-range plans to address future demands that can adequately address the needs of all project alternatives and the Proposed Project.

In addition, policies and programs set forth for the Proposed Project also apply to Alternative 3 to address potential impacts to wastewater treatment facilities in the City. Policy 6.1 of the Water, Sewer and Utilities Sub-Element encourages CVWD and DWA to implement short- and long-term plans for an integrated, city-wide sewer system. Program 6.1.1 requires the City and service agencies to evaluate a wide range of methods to finance the expansion of the sewer system. Policies 6.2 and 6.3 of the Water, Sewer and Utilities Sub-Element require the City to monitor resource management activities of the CVWD, DWA, and CRWQCB to preserve and protect water resources and quality.

Overall, new wastewater treatment facilities or expansion of existing wastewater treatment facilities could be required as the population and corresponding demand for services increases. In the case of Alternative 3, this expansion would be less than for the Proposed Project or Alternative 1, as this Alternative generates less demand for additional capacity, but somewhat more demand than Alternative 2. However, each wastewater treatment facility would be evaluated on a project-by-project basis to assure that environmental impacts are mitigated, as needed.

¹⁰ CVWD's 2015 Urban Water Management Plan (Page 6-22).

Implementation of policies and programs set forth in the Public Services and Utilities Sub-Element and measures set forth in Section 2.15.7 of this EIR would be applicable to Alternative 3, and would ensure impacts related to water supplies would be less than significant. Therefore, buildout of Alternative 3 would result in less than significant impacts related to wastewater treatment facilities.

- d) *Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?*
- e) *Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?*

The City contracts with Burrtec for solid waste collection and disposal services. Future residential development facilitated by Alternative 3 would decrease the population in the planning area when compared to the Proposed Project, but increase the demand for services from additional industrial development. At Alternative 3 buildout, approximately 54,053 residential units could be built within the planning area. Commercial uses could total 13,651,604 square feet, and industrial uses could total 14,426,811 square feet. Implementation of Alternative 3 would result in a population increase of approximately 103,756 new residents, resulting in a total citywide population of 158,222 persons at buildout. Although less than the Proposed Project, this increase in growth and development would result in an increase in solid waste generation, and increased demand for solid waste services throughout the City. Using solid waste generation factors provided by CalRecycle, buildout of Alternative 3 could result in the generation of approximately 87,887 tons per year of solid waste, assuming a 50% diversion rate (Table 3.15-6).

**Table 3.15-6 Alternative 3
 Estimated Solid Waste Disposal at Buildout**

| Land Use | CIWMB Disposal Rates | Conditions at Alternative 3 Buildout (2040) | Solid Waste Disposal (pounds per day) | Solid Waste Disposal (tons per year) |
|----------------------------|----------------------------------|---|---------------------------------------|--------------------------------------|
| Residential | 5.2 pounds/resident/day* | 158,222 persons | 822,754 | 150,153 |
| Commercial | 5 pounds/1000 square feet /day** | 13,651,604 square feet | 68,258 | 12,457 |
| Industrial | 5 pounds/1000 square feet /day** | 14,426,811 square feet | 72,134 | 13,164 |
| TOTAL | | | 963,146 | 175,774 |
| TOTAL (with 50% diversion) | | | 481,573 | 87,887 |

* California's 2017 Per Capita Disposal Rate, using SB 1016's measurement system, by CalRecycle.

**Estimated Solid Waste Generation Rates by CalRecycle.

As shown in Table 3.15-6, buildout of Alternative 3 would result in solid waste disposal of approximately 963,146 pounds per day, or 175,774 tons per year. State law (AB 939) requires a 50 percent diversion of solid waste from landfills; after diversion, solid waste disposal at Alternative 3 buildout is projected to be 481,573 pounds per day, or 87,887 tons per year. As discussed above, the three landfills serving the region have a combined remaining capacity of 178.8 million cubic yards. Waste generated by the development under Alternative 3 would not exceed the capacity of these landfills.

Cathedral City, Burrtec Waste Industries, and landfills serving Cathedral City are required to comply with applicable solid waste management and reduction statutes and regulations. Alternative 3 would have no significant impact on their compliance with these requirements.

Overall, with continuing adherence to the requirements of AB 939 and implementation of policies and programs set forth in the Public Services and Utilities Sub-Element and measures set forth in Section 2.15.7 of this EIR, impacts related to solid waste management would be less than significant.

3.15.3.3.1. Alternative 3 Mitigation Measures

With the implementation of the mitigation measures set forth in Section 2.15.7 of this EIR and relevant policies and programs set forth in the Public Utilities and Service Systems Sub-Element of the proposed General Plan and compliance with the standard conditions, no significant adverse impacts on these services are anticipated.

3.15.3.3.2. Alternative 3 Significance After Mitigation

Residual environmental effects associated with the implementation of Alternative 3 would be somewhat reduced from those for the Proposed Project. Through the application of the proposed General Plan policies and programs, and the mitigation measures set forth in Section 2.15.7 of this EIR, potential impacts can be avoided, minimized and/or reduced to levels that are less than significant.

3.15.3.3.3. Alternative 3 Cumulative Impacts

Public Services

Implementation of Alternative 3 would gradually increase population in the planning area, which would increase the demand for public services, thus requiring additional staffing, equipment, and facilities. Such growth would be somewhat less than anticipated long-term, regional growth in the Coachella Valley but would contribute incrementally to a broader increased demand for services. The proposed General Plan includes numerous policies and programs that require the City to monitor growth and expand services as needed, and to work collaboratively with various agencies to assure adequate services are provided. The programs and policies ensure impacts will be less than significant and that Alternative 3's impacts will be less than cumulatively considerable.

Utilities and Service Systems

Under Alternative 3, development facilitated by the proposed General Plan, in combination with all other development within the service boundaries of utility providers, would result in a somewhat lower demand for electricity, natural gas, wastewater, and solid waste resources and services, and a slightly higher demand for water due to the higher acreages for single-family residential. As private companies, SCE and SoCalGas continuously plan for growth and expand their infrastructure according to demand. Quasi-public agencies, such as CVWD and DWA, work with regional communities, including Cathedral City, to plan for growth. The proposed General Plan includes policies and programs, applicable to Alternative 3, that require the City to coordinate with local service providers to plan for future growth, require developers to contribute to the installation and operation of expanded infrastructure, and implement measures to reduce consumption of resources. These policies would minimize potential impacts associated with Alternative 3 such that they would not be cumulatively considerable.

3.15.4. Environmental Superior Alternative

At buildout, Alternative 2 would result in the fewest dwelling units and smallest population within the same area as the other alternatives. As a result, it would be expected to require the least amount of public and utility services and expansion of related infrastructures, such as the extension of electric and water and wastewater infrastructures and school enrolment. In this regard, Alternative 2 is environmentally superior to the other project alternatives.

3.16. Transportation

3.16.1. Introduction

This section of the EIR analyzes the potential impacts associated with the Project alternatives based on regional and local transportation conditions. It briefly describes existing conditions of the local transportation network and traffic volumes within Cathedral City and analyzes the potential impacts of the project alternatives on the surrounding transportation system and future long-term traffic conditions. As with other alternatives analyzed, it is assumed that the goals, policies and programs set forth in the proposed General Plan are also applicable to the alternative projects. It also assumes that the proposed an *Active Transportation Plan*, which facilitates the evolution of the City toward a more multi-modal transportation network, is also part of each alternative. Therefore, the following analysis qualitatively evaluates how alternative modes of transportation, such as bike lanes, public transit, and multi-modal facilities will affect local and regional roadways, levels of service and vehicle miles traveled.

3.16.2. Existing Conditions

Regional Setting

The Coachella Valley is bisected by Interstate-10, which extends in an east-west direction and connects the region to western Riverside County and the Los Angeles metropolitan area to the west, and desert communities and Arizona to the east. The valley is also connected to surrounding regions by State Highways 111, 74, and 62. Union Pacific Railroad provides regional freight and passenger rail service, and the Palm Springs International Airport serves as the region's primary airport.

Cathedral City is also bisected by Interstate-10; direct access is provided at the I-10/Date Palm Drive interchange. East Palm Canyon Drive (Highway 111) accommodates local and regional traffic through one of the City's principal commercial corridors and connects it with other Coachella Valley communities. Ramon Road is also an important east-west arterial providing six travel lanes through the City and adjoining communities to the east (Rancho Mirage) and west (Palm Springs), and access to the Bob Hope Drive /I-10 interchange and to the Gene Autry Drive /I-10 interchange. Other major arterials generally occur in a north-south/east-west grid pattern. Multi-modal connections in the City include bike lanes and paths, trails, sidewalks, and the first segment of CV Link, a regional pathway that will extend ±49 miles through the valley at buildout. SunLine Transit Agency provides mass transit service throughout the valley.

City Roadway Operations

The currently adopted and proposed General Plans establish Level-of-Service (LOS) D as the minimum peak hour system performance standard for the City's circulation network. The transportation analysis prepared in conjunction with the Proposed Project studied thirty (30) intersections and thirty-seven (37) roadway segments.¹ It determined that all the intersections are currently operating at acceptable LOS, with the exception of the following:

- Date Palm Drive/Varner Road (#10) – LOS F PM peak hour only
- Cathedral Canyon Drive/Ramon Road (#14) – LOS E AM and PM peak hours
- Landau Boulevard/Ramon Road (#17) – LOS E AM peak hour only
- Mountain View Road/Varner Road (#20) – LOS F AM peak hour only.

Only one of the four intersections is “built out” and is designated a “special study area” in the proposed General Plan. The other three intersections will receive further physical improvements in the future and are expected to operate at LOS D or better in future years.

¹ “Cathedral City General Plan Update Transportation Analysis, Cathedral City, California,” Urban Crossroads, Inc., February 13, 2019.

The analysis conducted for the proposed General Plan (see Section 2.16) also evaluated traffic signal warrants and found that:

- the existing unsignalized intersection of Date Palm/Varner Road (#10) appears to meet traffic signal warrants under existing conditions
- the existing unsignalized intersection of Mountain View Road/Varner Road (#20) almost meets traffic signal warrants under existing conditions. Monitoring of the intersection is recommended to determine if the signal warrant is satisfied as ambient or potential nearby development growth occurs.

3.16.3. Alternatives Impact Analysis

3.16.3.1. Alternative 1

3.16.3.1.1. Alternative 1 Impacts

- a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities.*

City LOS Policy

The current General Plan establishes LOS D as the minimum peak hour system performance standard for the City's circulation network. As discussed in Section 2.16.6.a of this EIR, at buildout of the Proposed Project, all study area roadway segments are projected to operate at an acceptable LOS, except for eight (8) segments that could operate at LOS E or F. Additionally, all intersections are projected to operate at an acceptable LOS, except for two (2) that would operate at LOS E or F during peak hours and which currently operate at unacceptable levels.

The transportation analysis prepared in conjunction with the Proposed Project determined that buildout of Alternative 1 would generate approximately 19,813 more vehicle trip ends per day than the Proposed Project.² This constitutes a 1.8 percent increase in total daily traffic volumes compared to the Proposed Project. While it is reasonable to expect that the additional trips would affect future LOS operating conditions on study area roadway segments and intersections, the additional traffic would be distributed network-wide and its effects would be very limited. Implementation of the mitigation measures cited for the Proposed Project in Section 2.16.7 would serve to reduce potential impacts, and may serve to mitigate impacts to acceptable levels.

Roadway Classifications

Alternative 1 would result in the same roadway classifications as those proposed by the Proposed Project (see Section 2.16.6). The classifications are updated and further diversified versions that account for existing built and non-automotive features, and which optimize the implementation of the City's multi-modal strategy as set forth in the Circulation and Mobility Element and the Active Transportation Plan. As with the Proposed Project, impacts would be less than significant.

Roadway Cross-Sections

Alternative 1 would result in the same roadway widths and the more diversified and tailored cross-sections set forth in the Proposed Project (see Section 2.16.6). The cross-sections are updated versions that incorporate Complete Streets strategies and account for existing and projected traffic volumes. As with the Proposed Project, impacts associated with Alternative 1 would be less than significant.

² Table 2 of Appendix 4.1: General Plan Alternatives Land Use and Trip Generation Comparisons, "Cathedral City General Plan Update Transportation Analysis, Cathedral City, California," Urban Crossroads, Inc., February 13, 2019.

Alternative Transportation Plans

As with the Proposed Project, Alternative 1 would result in adoption and implementation of a City-specific Active Transportation Plan (ATP), which builds upon earlier multi-modal efforts and the bicycle, pedestrian, and NEV facilities identified in the CVAG ATP and CVAG NEV Plan. The City ATP and proposed policies of the General Plan Circulation and Mobility Element are consistent with Complete Streets and sustainable communities strategies of the CVAG plans and SCAG's RTP/SCS. Beyond the standards and guidance set forth in the Circulation and Mobility Element, the proposed Community Design Element includes policies and programs (which would continue to apply in Alternative 1) that encourage a land use patterns that more strongly supports multi-modal transportation, including more mixed use and transit-oriented development (TOD), that will also serve to shift motor vehicle trips to other modes of travel. As with the Proposed Project, impacts to alternative transportation plans would be less than significant.

b) Conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b).

As explained above, buildout of Alternative 1 is projected to generate approximately 19,813 (or 1.8 percent) more vehicle trips per day than the Proposed Project. It can be expected, therefore, that Alternative 1 would also result in more vehicle miles traveled (VMT) (0.27 percent) than the Proposed Project but this increase would be distributed network-wide and its effects, compared to the Proposed Project, would be very limited at any given location in the roadway network.

It must be noted that, as with the Proposed Project, Alternative 1 covers all of Cathedral City which is well-served by existing transit services, routes, and stops along high-quality transit corridors, the use of which would reduce vehicular trips and VMTs. As with the Proposed Project, the Circulation and Mobility Element would apply to Alternative 1 and its policies and programs would contribute to reduced city-wide average daily trips and VMTs. Additionally, Alternative 1 would implement the Active Transportation Plan (ATP) that is aimed at increasing use of multi-modal transportation facilities and decreasing VMTs. As with the Proposed Project, impacts would be less than significant.

c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).

Compared to the Proposed Project, Alternative 1 increases the potential land use intensities of some vacant parcels of land, such as increasing residential densities or replacing business park uses. However, in the overall, Alternative 1 provides reasonable land use compatibility throughout the City by, for example, locating commercial lands along major arterials and truck routes, and lowering density residential lands further from arterials to limit intrusion from traffic volumes and noise, such that land use incompatibilities are minimized. Vehicular incompatibilities associated with farm equipment are not anticipated in the planning area because the City does not contain farmland.

As with the Proposed Project, development-specific roadway and intersection geometries and improvements do not change significantly between project alternatives, and would be reviewed by the City and other agencies, as appropriate, when development proposals are received. Policy 4 of the Circulation and Mobility Element would require that project-specific traffic studies be prepared and mitigation measures be provided, as necessary. With implementation of General Plan policies and programs, as well as standard City requirements, impacts of Alternative 1 would be less than significant, the same level of impact as the Proposed Project.

d) Result in inadequate emergency access.

Alternative 1 does not propose any land use designations or physical improvements that would result in inadequate emergency access. As with the Proposed Project, implementation of Alternative 1 would facilitate new urban development which could affect emergency access during and after construction. However, implementation of standard requirements, including development plan reviews by City staff (including City Police and Fire

Departments) and other appropriate agencies, as well as Program 2.B, Policy 3, and Program 3.A of the General Plan Emergency Preparedness Sub-Element would assure that future development projects maintain adequate emergency access and evacuation routes. As with the Proposed Project, impacts of Alternative 1 would be less than significant.

3.16.3.1.2. Alternative 1 Mitigation Measures

Alternative 1 would be subject to the policies and programs set forth in the proposed Circulation and Mobility Element (including the City ATP) and the Community Design Element. It would also be subject to the avoidance, minimization and mitigation measures described in Section 2.16.7 for the Proposed Project. No additional mitigation or other measures would be required.

3.16.3.1.3. Alternative 1 Significance After Mitigation

After implementation of the above cited policies, programs and mitigation measures, impacts of Alternative 1 would be less than significant.

3.16.3.1.4. Alternative 1 Cumulative Impacts

The City and other jurisdictions in the Coachella Valley, including its other cities and Riverside County, participate in regional transportation planning that coordinates existing and future land uses with the expansion and evolution of the local and regional transportation system. These planning and funding activities are further coordinated through the Coachella Valley Association of Governments (CVAG), the Riverside County Transportation Commission (RCTC), and the Southern California Association of Governments' (SCAG) Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). This integrated long-range planning approach ensures that future impacts associated with implementation of Alternative 1 would not be cumulatively considerable.

3.16.3.2. Alternative 2

3.16.3.2.1. Alternative 2 Impacts

- a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities.*

City LOS Policy

The current General Plan establishes LOS D as the minimum peak hour system performance standard for the City's circulation network. As discussed in Section 2.16.6.a of this EIR, at buildout of the Proposed Project, all study area roadway segments are projected to operate at an acceptable LOS, except for eight (8) segments that would operate at LOS E or F. Additionally, all intersections are projected to operate at an acceptable LOS, except for two (2) that would operate at LOS E or F during peak hours and which currently operate at unacceptable levels.

The transportation analysis prepared in conjunction with the Proposed Project determined that buildout of Alternative 2 would generate approximately 38,379 fewer vehicle trip ends per day than the Proposed Project.³ This constitutes a 3.6 percent reduction in total daily traffic volumes compared to the Proposed Project. It is reasonable to expect that the reduced number of trips would positively affect future LOS operating conditions on study area roadway segments and intersections, the reduced trips traffic would be distributed network-wide and the effects would be limited, if comparatively beneficial. Implementation of the mitigation measures cited for the Proposed Project in Section 2.16.7 would serve to further reduce potential impacts, and may serve to further mitigate impacts to ensure acceptable levels.

³ Table 2 of Appendix 4.1: General Plan Alternatives Land Use and Trip Generation Comparisons, "Cathedral City General Plan Update Transportation Analysis, Cathedral City, California," Urban Crossroads, Inc., February 13, 2019.

Roadway Classifications

Alternative 2 would result in the same roadway classifications as those proposed by the Proposed Project (see Section 2.16.6). The classifications are updated and further diversified versions that account for existing built and non-automotive features, and which optimize the implementation of the City's multi-modal strategy as set forth in the Circulation and Mobility Element and the Active Transportation Plan. As with the Proposed Project, Alternative 2 impacts would be less than significant.

Roadway Cross-Sections

Alternative 2 would result in the same roadway widths and the more diversified and tailored cross-sections set forth in the Proposed Project (see Section 2.16.6). The cross-sections are updated versions that incorporate Complete Streets strategies and account for existing and projected traffic volumes. As with the Proposed Project, impacts associated with Alternative 2 would be less than significant.

Alternative Transportation Plans

As with the Proposed Project, Alternative 2 would result in adoption and implementation of a City-specific Active Transportation Plan (ATP), which builds upon earlier multi-modal efforts and the bicycle, pedestrian, and NEV facilities identified in the CVAG ATP and CVAG NEV Plan. The City ATP and proposed policies of the General Plan Circulation and Mobility Element are consistent with Complete Streets and sustainable communities strategies of the CVAG plans and SCAG's RTP/SCS. Beyond the standards and guidance set forth in the Circulation and Mobility Element, the proposed Community Design Element includes policies and programs (which would continue to apply in Alternative 2) that encourage a land use patterns that more strongly supports multi-modal transportation, including more mixed use and transit-oriented development (TOD), that will also serve to shift motor vehicle trips to other modes of travel. As with the Proposed Project, impacts to alternative transportation plans would be less than significant.

b) Conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b).

As explained above, buildout of Alternative 2 is projected to generate approximately 38,379 (or 3.6 percent) fewer vehicle trips per day than the Proposed Project. It can be expected, therefore, that Alternative 2 would also result in proportionately fewer vehicle miles traveled (VMT) than the Proposed Project. This decrease would be distributed network-wide and its effects, compared to the Proposed Project, would be limited at any given location in the roadway network.

As noted above, and as with the Proposed Project, Alternative 2 covers all of Cathedral City which is well-served by existing transit services, routes, and stops along high-quality transit corridors, the use of which would further reduce vehicular trips and VMTs. As with the Proposed Project, the Circulation and Mobility Element would apply to Alternative 2 and its policies and programs would contribute to reduced city-wide average daily trips and VMTs. Additionally, Alternative 2 would implement the Active Transportation Plan (ATP) that is aimed at increasing use of multi-modal transportation facilities and decreasing VMTs. As with the Proposed Project, impacts would be less than significant.

c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).

Compared to the Proposed Project, Alternative 2 decreases the potential land use intensities of some vacant parcels of land, such as decreasing residential densities or replacing mixed-use with industrial uses. In the overall, Alternative 2 provides reasonable land use compatibility throughout the City by, for example, by continuing the patterns of locating commercial lands along major arterials and truck routes, and lowering density residential lands further from arterials to limit intrusion from traffic volumes and noise, such that land use incompatibilities are minimized. Vehicular incompatibilities associated with farm equipment are not anticipated in the planning area because the City does not contain farmland.

As with the Proposed Project, development-specific roadway and intersection geometries and improvements do not change significantly between project alternatives, and would be reviewed by the City and other agencies, as appropriate, when development proposals are received. Policy 4 of the Circulation and Mobility Element would require that project-specific traffic studies be prepared and mitigation measures be provided, as necessary. With implementation of General Plan policies and programs, as well as standard City requirements, impacts of Alternative 2 would be less than significant, the same level of impact as the Proposed Project.

d) Result in inadequate emergency access.

Alternative 2 does not propose any land use designations or physical improvements that would result in inadequate emergency access. As with the Proposed Project, implementation of Alternative 2 would facilitate new urban development which could affect emergency access during and after construction. However, implementation of standard requirements, including development plan reviews by City staff (including City Police and Fire Departments) and other appropriate agencies, as well as Program 2.B, Policy 3, and Program 3.A of the General Plan Emergency Preparedness Sub-Element, would ensure that future development projects maintain adequate emergency access and evacuation routes. As with the Proposed Project, impacts of Alternative 2 would be less than significant.

3.16.3.2.2. Alternative 2 Mitigation Measures

Alternative 2 would be subject to the policies and programs set forth in the proposed Circulation and Mobility Element (including the City ATP) and the Community Design Element. It would also be subject to the avoidance, minimization and mitigation measures described in Section 2.16.7 for the Proposed Project. No additional mitigation or other measures would be required.

3.16.3.2.3. Alternative 2 Significance After Mitigation

After implementation of the above cited policies, programs and mitigation measures, impacts of Alternative 2 would be less than significant.

3.16.3.2.4. Alternative 2 Cumulative Impacts

As noted above and discussion in Section 2.16, the City and other jurisdictions in the Coachella Valley, including its other cities and Riverside County, participate in regional transportation planning that coordinates existing and future land uses with the expansion and evolution of the local and regional transportation system. These planning and funding activities are further coordinated through the Coachella Valley Association of Governments (CVAG), the Riverside County Transportation Commission (RCTC), and the Southern California Association of Governments' (SCAG) Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). This integrated long-range planning approach ensures that future impacts associated with implementation of Alternative 2 would not be cumulatively considerable.

3.16.3.3. Alternative 3

3.16.3.3.1. Alternative 3 Impacts

- a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities.***

City LOS Policy

The current General Plan establishes LOS D as the minimum peak hour system performance standard for the City’s circulation network. As discussed in Section 2.16.6.a of this EIR, at buildout of the Proposed Project, all study area roadway segments are projected to operate at an acceptable LOS, except for eight (8) segments that would operate at LOS E or F. Additionally, all intersections are projected to operate at an acceptable LOS, except for two (2) that would operate at LOS E or F during peak hours and which currently operate at unacceptable levels.

The transportation analysis prepared in conjunction with the Proposed Project determined that buildout of Alternative 3 would generate approximately 6,586 more vehicle trip ends per day than the Proposed Project.⁴ This constitutes a 0.6 percent increase in total daily traffic volumes compared to the Proposed Project. It is reasonable to expect that the modestly increased number of trips would affect future LOS operating conditions on study area roadway segments and intersections, the additional traffic would be distributed network-wide and its effects would be very limited. Implementation of the mitigation measures cited for the Proposed Project in Section 2.16.7 would serve to reduce potential impacts, and serve to mitigate impacts to acceptable levels.

Roadway Classifications

Alternative 3 would result in the same roadway classifications as those proposed by the Proposed Project (see Section 2.16.6). The classifications are updated and further diversified versions that account for existing built and non-automotive features, and which optimize the implementation of the City’s multi-modal strategy as set forth in the Circulation and Mobility Element and the Active Transportation Plan. As with the Proposed Project, impacts associate with Alternative 3 would be less than significant.

Roadway Cross-Sections

Alternative 3 would result in the same roadway widths and the more diversified and tailored cross-sections set forth in the Proposed Project (see Section 2.16.6). The cross-sections are updated versions that incorporate Complete Streets strategies and account for existing and projected traffic volumes. As with the Proposed Project, impacts associated with Alternative 3 would be less than significant.

Alternative Transportation Plans

As with the Proposed Project, Alternative 3 would result in adoption and implementation of a City-specific Active Transportation Plan (ATP), which builds upon earlier multi-modal efforts and the bicycle, pedestrian, and NEV facilities identified in the CVAG ATP and CVAG NEV Plan. The City ATP and proposed policies of the General Plan Circulation and Mobility Element are consistent with Complete Streets and sustainable communities strategies of the CVAG plans and SCAG’s RTP/SCS. Beyond the standards and guidance set forth in the Circulation and Mobility Element, the proposed Community Design Element includes policies and programs (which would continue to apply in Alternative 3) that encourage a land use patterns that more strongly supports multi-modal transportation, including more mixed-use and transit-oriented development (TOD), that will also serve to shift motor vehicle trips to other modes of travel. As with the Proposed Project, impacts to alternative transportation plans associated with Alternative 3 would be less than significant.

b) Conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b).

As explained above, buildout of Alternative 3 is projected to generate approximately 6,586 (or 0.6 percent) more vehicle trips per day than the Proposed Project. It can be expected, therefore, that Alternative 3 would also result in proportionately more vehicle miles traveled (VMT) than the Proposed Project but this increase would be very limited, would be distributed network-wide and its effects, compared to the Proposed Project, would be very limited at any given location in the roadway network.

⁴ Table 2 of Appendix 4.1: General Plan Alternatives Land Use and Trip Generation Comparisons, “Cathedral City General Plan Update Transportation Analysis, Cathedral City, California,” Urban Crossroads, Inc., February 13, 2019.

As with the Proposed Project, Alternative 3 covers all of Cathedral City which is well-served by existing transit services, routes, and stops along high-quality transit corridors, the use of which would reduce vehicular trips and VMTs. As with the Proposed Project, the Circulation and Mobility Element would apply to Alternative 3 and its policies and programs would contribute to reduced city-wide average daily trips and VMTs. Additionally, Alternative 3 would implement the Active Transportation Plan (ATP) that is aimed at increasing use of multi-modal transportation facilities and decreasing VMTs. As with the Proposed Project, impacts would be less than significant.

c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).

Compared to the Proposed Project, Alternative 3 increases the potential land use intensities of some vacant parcels of land, but in a very modest degree. In the overall, Alternative 3 provides reasonable land use compatibility throughout the City by, for example, locating commercial lands along major arterials and truck routes, and lowering density residential lands further from arterials to limit intrusion from traffic volumes and noise, such that land use incompatibilities are minimized. Vehicular incompatibilities associated with farm equipment are not anticipated in the planning area because the City does not contain farmland.

As with the Proposed Project, development-specific roadway and intersection geometries and improvements do not change significantly between project alternatives, and would be reviewed by the City and other agencies, as appropriate, when development proposals are received. Policy 4 of the Circulation and Mobility Element would require that project-specific traffic studies be prepared and mitigation measures be provided, as necessary. With implementation of General Plan policies and programs, as well as standard City requirements, impacts of Alternative 3 would be less than significant, the same level of impact as the Proposed Project.

d) Result in inadequate emergency access.

Alternative 3 does not propose any land use designations or physical improvements that would result in inadequate emergency access. As with the Proposed Project, implementation of Alternative 3 would facilitate new urban development which could affect emergency access during and after construction. However, implementation of standard requirements, including development plan reviews by City staff (including City Police and Fire Departments) and other appropriate agencies, as well as Program 2.B, Policy 3, and Program 3.A of the General Plan Emergency Preparedness Sub-Element would assure that future development projects maintain adequate emergency access and evacuation routes. As with the Proposed Project, impacts of Alternative 3 would be less than significant.

3.16.3.3.2. Alternative 3 Mitigation Measures

Alternative 3 would be subject to the policies and programs set forth in the proposed Circulation and Mobility Element (including the City ATP) and the Community Design Element. It would also be subject to the avoidance, minimization and mitigation measures described in Section 2.16.7 for the Proposed Project. No additional mitigation or other measures would be required.

3.16.3.3.3. Alternative 3 Significance After Mitigation

After implementation of the above cited policies, programs and mitigation measures, impacts of Alternative 3 would be less than significant.

3.16.3.3.4. Alternative 3 Cumulative Impacts

The City and other jurisdictions in the Coachella Valley, including its other cities and Riverside County, participate in regional transportation planning that coordinates existing and future land uses with the expansion and evolution of the local and regional transportation system. These planning and funding activities are further coordinated through the Coachella Valley Association of Governments (CVAG), the Riverside County Transportation Commission (RCTC), and the Southern California Association of Governments' (SCAG) Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). This integrated long-range planning approach ensures that future impacts associated with implementation of Alternative 3 would not be cumulatively considerable.

3.16.4. Environmental Superior Alternative

On the basis of trips generated and VMTs, Alternative 2 is environmental superior to the other alternatives and to the Proposed Project. With regard to other measures of significance, all of the alternatives, including the Proposed Project, are equivalent to one another. It should be noted that the impacts of the alternatives take into account only qualitatively the effects associated with the new emphasis on mixed-use and transit-oriented land uses, and on the effects associated with an increased focus on multi-modal transportation. Nonetheless, Alternative 2 appears to be environmentally superior to the other alternatives but its adoption is not required to mitigate for significant unavoidable impacts.

3.17. Conclusion and Overall Environmentally Superior Alternative

Based on the analysis contained within this section, the environmentally superior project alternative is determined to be the Proposed Project (per CEQA 15126.6).

The overall impacts of each of the project alternatives, compared to each other and to the Proposed Project, are largely the same but do have limited differences. The lands potentially affected by the alternatives do not differ; that is, there are no open space lands in one that are impacted in another. Therefore, the differences are in the type and intensity of land uses. There are several areas of potential impact where alternatives differ to a meaningful extent: geology and soils, hazards and hazardous materials, hydrology and water quality/resources, energy and mineral resources, public and facilities and services. Other areas where impacts could vary include parks and recreation resources, transportation and utilities.

With regard to geotechnical conditions, these do not change but the extent of development and the number of people that could be exposed to major seismic events is greater, particularly in terms of physical improvements (buildings). Therefore, in this regard Alternative 2 could be argued to be superior to the others. There will be a lower permanent population and fewer buildings and other improvements, including critical infrastructure constructed under this alternative.

**Table 3.17-1
 Environmentally Superior Alternative Checklist**

| Topic | Proposed Project | Alt. 1: More Intense | Alt. 2: Less Intense | Alt. 3: No Project |
|--|------------------|-------------------------|-------------------------|-----------------------|
| Aesthetics | LS | LS/SI | LS/SI | LS/SI |
| Agriculture and Forestry | NI | NI/SI | NI/SI | NI/SI |
| Air Quality and GHG | SU | SU/MI | SU/LI | SU/LI |
| Biological Resources | LSM | LSM/SI | LSM/SI | LSM/SI |
| Cultural and Tribal Cultural | LSM | LSM/SI | LSM/SI | LSM/SI |
| Geology and Soils | LSM | LSM/MI | LSM/LI | LSM/SI |
| Hazards and Hazardous Materials | LS | LS/MI | LS/LI | LS/LI |
| Hydrology and Water Quality/Resources | LS | LS/MI | LS/LI | LS/SI |
| Land Use and Planning | LS | LS/SI | LS/SI | LS/SI |
| Energy and Mineral | LSM | LSM/MI | LSM/LI | LSM/LI |
| Noise | LSM | LSM/SI | LSM/LI | LSM/LI |
| Population, Housing and Socio-Economic | LS | LS/SI | LS/LI | LS/LI |
| Public Services | LSM | LSM/MI | LSM/LI | LSM/LI |
| Recreation | LSM | LSM/MI | LSM/LI | LSM/LI |
| Transportation and Traffic | LSM | LSM/MI | LSM/LI | LSM/SI |
| Utilities and Service Systems | LSM | LSM/MI | LSM/LI | LSM/LI |
| NI = No Impact LS = Less than Significant LSM = Less than Significant with Mitigation SU = Significant and Unavoidable MI = More Impact than Proposed Project LI = Less Impact than Proposed Project SI = Similar Impact to Proposed Project | | | | |

In consideration of hydrology and water resources/quality, Alternative 2 would appear to be superior in this regard as well. While it can be presumed that the threat of flooding will be addressed equally, the level of resource consumption and the potential for impacts to water quality could be less under this least intense alternative. Therefore, Alternative 2 appears to be modestly superior to the other alternatives.

Impacts to energy and mineral resources appear to be greatest under the Alternative 1 scenario, with higher populations and more extensive industrial development. However, if residential development is more compact with higher average densities per acre, the contribution of residential development to increased water demand may be reduced on a per capita basis. Increases in other land uses, including industrial development, may result in higher demand for water resources. Therefore, it is arguable that two of the alternatives will result in equal or lower impacts, compared to the Proposed Project, but that Alternative 2 could result in modestly greater impacts.

With regard to impacts to public services, utilities and service systems, these would be most affected by differences in the permanent population at buildout. To the extent Alternative 2 generates the lowest potential permanent population, it is environmentally superior to the others. To the extent that Alternative 2 may result in lower residential densities and perhaps less efficient use of lands to be developed, the impact-reducing effects of this alternative may be lessened. Nonetheless, Alternative 2 still looks to be superior with regard to these areas of potential impact.

As regards transportation impacts, Alternative 2 is superior to all the others in that it will generate the lowest overall vehicular traffic and associated vehicle miles traveled. It may also modestly improve the roll out of multi-modal facilities in the City by placing less pressure on the roadway network to accommodate motor vehicles and may also serve to enhance multi-modal safety with less cars and trucks on the roads. This alternative may also serve to ensure that special study areas in the transportation network can be addressed at lower costs.

Conclusion

In the overall, the Less Intense development scenario represented by Alternative 2 is arguably environmentally superior to the other alternatives and the Proposed Project, even if modestly so. It is difficult to predict how changes in transportation, energy sources and services, and other aspects of urban design and development may affect the future City, regardless of the future intensity of development, but based on current conditions and the evolution of how urban development is served, Alternative 2 can be considered to be modestly superior to all alternatives considered.

City of Cathedral City General Plan Update

ENVIRONMENTAL IMPACT REPORT

4. UNAVOIDABLE SIGNIFICANT IMPACTS

Introduction

Unavoidable significant impacts are those that cannot be reduced to acceptable or insignificant levels by the implementation mitigation measures. Impacts associated with buildout of the Cathedral City 2040 General Plan Update are addressed in detail in Section 2 of this EIR. Comprehensive mitigation measures, as well as monitoring and reporting programs, have been developed to address potential impacts. In most cases, the mitigation measures set forth in this Draft EIR will demonstrably and effectively reduce all potentially significant impacts to levels of insignificance. However, greenhouse gas emission levels could not be mitigated to less than significant levels and are considered unavoidable significant impacts.

Greenhouse Gas

Operational activities would result in the generation and emission of greenhouse gases, which could have significant impacts to air quality locally and regionally. There are five emission source categories that contribute either directly or indirectly to operational GHG emissions, including energy/electricity usage, water usage, solid waste disposal, area emissions (pavement and architectural coating off-gassing), and mobile sources.

To achieve the AB 32 target by 2020, Cathedral City would have to cut GHG emissions by 23.4%, or 55,909 tonnes to limit future emissions to 183,424 tonnes (1990 levels). To achieve the SB 32 target of 40% below 1990 emissions, the City would need to reduce emissions to a total of 110,054 tonnes. Currently, there are no adopted 2040 reduction targets, however CARB is working towards a 2050 climate goal to reduce GHG emissions by 80 percent below 1990 levels, which would require the City to reduce GHG emissions to a total of 36,685 tonnes annually.

As shown in Section 2.4, Table 2.4-5, Project-generated operational emissions have the potential to exceed the City's AB 32 and SB 32 reduction targets for 2020 through 2050¹. Implementation of the Climate Action Plan is intended to reduce impacts associated with the emission of greenhouse gases within City limits to levels that are less than significant. In addition, the General Plan's Air Quality Policy 10 ensures that the City's CAP and GHG Inventory are regularly updated to include current trends in technology, climate regulations, and to track the City's efforts to reduce overall greenhouse gas emissions. Policies 5 through 7 promote the use of alternative energy sources and modes of transportation that can further reduce the City's GHG emissions.

¹ The International Council for Local Governmental Initiatives (ICLEI) Clean Air and Climate Protection (CACP) software and California Air Resources Board-approved Local Government Operations Protocol (LGOP) were used for the City's Greenhouse Gas Inventory and Climate Action Plan. The GHG emission projections for the City's Climate Action Plan and Greenhouse Gas Inventory are based on direct emissions from major source categories within the City limits, which were derived from utility bills and real consumption data. Results shown in Table 2.4-5 may differ from future CAP and GHG Inventory updates.

Individual projects developed under the 2040 General Plan will be assessed on a case-by-case basis for potential impacts related to GHG emissions. Implementation of mitigation measures AQ-9 through AQ-42 will help to reduce GHG emissions to the greatest extent feasible. However, based on the GHG projections in Section 2, it is possible that the 2040 General Plan update would generate GHG emissions that could have a significant and unavoidable impact on the environment.

Cumulative Impacts

Based on the analysis above, the 2040 General Plan has the potential to make a cumulatively considerable contribution to GHG levels due to the increased emission levels. Although the 2040 General Plan policies and programs represent the best practicable strategies to reduce emissions associated with buildout, and are consistent with State regulations and guidelines, no additional mitigation is currently available to reduce this impact to a less than significant level. Cumulative impacts could be significant and unavoidable.



City of Cathedral City General Plan Update

ENVIRONMENTAL IMPACT REPORT

5. IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF ENVIRONMENTAL RESOURCES

As required by CEQA Section 15126.2(c), this section of the EIR addresses the potentially significant irreversible environmental changes to or loss of non-renewable resources that could occur from implementation of the Proposed Project. In general, non-renewable resources imply fossil-based energy resources, but may also pertain to the permanent loss of agricultural, biological, mineral and other natural resources. The use of non-renewable resources during construction of future projects allowed by the General Plan Update, and long-term impacts associated with the build out of the City may be irreversible and irretrievable.

Buildout of the Cathedral City 2040 General Plan Update will result in the irretrievable and irreversible commitment of non-renewable natural resources, including energy resources such as petroleum and natural gas, water resources, and mineral resources used for construction materials, such as concrete and steel.

Future development and redevelopment facilitated by the proposed General Plan Update would increase the demand for sand and gravel resources for roadways, infrastructure, and building construction (See Section 2.7 Mineral and Energy Resources.) These resources could be derived from the regional Coachella Valley market, but the demand for sand and gravel resources would not be considered significant when compared to available regional resources.

The Proposed Project would result in an overall increase in housing units, commercial square footage, and industrial square footage. The development of these increased land use densities would also contribute to the need for additional energy supplies (i.e., natural gas, electricity). However, due to efficiencies in land use planning, the Proposed Project will reduce overall vehicle miles traveled (VMT) at buildout. This VMT reduction is primarily due to a reduction in trip generation, combined with a shift in the relationship between residential and non-residential uses.

The annual demand for electricity (in kWh), natural gas (in therms), and transportation fuel (gasoline and diesel, in gallons), was estimated for the 2040 General Plan and is presented in Section 2.7, Tables 2.7-3 and 2.7-4. Future development facilitated by the proposed General Plan Update would be evaluated on a project-by-project basis to assure each project is designed, built, and operated in accordance with all applicable energy-related regulations, including energy efficiency and conservation standards. Energy related impacts are considered less than significant because the proposed 2040 General Plan would implement a number of policies designed to minimize wasteful, inefficient, or unnecessary consumption of energy. Mitigation Measures ME-1 through ME-6, in Section 2.7 of this EIR will ensure impacts related to energy efficiency are less than significant.

Buildout of the General Plan Update will marginally change the physical environment, insofar that it will drive development and re-development of lands within the City. However, development will occur in already partially developed areas, adjacent to or near existing neighborhoods or street grids, and changes to the physical environment are considered *planned development* and impacts will be less than significant.

The proposed General Plan Update would facilitate future urban development that could disturb or permanently remove sensitive species and/or their habitats. As discussed in Section 2.5, future development projects facilitated under the proposed General Plan would be evaluated on a project-by-project basis for potential adverse impacts to sensitive species and required to implement mitigation measures, as needed. Lands within designated conservation areas would continue to be protected under the Proposed Project. Impacts to biological resources would be mitigated to less than significant levels through policies and programs of the proposed General Plan Biological Resources Sub-Element, General Plan land use plan, and mitigation measures set forth in Section 2.5.

In summary, although the Proposed Project will result in the irreversible loss of finite resources, the loss will not be significant, and is consistent with planned development goals within the City.



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6. GROWTH INDUCING IMPACTS

A. Growth Inducement

The Proposed Project land use development scenario will not overtly, incidentally or significantly induce growth or change the physical conditions in the General Plan study area. The Proposed Project includes changes in land use assignments on currently vacant lands, which improve the balance between jobs and housing and infrastructure, when compared to the current General Plan. The Proposed Project also improves land use adjacencies or compatibilities that improve access to employment centers, commercial services, education institutions and parks and recreation opportunities. Nonetheless, the Proposed Project will contribute an incremental increase in growth over the long-term, particularly in the northern planning area south of the UPRR/I-10 corridor. The Proposed Project intends to maintain and enhance the City's residential character, while it continues to provide expanded opportunities for housing, business and employment, and growth in other sectors of the local economy.

It should be noted that while the Proposed Project, as with all of the project alternatives, will facilitate the extension of roads and infrastructure, the resulting growth is planned both on a local and regional level. Therefore, growth that is facilitated by the Proposed Project is not of a type or extent that is inadvertently induced in the sense meant by CEQA. Growth in the City will be highly coordinated both locally and regionally, and will continue to coordinate land use and transportation, as well as public services and utilities.

Growth associated with the implementation of the Proposed Project will be regulated and limited by policies, programs and physical constraints. Extensive portions of the planning area north of Interstate-10 are in conservation, and additional lands are slated for acquisition and management for the protection of open space and biological resources. Similarly, in the northern portion of the City, large areas located within and near Willow Hole and the western slopes of the Indio Hills (Edom Hill), including mesquite hummocks, are designated as Open Space-Public and are or are planned for public or quasi-public conservation ownership, and include existing BLM lands. Also, the Proposed Project designates the mountainous areas, including the Santa Rosa Mountains, in a manner that does not facilitate significant development on these lands. These open space lands are or will be conserved in perpetuity under the Coachella Valley Multi-Species Habitat Conservation Plan, to which the City is a Permittee.

B. Cumulative Impacts

Impacts associated with the implementation of the General Plan must be considered along with the effects of other development, which may also occur outside the City's General Plan study area and jurisdiction. CEQA identifies these as cumulative impacts (Section 21083 (b), CEQA Statutes and Section 15355 of the CEQA Guidelines). In this EIR, cumulative impacts have been addressed categorically for the Proposed Project in Section 2.0 and for project alternatives in Section 3.0.

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7. SHORT-TERM USE VERSUS LONG-TERM PRODUCTIVITY

This section of the EIR provides a discussion of the long-term effects of the Proposed Project by evaluating the relationship between the local short-term uses of the environment and the maintenance and enhancement of long-term productivity. Areas of impact which limit the range of beneficial uses of the environment or pose long-term risks to health and safety, have been given special focused consideration. These may include biological resources, water resources, energy resources, air resources and visual resources. This section also discusses why the Proposed Project is believed to be justified for adoption and implementation at this time, rather than delaying its adoption to consider additional alternatives not addressed in this EIR.

Biological Resources

The continued development of the General Plan planning area will include the disturbance and conversion of natural lands, and construction of improvements that will result in the loss of natural plant communities and wildlife. Habitat loss, fragmentation and degradation are direct consequences of land development activities. The proposed General Plan prohibits or significantly limits development on lands designated as habitat conservation and other sensitive areas. The Proposed Project also provides substantial restrictions to the density and intensity of development permitted near and/or adjacent to sensitive areas, and requires adherence to the *Land Use Adjacency Guidelines* set forth in the *Coachella Valley Multiple Species Habitat Conservation Plan* (CVMSHCP). Nonetheless, buildout of the General Plan planning area will result in the degradation or removal of biological resources within the planning area.

The continued development of the General Plan planning area could result in significant impacts to common and sensitive species such as the Coachella Valley Fringe-toed lizard, flat-tailed horned lizard, burrowing owl, Peninsular bighorn sheep and the Palm Springs pocket mouse which occupy natural habitats within the study area. Adverse impacts may include the legal taking of individual animals pursuant to the allowed incidental take permits issues under the CVMSHCP. It should be noted that no incidental take of Peninsular bighorn sheep is permitted under the CVMSHCP or its associated *Natural Communities Conservation Plan* (NCCP) approved by the State. The County of Riverside, CVAG, and City of Cathedral City along with other desert communities and the Coachella Valley Mountains Conservancy, the Friends of the Desert Mountains and others, are working with federal and state agencies in the implementation of the Multiple Species Habitat Conservation Plan to protect a broad range of species and their habitat. Lands designated within *Conservation Areas* by the CVMSHCP, include the aforementioned lands in the northern portions of the City and in the Santa Rosa Mountains, and are planned for long-term conservation.

The General Plan includes policies and programs that ensure that the City complies with applicable conservation lands management protocol when evaluating potential impacts and mitigation measures. Appropriate incidental take permits and associated mitigation measures are required prior to development whenever state and/or federal listed

species are identified that are not designated as “Covered Species” under the CVMSHCP, including the aforementioned bighorn sheep, Casey’s June beetle, burrowing owl and other birds covered under the *Migratory Bird Treaty Act* (MBTA). In general, the loss and degradation of habitat and the on-going impacts of human activities to biological resources will contribute to the long-term reduction of animal and plant species, habitat and biological diversity; however, compliance with the CVMSHCP, MBTA and other applicable plant and wildlife conservation plans and requirements, will assure that impacts will be less than significant even in the long-term.

Water Resources

As discussed at length in Sections 2 and 3 of this EIR, the water management agencies of the City and Coachella Valley, including and especially Desert Water Agency (DWA) and Coachella Valley Water District (CVWD), have made significant strides in balance the demand for domestic water with supply. At this time, the water agencies have or soon will have established a balance between a dependable long-term water supply, including waters in storage and contracted for on-going delivery, and long-term demand. Historical overdraft of the groundwater aquifer has or soon will end and net recharge to these basins will incrementally increase water is storage in the coming years.

This EIR, as well as the General Plan Water Resources Sub-Element and other General Plan elements, address the current conditions of the Whitewater River Subbasin, which serves as the main groundwater repository for the Coachella Valley, including the General Plan planning area. Imported water from the Colorado River supplements the recharge of the Whitewater River Subbasin, which is also addressed through natural surface recharge and reclaimed wastewater. The water agencies continue to promote water conservation and have implemented water management strategies and measures that have increased water use efficiencies and reduced or eliminated overdraft.

The continued implementation of stringent water conservation methods and acquisition of additional sources of recharge are serving to alleviate groundwater overdraft conditions in the valley. The policies and programs of the proposed General Plan promote and support the conservative use of water resources for landscaping and domestic uses, and otherwise encourage the efficient use of our limited water resources. Therefore, the City and the water agencies that serve it are working together to ensure that the short-term use of water resources will not outstrip the long-term supply.

Energy Resources

As discussed in the Energy and Mineral Resources Sub-Element found in the Open Space and Conservation Element of the proposed General Plan, the City, CVAG and member jurisdictions, Riverside County, SCAG and various state agencies have enacted a wide range of initiatives to conserve energy and to transition to renewable sources of energy. While the impetus for this evolution has been induced to a large degree by the threats of global warming and climate change, there have also been other human and environmental health reasons that have driven this effort.

The proposed General Plan, including but not limited to the policies and programs set forth in the Energy and Mineral Resources Sub-Element, will help to ensure that the City does its part to secure an economically and environmentally sustainable energy future. The General Plan also points directly to the City’s Climate Action Plan, Sustainability Plan and Green for Life program that further implement the City’s conservation and renewable energy ethic. Therefore, the City, other local governments, CVAG, SCAG and the state are working together to ensure that the short-term use of energy resources will be economically and environmentally sustainable and that future energy use does not outstrip the long-term supply.

Air Resources and Greenhouse Gasses

As indicated in the discussion in Section 2 of this document, air quality affected by identified criteria pollutants, and emissions of climate-changing greenhouse gasses (GHGs), are both local and non-localized issues that are influenced by various emissions generated both locally and from areas outside the Coachella Valley. Continued growth and development in the City and the region are expected to increase the amount of pollutants emitted into

the valley's air basin. Increased traffic, urban development and use of electrical power and natural gas consumption will generate additional local and regional pollutants that will further degrade air quality. Increased local emissions will contribute to higher concentrations of reactive organic gases, oxides of nitrogen and particulates. The amount of locally produced ozone is expected to rise in the future, given that ideal conditions necessary for ozone generation occur in the Coachella Valley.

Oxides of nitrogen and reactive hydrocarbons are generated by the burning of natural gas and the continued use of gasoline and diesel fuels in vehicles and equipment. These pollutants degrade local air quality to a greater or lesser extent, as determined by the rates of dispersion. Fugitive dust emissions will increase with continued urban development; however, these increases are expected to be temporary as disturbed sites will be permanently stabilized with landscaping, structures and pavement. Although the proposed General Plan update includes goals, policies and programs intended to regulate emissions, impacts to air quality cannot be completely eliminated, at least not in the near to mid-term. The decrease in emissions is not expected to occur in the near future, unless transportation methods and combustion technology undergo extreme modifications.

In this regard, and as discussed above under Energy Resources, there is a concerted effort on all levels to move away from the use of fossil fuels for purposes of transportation, heating and cooling, electricity generation and other energy needs. State mandates to reduce the emission of GHGs also have the effect of reducing our reliance on fossil fuels and increasing the use of electricity generated by renewable sources, especially wind and solar. The City has taken a leadership role in this effort and the proposed General Plan includes a wide range of policies and programs that will facilitate the transition to a cleaner array of energy resources and a reduction if the emission of criteria pollutants and GHGs.

Visual Resources

The City values its scenic and visual resources, created by the exceptional mountain formations and vast expanses of low-lying desert lands. The City's unique environment is responsible for drawing visitors and new residents from all over the country. The continued development of the City in conformance with the proposed General Plan's various policies and programs will ensure that future development will have limited impacts to viewsheds with the City. The policies and programs of the proposed General Plan include appropriate development criteria and require reviews of proposed projects which may generate potential adverse impacts on scenic resources. The proposed General Plan also incorporates the preservation and application of elements of the desert landscape into urban design. Development projects within the General Plan planning area will be required to meet standards and regulations that limit impacts to scenic resources. Nonetheless, grading, clearing and other site disturbances, along with construction of roads and structures will all contribute to the long-term impacts to visual resources, which can be avoided, minimized and mitigated to levels that are less than significant with the implementation of the General Plan's policies and programs.

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8. ORGANIZATIONS, PERSONS AND DOCUMENTS CONSULTED

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B. Environmental/Planning Consultant

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42635 Melanie Place, Suite 101
Palm Desert, CA 92211

C. Engineering Consultant/Noise and Traffic

Urban Crossroads
260 E. Baker St. Suite 200
Costa Mesa, CA 92626

D. Air Quality Consultant

Terra Nova Planning & Research, Inc.
42635 Melanie Place, Suite 101
Palm Desert, CA 92211

E. Utilities

City of Cathedral City
Desert Water Agency
Burrtec Waste Industries, Inc.
Southern California Edison
Spectrum
The Gas Company
Frontier Communications

F. Public Agencies

City of Cathedral City
City of Palm Springs
California Office of Planning and Research
Caltrans
Riverside County Transportation Department
Riverside County Flood Control & Water Conservation District
Desert Water Agency
Coachella Valley Water District
Coachella Valley Association of Governments
Palm Springs Unified School District
South Coast Air Quality Management District
Riverside County Airport Land Use Commission
Regional Water Quality Control Board
Federal Aviation Administration

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