

CEQA requires an EIR to evaluate a project's effects in relationship to broader changes occurring, or that are foreseeable to occur, in the surrounding environment. Accordingly, this chapter presents a detailed discussion, consistent with the requirements of CEQA, of the cumulative impacts, growth-inducing impacts, and significant and irreversible effects of the Project, and growth inducement associated with the Project.

4.1 CUMULATIVE IMPACTS

This Draft EIR provides an analysis of overall cumulative impacts of the Project taken together with other past, present, and probable future projects producing related impacts, as required by Section 15130 of the California Environmental Quality Act Guidelines (State CEQA Guidelines). The goal of this analysis is twofold: first, to determine whether the overall long-term impacts of all such projects would be cumulatively significant; and second, to determine whether the Project itself would cause a “cumulatively considerable” incremental contribution to any such cumulatively significant impacts. (See State CEQA Guidelines Sections 15130[a]-[b], Section 15355[b], Section 15064[h], Section 15065[c]; *Communities for a Better Environment v. California Resources Agency* [2002] 103 Ca1.App.4th 98, 120.) In other words, the required analysis intends to first create a broad context in which to assess the project’s incremental contribution to anticipated cumulative impacts, viewed on a geographic scale well beyond the project area itself, and then to determine whether the project’s incremental contribution to any significant cumulative impacts from all projects is itself significant (i.e., “cumulatively considerable” in CEQA parlance).

Pursuant to Section 15130(b) of the State CEQA Guidelines, “(t)he discussion of cumulative impacts shall reflect the severity of the impacts and their likelihood of occurrence, but the discussion need not provide as great detail as is provided for the effects attributable to the project alone. The discussion should be guided by the standards of practicality and reasonableness, and should focus on the cumulative impacts to which the identified other projects contribute rather than the attributes of other projects which do not contribute to the cumulative impact.”

Section 2.0 (Project Description) of this Draft EIR provides a detailed description of the cumulative development at buildout of the General Plan used throughout this Draft EIR. Tables 2-3 identifies the total development potential for Single Family Units, Multifamily Units, Commercial Development, Office Development, and Industrial Development that was factored into the environmental analysis. Additionally the General Plan Buildout Analysis in Section 2.0 provides estimated employment projections based on land uses throughout the Planning Area. Tables 3.12-1 through 3.12-3 in Section 3.12 (Population and Housing) identifies population trends, including past and projected future population levels within the City, and household trends, including the past and projected future numbers of households within the City.

CUMULATIVE EFFECTS OF THE PROJECT

Method of Analysis

Although the environmental effects of an individual project may not be significant when that project is considered separately, the combined effects of several projects may be significant when considered collectively. State CEQA Guidelines Section 15130 requires a reasonable analysis of a project's cumulative impacts, which are defined as "two or more individual effects which, when considered together are considerable or which compound or increase other environmental impacts." The cumulative impact that results from several closely related projects is: the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonable foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time (State CEQA Guidelines 15355[b]). Cumulative impact analysis may be less detailed than the analysis of the project's individual effects (State CEQA Guidelines 15130[b]).

The State CEQA Guidelines Section 15130(b)(1) provides two approaches to analyzing cumulative impacts. The first is the list approach, which requires a listing of past, present, and reasonably anticipated future projects producing related or cumulative impacts, including, if necessary, those projects outside the control of the agency. The second is the plan approach, wherein the relevant projections contained in an adopted general plan or related planning document that is designed to evaluate regional or area-wide conditions contributing to the cumulative effect. For this Draft EIR, the plan approach been used to analyze cumulative impacts. The plan approach component assumes full buildout of the proposed City of Martinez General Plan and Land Use Map, as described in greater detail below.

Cumulative Impacts

Under CEQA, the discussion of cumulative impacts should focus on the severity of the impacts and the likelihood of their occurrence. The cumulative scenario for the proposed project includes growth planned for the City under buildout of the proposed General Plan, as described in Chapters 2.0, 3.10 and 3.12. Additionally, as described in Chapter 2.0, the proposed project would not approve or entitle any development projects in the City. The analysis of cumulative effects considered the cumulative projected General Plan buildout.

Cumulative impacts for most issue areas are not quantifiable and are therefore discussed in general terms as they pertain to development patterns in the surrounding region. In consideration of the cumulative scenario described above, the proposed project may result in the following cumulative impacts.

AESTHETICS AND VISUAL RESOURCES

Impact 4.1 Cumulative Degradation of the Existing Visual Character of the Region (Cumulatively Considerable)

As described in Chapter 3.1 (Aesthetics and Visual Resources) Impact 3.1-1: General Plan implementation could result in substantial adverse effects on scenic vistas, and Impact 3.1-3: General Plan implementation could substantially degrade the existing visual character or quality of the Planning Area and its surroundings are both considered significant and unavoidable impacts.

Future development that could occur under cumulative conditions could impact local viewsheds and degrade aesthetics. The General Plan contains numerous policies and programs related to the preservation and enhancement of viewsheds, the protection of scenic resources. Individual development projects would be required to be consistent with these General Plan policies and programs. However, future development allowed under the proposed General Plan and Land Use Map would substantially change existing views, therefore the proposed project would have a **significant and unavoidable** and **cumulatively considerable** contribution to impacts to visual and scenic resources.

AGRICULTURAL RESOURCES

Impact 4.2: Cumulative Impact on the Region's Agricultural Resources (Cumulatively Considerable)

Cumulative development anticipated in the region may result in impacts to agricultural resources, including the permanent loss and or reduction of agricultural land. Subsequent projects implemented under the City's General Plan would be required to be consistent with the policies and programs of the General Plan. The Open Space and Conservation Element of the General Plan establishes policies and programs that are designed to protect and conserve agricultural resources, as discussed in Section 3.2 (Agricultural Resources). New development would occur within significant agricultural areas located in the City, and would contribute the loss of viable agricultural land in the region. As such, the project would have a **significant and unavoidable** and **cumulatively considerable** impact on agricultural resources.

AIR QUALITY

Impact 4.3: Cumulative Impact on the Region's Air Quality (Cumulatively Considerable)

Construction of the individual development projects allowed under the land use designations of the City's General Plan would lead to moderate increases in vehicle trips on local roadways, increases in energy consumption, and increases in air quality emissions from mobile stationary sources. The General Plan Update would allow growth of new residential land uses that would be sensitive receptors and new non-residential land uses that are a potential for new emissions

sources. Additionally construction emissions would remain a significant and unavoidable impact relating to air quality impacts.

Typically, pollutant sources would be evaluated through the BAAQMD permit process or the CEQA process to identify and mitigate any significant exposures. However, some sources that would not undergo such a review, such as truck loading docks or truck parking areas, may have the potential to cause significant increases in TAC exposure. Implementation of Mitigation Measure AQ-3 would reduce this impact. However, it is not possible to determine at this stage of the planning process that all impacts could be reduced to a less-than-significant level from larger sources such as the Shell Refinery, for example. Therefore, this impact would remain significant and unavoidable.

The proposed General plan includes many relevant policies and numerous strategies that promote the development of transit-oriented projects to reduce vehicle emissions throughout the City. However, the project's contribution to cumulative air quality impacts is still considered **cumulatively considerable**.

BIOLOGICAL RESOURCES

Impact 4.4: Cumulative Loss of Biological Resources Including Habitats and Special Status Species (Less than Cumulatively Considerable)

Cumulative development anticipated in the region may result in impacts to biological resources, including the permanent loss of habitat for special-status species, direct and indirect impacts to special-status species, and reduction and degradation of sensitive habitat. Subsequent projects implemented under the City's General Plan would be required to be consistent with the policies and programs of the General Plan. The Open Space and Conservation Element of the General Plan establishes policies and programs that are designed to protect and conserve special status species and their habitat, as discussed in Chapter 3.4 (Biological Resources). New development would not occur within any of the significant biological features located in the City, and would not contribute the loss of biological resources or sensitive habitat in the region. As such, the project would have a **less than cumulatively considerable** impact on biological resources.

CULTURAL RESOURCES

Impact 4.5: Cumulative Impacts on Known and Undiscovered Cultural Resources (Less than Cumulatively Considerable)

Construction of future development projects allowed under the land use designations of the City's General Plan may result in the discovery and removal of cultural resources, including archaeological, paleontological, historical, and Native American resources and human remains. As discussed in Section 3.5, future development would require project-specific surveys for potential resources and to evaluate any resources discovered during construction activities. Mitigation Measure Cul-1 would update the City's General Plan Cultural and Arts Element to include additional policy requirements to ensure that all individual projects either avoid known cultural or historical resources, or take steps to implement amelioration methods to reduce impacts to known cultural or historical resources. Adherence to these policies, actions, and regulations will avoid and/or minimize a cumulative loss of these important resources if they are found during project-

specific surveys or construction and would reduce impacts associated with cumulative development to a less than significant level. Therefore, the proposed project's incremental contribution to cumulative cultural resource impacts would be **less than cumulatively considerable**.

GEOLOGY AND SOILS

Impact 4.6: Cumulative Impacts related to Geology and Soils (Less than Cumulatively Considerable)

Construction of the individual development projects allowed under City's General Plan may result in risks associated with geology and soils. For example, there will always be a chance that a fault located anywhere in the state (or region) could rupture and cause seismic ground shaking. Additionally, grading, excavation, removal of vegetation cover, and loading activities associated with construction activities could temporarily increase runoff, erosion, and sedimentation. Other geologic risk such as liquefaction, landsliding, lateral spreading, and soil expansion are also geologic risks that are present.

While some cumulative impacts may occur in the region as individual projects are constructed, the City's General Plan policies and programs, as well as State and federal regulations (all of which are identified in Section 3.6 (Geology and Soils), will reduce the risk to people in the region. Considering the protection granted by local, state, and federal agencies and their requirements for the seismic design, as discussed in Section 3.6, the overall cumulative impact would not be significant. By the same token, the proposed project's incremental contribution to cumulative geologic and soil impacts would be **less than cumulatively considerable**.

GREENHOUSE GASES AND CLIMATE CHANGE

Impact 4.7: Increased Greenhouse Gas Emissions May Contribute to Climate Change (Less than Cumulatively Considerable)

Impacts 3.7-1 and 3.7-2 in Chapter 3.7 (Greenhouse Gas) provide a cumulative-level analysis of GHG emissions impacts and the proposed project's consistency with applicable plans, policies, and regulations adopted for the purpose of reducing the emissions of greenhouse gases.

As shown in Table 3.7-2 (Section 3.7), 2040 full build-out operation of the General Plan Update would have per capita emissions of 5.8 MT of CO₂e/yr, which would not exceed the BAAQMD general plan-level threshold of 6.6 MT CO₂e/year. This impact is, therefore, considered **less than significant**.

Additionally, the City's Climate Action Plan identifies existing and proposed initiatives to reduce greenhouse gas emissions. The CAP ensures that the City's future activities and development patterns conform to California climate change legislation. The purpose of the CAP is to identify how the City will help the State achieve the State GHG emission reduction target of 15 percent by the year 2020. The CAP provides goals and associated measures, also referred to as GHG reduction measures, in the sectors of energy use, transportation, land use, water, and solid waste. In

addition, the CAP provides goals and measures for longer-term adaptation to the potential risks associated with climate change.

The CAP includes all of the elements identified under CEQA Guidelines Section 15183.5(b)(1), which identifies the elements that a plan for the reduction of GHGs should include. Specifically, the CAP complies with the provisions of CEQA Guidelines Section 15183(b)(1) by providing a quantified inventory of GHG emissions and by providing a level based on substantial evidence below which activities subject to the plan will not make a cumulatively considerable contribution to GHG impacts. That level is based on the State's AB 32 goals.

While the City's General Plan takes a broad and comprehensive approach to sustainability, the CAP focuses specifically on GHG reductions. The CAP identifies and quantifies the impact of the City's sustainability vision, policies, and programs on GHG emissions. The sustainability components of the General Plan and the CAP function together as part of the City's comprehensive toolkit to achieve a vibrant and sustainable community.

The CAP provides specific and concrete direction to the City and development community and includes numerous specific measures that would apply to new development in order to reduce individual subsequent projects' contributions to climate change. Compliance with the CAP and implementation of applicable CAP measures would ensure that subsequent projects, which are consistent with the General Plan, would have a less than cumulatively considerable contribution to climate change and greenhouse gases. The analysis presented above demonstrates that the implementation of the CAP for all subsequent development projects would assist the City in helping the State meet its reduction goals. Therefore, subsequent projects, including development projects, that are consistent with the General Plan and implement applicable CAP measures, would not result in a significant or considerable cumulative contribution to climate change and the generation of GHGs. Therefore, this impact is **less than significant** and **less than cumulatively considerable**.

HAZARDS

Impact 4.8: Cumulative impacts from hazardous materials and human health risks. (Less than Cumulatively Considerable)

Construction of the individual development projects allowed under the land use designations of the General Plan may involve the transportation, use, and/or disposal of hazardous materials, which may involve the use of equipment that contains hazardous materials (e.g., solvents and fuels, diesel-fueled equipment), or the transportation of excavated soil and/or groundwater containing contaminants from areas that are identified as being contaminated. Furthermore, some will inevitably transport or use hazardous materials within ¼ mile of a school, or other sensitive receptors such as hospitals and residences.

While some cumulative impacts will occur in the region as individual projects are constructed, the City's General Plan policies and programs, as well as State and federal regulations, will reduce the risk to people in the City and surrounding area. Considering the protection granted by local, State,

and federal agencies and their requirements for the use of hazardous materials in the region, as discussed in Section 3.8 (Hazards and Hazardous Materials), the overall cumulative impact would be less than significant. By the same token, the proposed project's incremental contribution to cumulative hazards and human health impacts would be **less than cumulatively considerable**.

HYDROLOGY AND WATER QUALITY

***Impact 4.9: Cumulative impacts related to Hydrology and Water Quality.
(Less than Cumulatively Considerable)***

Construction of the individual development projects allowed under the land use designations of the General Plan has the potential to have construction and dewatering related water quality impacts, impacts to groundwater recharge, and cause flooding, erosion, or siltation from the alteration of drainage patterns.

While some cumulative impacts will occur in the region as individual projects are constructed, the General Plan policies and Implementation programs, as well as State and federal regulations, will substantially reduce the impacts. Considering the protection granted by local, State, and federal agencies and their permit and monitoring requirements, as discussed in Section 3.9 (Hydrology and Water Quality), the overall cumulative impact would not be significant. By the same token, the proposed project's incremental contribution to cumulative hydrology impacts would be **less than cumulatively considerable**.

LAND USE, POPULATION AND HOUSING

***Impact 4.10: Cumulative Impact associated with Land Use Plans
(Less than Cumulatively Considerable)***

Cumulative land use and planning impacts, such as the potential for conflicts with adjacent land uses and consistency with adopted plans and regulations, are typically site- and project-specific. Under cumulative conditions, individual projects may require removal of homes and result in the displacement of people and housing; however, these effects are not cumulatively considerable because there is adequate replacement housing allowed under the General Plan.

New development and redevelopment projects would be designed to complement the character of existing communities and provide connectivity between existing development and new development within the cumulative analysis area. As described in detail in Section 3.10 (Land Use Planning), and Section 3.12 (Population and Housing), the proposed Land Use Element and implementing Policies address the preservation of the identify and qualities of the City's residential neighborhoods through assuring that all new development, renovation or remodeling are harmoniously designed and operated to integrate with the existing neighborhood. Future projects would be reviewed for consistency with adopted land use plans and regulations.

The proposed General Plan has been developed to be largely consistent with adopted plans and regulations. Subsequent development projects would be required to be consistent with all applicable policies, standards, and regulations, including those land use plans, policies, and regulations adopted to mitigate environmental effects by the City, as well as those adopted by

agencies with jurisdiction over components of future development project. The project is not anticipated to result in significant conflicts with land use plans, policies, or regulations that have jurisdiction over the project. The project's contribution to cumulative land use planning impacts is **less than cumulatively considerable**.

NOISE

Impact 4.11: Cumulative Exposure of Noise-Sensitive Land Uses to Noise in Excess of Normally Acceptable Noise Levels or to Substantial Increases in Noise (Cumulatively Considerable)

Construction of the individual development projects allowed under the land use designations of the City's General Plan may result in the generation of site-specific noise increases from stationary noise sources, and may contribute incrementally to noise from mobile sources. Additionally construction noise from individual development projects allowed under the City's General Plan will result in the generation of site-specific noise increases.

As discussed in Section 3.11 (Noise and Vibration), buildout of the updated General Plan would contribute to an exceedance of the City's transportation noise standards and would result in increases in traffic noise levels at existing sensitive receptors. Policies included in the General Plan would reduce noise associated with transportation and stationary noise sources through a range of measures and approaches. These noise-related policies include requirements for the preparation of project-specific noise studies, compliance with adopted City standards and thresholds of interior and exterior noise level exposure, the use of mitigation measures and techniques to reduce noise exposure, and land use compatibility standards. Implementation of General Plan policies would reduce noise throughout the Planning Area to the greatest extent feasible, however, the proposed project's incremental contribution to cumulative noise impacts would still be considered a **significant and unavoidable** and **cumulatively considerable** contribution to noise.

PUBLIC SERVICES, AND RECREATION

Impact 4.12: Cumulative Impact on Public Services and Recreation (Less than Cumulatively Considerable)

Cumulative growth that would occur over the life of the General Plan will result in increased demand for public services, including fire protection, law enforcement, schools, parks, libraries, and other public and governmental services. The service area for each of these utilities and services is considered the cumulative analysis area. As the demand for public services and recreation increases, there will likely be a need to increase staffing and equipment in order to maintain acceptable service ratios, response times, and other performance standards. New or expanded service structures (e.g., offices, maintenance and administrative buildings, schools, parks, fire departments, libraries, etc.) will be needed to provide for adequate staffing, equipment, and appropriate facilities to serve growth within the cumulative analysis area.

As described in Section 3.13 (Public Services), and Section 3,14 (Recreation), the General Plan includes a range of policies and programs that would ensure that public services are provided in a timely fashion, are adequately funded, and that new development funds its fair share of services.

The General Plan includes policies to ensure that recreational, educational, and fire protection services keep pace with new development and that other governmental services are adequately planned and provided. The General Plan includes policies to meet adopted and acceptable public services standards and to ensure future development pays its fair share for impacts to public services. With implementation of General Plan policies and programs, including those established by the proposed project, the proposed project's incremental contribution to cumulative public services and recreation impacts would be **less than cumulatively considerable**.

TRANSPORTATION AND CIRCULATION

Impact 4.13: Cumulative Impact on the Transportation Network (Cumulatively Considerable)

The impact analyses in Section 3.15 (Transportation) of this EIR addressed potential impacts to the City's transportation network under cumulative, or General Plan buildout, conditions. As described in greater detail in Section 3.15, additional traffic volumes are expected throughout the planning area under cumulative conditions. These traffic volumes reflect regional growth in addition to that projected under buildout of the General Plan. The General Plan identifies a list of circulation system improvements (Table 3.15-3) that are planned to accommodate development under the General Plan and these improvements are assumed to be implemented as described under the Transportation Analysis Methodology. The proposed Circulation Element of the General Plan Update notes that these improvements are currently planned, but not guaranteed to occur and are dependent on funding and other considerations. As stated in Section 3.15 the implementation of improvements necessary to ensure roadway operations meet performance standards may not occur as the General Plan identifies that the necessary improvements are planned but not guaranteed due to funding and other considerations, therefore the impact to the transportation system is considered **significant** and **unavoidable**, and **cumulatively considerable**.

Impact 4.14: Cumulative Impact from Public Utilities (Cumulatively Considerable and Significant and Unavoidable)

Under buildout conditions, development allowed by the General Plan would increase the demand for water supply, wastewater conveyance and treatment, and solid waste disposal. Growth associated with buildout of the General Plan, is summarized in Section 2.0.

Section 3.16 describes the water supply, wastewater treatment, stormwater, and solid waste impacts associated with implementation of the proposed project. Under cumulative conditions, individual projects proposed within the Planning Area would be required to comply with all applicable policies in the proposed general plan. As described in Section 3.16, impacts to utilities would be reduced to less than significant levels through implementation of policies and implementation measures contained in the proposed General Plan. The General Plan includes policies that ensure continued water conservation efforts and adequate planning and provision of public facilities, including water supply and wastewater treatment and conveyance, and methods to reduce solid waste generation. The policies and related utilities contained in the proposed General Plan would reduce the proposed project's contribution to cumulative utilities impacts by encouraging water conservation, requiring on-going planning to ensure adequate water supply and

wastewater treatment, including any necessary infrastructure, and to continue to reduce solid waste. As such, the proposed project's contribution to this impact is considered to be **less than cumulatively considerable**.

4.2 GROWTH-INDUCING EFFECTS

INTRODUCTION

Section 15126.2(d) of the CEQA Guidelines requires that an EIR evaluate the growth-inducing impacts of a proposed action. A growth-inducing impact is defined by the CEQA Guidelines as:

The way in which a proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Included in this are projects which would remove obstacles to population growth...It is not assumed that growth in an area is necessarily beneficial, detrimental, or of little significance to the environment.

Based on the State CEQA Guidelines, growth inducement is any growth that exceeds planned growth of an area and results in new development that would not have taken place without implementation of the Project. A project can have direct and/or indirect growth inducement potential. Direct growth inducement would result if a project, for example, involved construction of new housing. A project would have indirect growth inducement potential if it established substantial new permanent employment opportunities (e.g., commercial, industrial, or governmental enterprises) or if it would involve a construction effort with substantial short-term employment opportunities that would indirectly stimulate the need for additional housing and services to support the new employment demand (*Napa Citizens for Honest Government v. Napa County Board of Supervisors* (Cal. App. 1st Dist., 2001)). Similarly, a project would indirectly induce growth if it would remove an obstacle to additional growth and development, such as removing a constraint on a required public service. A project providing an increased water supply in an area where water service historically limited growth could be considered growth-inducing.

The State CEQA Guidelines further explain that the environmental effects of induced growth are considered indirect impacts of the proposed action. These indirect impacts or secondary effects of growth may result in significant, adverse environmental impacts. Potential secondary effects of growth include increased demand on other community and public services and infrastructure, increased traffic and noise, and adverse environmental impacts such as degradation of air and water quality, degradation or loss of plant and animal habitat, and conversion of agricultural and open space land to developed uses.

Growth inducement may constitute an adverse impact if the growth is not consistent with or accommodated by the land use plans and growth management plans and policies for the area affected. Local land use plans provide for land use development patterns and growth policies that allow for the orderly expansion of urban development supported by adequate urban public services, such as water supply, roadway infrastructure, sewer service, and solid waste service.

Components of Growth

The timing, magnitude, and location of land development and population growth in a region are based on various interrelated land use and economic variables. Key variables include regional economic trends, market demand for residential and non-residential uses, land availability and cost, the availability and quality of transportation facilities and public services, proximity to employment centers, the supply and cost of housing, and regulatory policies or conditions. Since the general plan of a community defines the location, type, and intensity of growth, it is the primary means of regulating development and growth in California.

GROWTH EFFECTS OF THE PROJECT

Population Growth

Given the historical and current population, housing, and employment trends, growth in the City, as well as the entire state is inevitable. The primary factors that account for population growth are natural increase, and net migration. The average annual birth rate (births per 1000 population) for California in 2013 was 13.1. Additionally, California is expected to attract roughly one third of the country's immigrants. Other factors that affect growth include the cost of housing, the location of jobs, the economy, the climate, and transportation. While these factors would likely result in growth in Martinez during the planning period of the proposed General Plan, growth will continue to occur based primarily on the demand of the housing market and demand for new commercial, industrial, and other non-residential uses.

Growth under the proposed General Plan would remain within the general growth levels projected statewide, and would not be anticipated to exceed any applicable growth projections or limitations that have been adopted to avoid an environmental effect. The proposed General Plan is intended to accommodate the City's fair share of statewide housing needs, which are allocated by the Association of Bay Area Governments, and based on regional numbers provided by the California Department of Housing and Community Development on a regular basis (every five to eight years).

Growth Effects Associated with the Proposed Project

The proposed project would not directly result in population growth. The proposed project does not propose nor entitle any development projects. The proposed General Plan includes many policies that would ensure that the City continues to plan for adequate transportation, public facilities, and services necessary to allow future growth.

Growth would occur under the proposed General Plan. Under cumulative conditions, growth associated with the General Plan, would result in population, housing, and employment increases that are generally similar to ABAG's population and housing projections for the City. As described in Chapter 2.0, upon full buildout of the proposed General Plan Land Use Map, the City's population may increase by approximately 7,105 residents. Additionally, the city may gain 2,900 new residential units, and employment may increase by approximately 2,390 employees, and

4.0 OTHER CEQA-REQUIRED TOPICS

there may be approximately 1.2 million square feet of new non-residential development in the City limits and SOI. .

The proposed General Plan includes goals and policies that mitigate environmental impacts associated with growth, such as air quality, noise, traffic, water supply, and water quality effects. Additionally, this Draft EIR includes mitigation measures, where appropriate, to reduce or eliminate potentially significant impacts associated with specific environmental issues associated with growth. Sections 3.1 through 3.16, and 4.0 provide a discussion of environmental effects associated with development allowed under the proposed General Plan.

With implementation of General Plan policies intended to guide growth to appropriate areas and provide services necessary to accommodate growth, the land uses allowed under the proposed General Plan, the infrastructure anticipated to accommodate proposed land uses, and the goal and policy framework would not induce growth that would exceed adopted thresholds. Therefore, population and housing growth associated with the proposed General Plan would result a less than significant impact.

As indicated in Section 2.0, the project is not anticipated to result in a significant population increase in the region. The cumulative growth that could occur in the City would be accommodated under the proposed General Plan and Land Use Map. Therefore, growth is anticipated to occur regardless of adoption of the proposed project as development and other growth projects could continue to be approved and implemented by the City and its neighboring communities. Growth will primarily occur as a result of external market forces, such as the availability of financing, the employment rate, and construction costs. The City's Housing Element and Land Use Map will accommodate future housing growth and will help to ensure that the City can accommodate its fair share of housing for all income groups. While the proposed General Plan would not result in a significant increase in the amount of growth, it would encourage growth to be developed in an orderly fashion, ensure adequate infrastructure, and provide for methods to reduce vehicle trips and energy consumption associated with development and public services.

With implementation of General Plan policies and actions intended to guide growth to appropriate areas and provide services necessary to accommodate growth, the land uses allowed under the proposed General Plan, the infrastructure anticipated to accommodate proposed land uses, and the goal and policy framework, the project would not induce growth that would exceed adopted thresholds. Therefore, population and housing growth associated with the proposed General Plan would result a **less than significant** impact.

4.3 SIGNIFICANT IRREVERSIBLE EFFECTS

CEQA requires that EIRs prepared for the adoption of a plan, policy, or ordinance of a public agency must include a discussion of significant irreversible environmental changes as a result of project implementation. State CEQA Guidelines Section 15126.2(c) describes irreversible environmental changes as:

“Uses of nonrenewable resources during the initial and continued phases of the project may be irreversible since a large commitment of such resources makes removal or nonuse thereafter unlikely. Primary impacts and, particularly, secondary impacts (such as highway improvement which provides access to a previously inaccessible area) generally commit future generations to similar uses. Also irreversible damage can result from environmental accidents associated with the project. Irretrievable commitments of resources should be evaluated to assure that such current consumption is justified.”

Consumption of nonrenewable resources refers to the loss of physical features within the natural environment, including the conversion of open space, sensitive habitats, and nonrenewable energy use. The proposed General Plan includes a variety of goals, policies and implementation measures, which would preserve open space areas and other natural resources in the region including local waterways and, as a result, will minimize the potential for impacts to the nonrenewable resources, including biological resources, open spaces, and waterways.

Non-renewable energy resources such as electricity, natural gas, propane, gasoline, and diesel would be consumed during the construction and operation of development allowed under the General plan. The City’s Climate Action Plan identifies existing and proposed initiatives to reduce greenhouse gas emissions. The CAP ensures that the City’s future activities and development patterns conform to California climate change legislation. The purpose of the CAP is to identify how the City will help the State achieve the State GHG emission reduction target of 15 percent by the year 2020. The CAP provides goals and associated measures, also referred to as GHG reduction measures, in the sectors of energy use, transportation, land use, water, and solid waste. In addition, the CAP provides goals and measures for longer-term adaptation to the potential risks associated with climate change.

Future development and infrastructure projects consistent with the proposed General Plan will physically change the environment in terms of aesthetics, air emission, noise, traffic, open space, and natural resources as discussed in Chapters 3.1 through 3.16. While these physical changes are not individually significant, these physical changes are irreversible after development occurs. Therefore, the proposed General Plan would allow irreversible changes within the City that would involve permanent commitment of resources, including land and energy.

In summary, implementation of the proposed General Plan would result in a commitment of land uses designated for the foreseeable future. Land use and development consistent with the General Plan would result in irretrievable commitments by introducing development onto sites that are presently undeveloped. The conversion of undeveloped lands including open space areas to urban uses would result in an irretrievable loss of open space land, and potential wildlife habitat. Additionally, development will physically change the environment in terms of aesthetics, air emission, noise, traffic, and open space. These physical changes are irreversible after development occurs. Therefore, the proposed General Plan would result in changes in land use within the Planning Area that would commit future generations to these uses.

The General Plan includes an extensive policy framework that is designed to address land use and environmental issues to the greatest extent feasible, while allowing growth and economic development for the City. However, even with the policies that will serve to reduce potential significant impacts, the proposed General Plan will result in significant irreversible changes. This impact is considered a **significant and unavoidable** impact under CEQA.

4.4 SIGNIFICANT AND UNAVOIDABLE IMPACTS

CEQA Guidelines Section 15126.2(b) requires an EIR to discuss unavoidable significant environmental effects, including those that can be mitigated but not reduced to a level of insignificance. The following significant and unavoidable impacts of the Brentwood General Plan are discussed in Chapter 3 and previously in this chapter (cumulative-level). Refer to those discussions for further details and analysis of the significant and unavoidable impacts identified below:

- **Impact 3.1-1:** General Plan implementation could result in substantial adverse effects scenic vistas (Significant and Unavoidable)
- **Impact 3.1-3:** General Plan implementation could substantially degrade the existing visual character or quality of the Planning Area and its surroundings (Significant and Unavoidable)
- **Impact 3.2-1:** General Plan implementation would result in the conversion of farmlands, including Prime Farmland, Unique Farmland, and Farmland of Statewide Importance (Significant and Unavoidable)
- **Impact 3.3-2:** Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors) (Significant and Unavoidable)
- **Impact 3.3-4:** Expose sensitive receptors to substantial pollutant concentrations (Significant and Unavoidable)
- **Impact 3.10-2:** General Plan implementation would not conflict with an applicable land use plan, policy, or regulation of an agency with jurisdiction over the project adopted to avoid or mitigate an environmental effect (Significant and Unavoidable)
- **Impact 3.11-1:** Traffic Noise Sources (Significant and Unavoidable)
- **Impact 3.11-4:** Construction Noise (Significant and Unavoidable)
- **Impact 3.11-6:** Railroad Noise Sources (Significant and Unavoidable)
- **Impact 3.15-1:** The proposed General Plan could conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit. (Significant and Unavoidable)
- **Impact 3.15-2:** The proposed General Plan could conflict with an applicable congestion management program, including, but not limited to level of service standards and travel

demand measures, or other standards established by the county congestion management agency for designated roads or highways (Significant and Unavoidable)

- **Impact 4.1:** Cumulative Degradation of the Existing Visual Character of the Region (Cumulatively Considerable)
- **Impact 4.2:** Cumulative Impact on the Region's Agricultural Resources (Cumulatively Considerable)
- **Impact 4.3:** Cumulative Impact on the Region's Air Quality (Cumulatively Considerable)
- **Impact 4.10:** Cumulative Impact associated with Land Use Plans (Cumulatively Considerable)
- **Impact 4.11:** Cumulative Exposure of Noise-Sensitive Land Uses to Noise in Excess of Normally Acceptable Noise Levels or to Substantial Increases in Noise (Cumulatively Considerable)
- **Impact 4.13:** Cumulative Impact on the Transportation Network (Cumulatively Considerable)
- **4.3:** Significant Irreversible Effects (Significant and Unavoidable)
- **4.6:** Substantial Adverse Effects On Human Beings (Significant and Unavoidable)

4.5 SUBSTANTIAL ADVERSE EFFECTS ON FISH, WILDLIFE, AND PLANT SPECIES

As described throughout the analysis in the DEIR, the proposed General Plan would not result in any significant impacts that would substantially reduce the habitat of fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, or reduce the number or restrict the range of a rare or endangered plant or animal to the environment. As described in greater detail in Section 3.4 (Biological Resources) any potentially significant impacts related to plant and animal species would be reduced to a less than significant level through implementation of goals, policies and implementation measures provided in the City's General Plan as well as through adherence to state and federal regulations. Therefore, this is considered a **less than significant** impact.

4.6 SUBSTANTIAL ADVERSE EFFECTS ON HUMAN BEINGS

As described throughout the analysis of this DEIR, the proposed General Plan reduces environmental effects including effects that directly and indirectly impact humans through implementation of goals, policies and implementation measures provided in the City's General Plan. However, several environmental impacts would still be considered significant and unavoidable (listed above in Section 4.4). These impacts include increases in localized noise, considerable increases of criteria pollutants, reduced air quality, and visual degradation, which may cause substantial adverse effects on humans and the way humans interact with their environment. Therefore, this is considered a **significant and unavoidable** impact.

4.7 EFFECTS NOT FOUND TO BE SIGNIFICANT

The proposed General Plan would not have a significant effect associated with potential impacts to mineral resources, including the loss of availability of a known mineral resource that would be of value to the region and residents of the state or 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. There are no known mineral resource locations in the Planning Area based on review of Update of Mineral Land Classification: Aggregate Materials in the South San Francisco Bay Production-Consumption Region (California Department of Conservation Division of Mines and Geology, 1996) and Special Report 146 Part II, Classification of Aggregate Resource Areas South San Francisco Bay Production-Consumption Region (California Department of Conservation Division of Mines and Geology, 1987) and there are no locally-important mineral resource recovery sites delineated in local plans, including the existing General Plan and adopted specific plans.

5.1 CEQA REQUIREMENTS

CEQA requires that an EIR analyze a reasonable range of feasible alternatives that meet most or all project objectives while reducing or avoiding one or more significant environmental effects of the project. The range of alternatives required in an EIR is governed by a “rule of reason” that requires an EIR to set forth only those alternatives necessary to permit a reasoned choice (CEQA Guidelines Section 15126.6[f]). Where a potential alternative was examined but not chosen as one of the range of alternatives, the CEQA Guidelines require that the EIR briefly discuss the reasons the alternative was dismissed.

Alternatives that are evaluated in the EIR must be potentially feasible alternatives. However, not all possible alternatives need to be analyzed. An EIR must “set forth only those alternatives necessary to permit a reasoned choice.” (CEQA Guidelines, Section 15126.6(f).) The CEQA Guidelines provide a definition for a “range of reasonable alternatives” and, thus limit the number and type of alternatives that need to be evaluated in an EIR.

First and foremost, alternatives in an EIR must be potentially feasible. In the context of CEQA, “feasible” is defined as:

... capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social and technological factors. (CEQA Guidelines 15364)

The inclusion of an alternative in an EIR is not evidence that it is feasible as a matter of law, but rather reflects the judgment of lead agency staff that the alternative is potentially feasible. The final determination of feasibility will be made by the lead agency decision-making body through the adoption of CEQA Findings at the time of action on the project. (Mira Mar Mobile Community v. City of Oceanside (2004) 119 Cal.App.4th 477, 489 see also CEQA Guidelines, §§ 15091(a)) (3) findings requirement, where alternatives can be rejected as infeasible); 15126.6 ([an EIR] must consider a reasonable range of potentially feasible alternatives that will foster informed decision making and public participation”). The following factors may be taken into consideration in the assessment of the feasibility of alternatives: site suitability, economic viability, availability of infrastructure, general plan consistency, other plan or regulatory limitations, jurisdictional boundaries, and the ability of the proponent to attain site control (Section 15126.6 (f) (1)).

Equally important to attaining the project objectives is the reduction of some or all significant impacts, particularly those that could not be mitigated to a less-than-significant level. The proposed General Plan Update would result in the following significant and unavoidable impacts, which are described in Sections 3.1 through 4.0:

- Impact 3.1-1: General Plan implementation could result in substantial adverse effects to scenic vistas (Significant and Unavoidable)

5.0 ALTERNATIVES

- Impact 3.1-3: General Plan implementation could substantially degrade the existing visual character or quality of the Planning Area and its surroundings (Significant and Unavoidable)
- Impact 3.2-1: General Plan implementation would result in the conversion of farmlands, including Prime Farmland, Unique Farmland, and Farmland of Statewide Importance (Significant and Unavoidable)
- Impact 3.3-2: Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors) (Significant and Unavoidable)
- Impact 3.3-4: Expose sensitive receptors to substantial pollutant concentrations (Significant and Unavoidable)
- Impact 3.10-2: General Plan implementation would not conflict with an applicable land use plan, policy, or regulation of an agency with jurisdiction over the project adopted to avoid or mitigate an environmental effect (Significant and Unavoidable)
- Impact 3.11-1: Traffic noise associated with the General Plan Update could expose persons to or generate noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies or result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project (Significant and Unavoidable)
- Impact 3.11-4: Construction noise associated with the General Plan could result in substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project (Significant and Unavoidable)
- Impact 3.11-6: The General Plan could expose persons to railroad noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies (Significant and Unavoidable)
- Impact 3.15-1: The proposed General Plan could conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit. (Significant and Unavoidable)
- Impact 3.15-2: The proposed General Plan could conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways (Significant and Unavoidable)
- Impact 3.16-1: General Plan implementation could result in insufficient water supplies to serve the project (Significant and Unavoidable)
- Impact 4.1: Cumulative Degradation of the Existing Visual Character of the Region (Cumulatively Considerable)
- Impact 4.2: Cumulative Impact on the Region's Agricultural Resources (Cumulatively Considerable)

- Impact 4.3: Cumulative Impact on the Region's Air Quality (Cumulatively Considerable)
- Impact 4.10: Cumulative Impact associated with Land Use Plans (Cumulatively Considerable)
- Impact 4.11: Cumulative Exposure of Noise-Sensitive Land Uses to Noise in Excess of Normally Acceptable Noise Levels or to Substantial Increases in Noise (Cumulatively Considerable)
- Impact 4.13: Cumulative Impact on the Transportation Network (Cumulatively Considerable)
- Impact 4.14: Cumulative Impact associated with Public Utilities (Cumulatively Considerable)
- 4.3: Significant Irreversible Effects (Significant and Unavoidable)
- 4.6: Substantial Adverse Effects On Human Beings (Significant and Unavoidable)

The following analysis of alternatives focuses on significant impacts, including those that would remain significant even if mitigation is applied or for which no feasible mitigation is available.

A Notice of Preparation was circulated to the public to solicit recommendations for a reasonable range of alternatives to the project. No specific alternatives were recommended by commenting agencies or the general public during the NOP public review process.

PROJECT OBJECTIVES

The alternatives to the project selected for analysis in the EIR were developed to minimize significant environmental impacts while fulfilling the basic objectives of the project. As described in the Martinez Vision 2035.

The Vision Statement below is a brief description of what Martinez wants to become through the implementation of its General Plan. The Vision Statement provides a sense of the purpose and mission for the General Plan and sets the tone for the goals, objectives, policies and actions of the rest of the General Plan.

Martinez will retain a unique, small town historic character within its larger suburban context of Central Contra Costa County. Martinez' identity will be largely based on its vibrant, eclectic downtown, set within pedestrian-oriented neighborhoods made up of varied and traditionally designed homes. The temperate climate, the Carquinez Straight, Alhambra Creek and its tributaries, and especially the open hillsides surrounding the existing urban areas frame our physical identity.

Visitors will continue to be attracted to Martinez because of its unique small-town character, shops, restaurants, waterfront recreation, surrounding natural beauty and role as the County Seat. Martinez residents know that the City also provides a strong sense of belonging for its residents. It contains a broad array of 19th and early 20th century buildings that form multi-faceted streetscapes and neighborhoods and support an economically diverse community. Newer neighborhoods will retain their livable mix

of quality and varied housing opportunities, convenient and appropriately scaled commercial areas, and plentiful parks and open spaces.

Martinez will retain its qualities for future generations by providing a vibrant economy linked to a viable community social structure and by conserving the ecosystem and built environment that supports it. Martinez is, and will remain, a community in which its residents can take pride.

5.2 ALTERNATIVES CONSIDERED IN THIS EIR

Five alternatives to the project were considered: the No Project Alternative, Reduced Project Alternative, Vine Hill Development Alternative, Alternative Location, Revised Project Alternative, and Agricultural Preservation Alternative. Alternatives were selected for detailed analysis and comparison to the proposed project based on the potential of the alternative to reduce or avoid significant environmental impacts.

Three of the alternatives considered, the No Project Alternative, the Revised Project Alternative, and the Agricultural Preservation Alternative, were ultimately selected for detailed analysis. The planning horizon for the alternatives analysis is based on buildout of the General Plan. These alternatives are analyzed in Section 5.3 of this chapter.

Two of the alternatives considered were not selected for further analysis, as described below.

ALTERNATIVES NOT SELECTED FOR FURTHER ANALYSIS

The following alternatives were considered, but not selected for further analysis for the reasons described below:

- Alternative Location – A project alternative consisting of an alternative project location was considered, but determined to be infeasible as the General Plan is applied on a city-wide basis.
- Reduced Project Alternative – A project alternative consisting of reducing development was considered, but rejected for several reasons. First, much of the land within the city limits is already developed and could not be reduced or eliminated without significant impacts to the existing residents. Most of the larger and contiguous areas that are currently undeveloped but anticipated to be developed under the General Plan have already undergone a more detailed planning process that was specifically meant to guide development in that area (i.e. Specific Plan process). Any alternative changing uses in these areas would be in conflict with the previously adopted plans and is not desired by the City. The City does not desire to restrict or reduce development in infill areas within the City. Lastly, the City desires to designate all lands up to the City's sphere of influence as established by the Contra Costa Local Agency Formation Commission. For these reasons, this potential alternative is rejected.

ALTERNATIVES TO THE PROJECT

The alternatives analyzed in this EIR include the following:

- **Alternative 1: No Project Alternative.** Under Alternative 1, the City would not adopt the General Plan Update. The City's existing General Plan would continue to be implemented and no changes to the General Plan, zoning, or City policies or programs associated with the project would occur.
- **Alternative 2: Increased Downtown Residential Density Project Alternative.** Alternative 2 would be similar to the proposed project in that it would include a comprehensive update of all General Plan elements. However, under this alternative, the residential densities permitted in the Downtown Land Use Designations, which include the Downtown Core (D/C), Downtown Shoreline (D/S), and Downtown Transition (D/T), would increase by approximately 30 percent.
- **Alternative 3: Agricultural Preservation Alternative.** Alternative 3 would be similar to the proposed project in that it would include a comprehensive update of the General Plan. However, under this alternative, the 4.36 acres of Unique Farmland that is located within the city limits and designated for residential development (Residential Low) would instead be designated as Agricultural Lands. This land is currently part of a larger existing vineyard operation that extends beyond the city limits into the sphere of influence. All other components of the proposed General Plan would be the same.

5.3 ENVIRONMENTAL ANALYSIS

The alternatives analysis provides a summary of the relative impact level of significance associated with each alternative for each of the significant environmental issue areas analyzed in this EIR. Following the analysis of each alternative, Table 5-1 summarizes the comparative effects of each alternative.

ALTERNATIVE 1- NO PROJECT ALTERNATIVE

Under Alternative 1, the City would continue to implement the adopted General Plan and no changes would be made to update the General Plan Elements or the Land Use Map. Additionally, changes to the City's Zoning Ordinance, which are identified in the various implementation programs contained in the proposed General Plan Update, would not occur. Future development would be consistent with the adopted Land Use Map as shown on Exhibit 3.10-3. Alternative 1 would reduce potential development in the eastern portion of SOI, which is designated for I-M, G, and HRR uses by the proposed General Plan and designated CUL by the existing General Plan. Some of the land designated PPOS and OS-S by the adopted General Plan on the east side of Alhambra Ave is designated HRR and RVL by the proposed General Plan. Along Morello Ave, land would remain designated OS&R that would be designated HRR and MDRL by the proposed General Plan. Alternative 1, like the proposed project, would not directly result in any new development nor grant any entitlements for development. New development

is anticipated to occur regardless of adoption of Alternative 1 as development and other projects consistent with the General Plan could continue to be approved and implemented by the City.

Adverse Effects on Visual Character and the Visual Environment

The proposed project would result in significant and unavoidable impacts associated with adverse effects on visual character, including scenic resources, as described under Impacts 3.1-1 and 3.1-3 in Section 3.1. Under Alternative 1, development patterns within the city limits would be generally comparable to the proposed project. Buildout of the proposed General Plan and Alternative 1 would allow for new development to occur in areas that have historically been undeveloped, which remain in a semi naturalized condition. Additionally, new development may result in changes to the skyline throughout the Planning Area, which could obstruct or interfere with views of the surrounding hillsides, Mount Diablo, the Carquinez Strait, and the foothill areas surrounding the Martinez Planning Area. Under Alternative 1, some of the areas designated for open space uses would not be converted to residential, industrial, or government uses as would occur under the proposed General Plan.

While buildout under Alternative 1 has the potential to result in new and expanded development at similar levels and intensities as would occur under buildout of the proposed project, the proposed project includes a more developed and refined set of policies aimed at preserving and protecting visual resources. A central theme of the proposed General Plan is to preserve and protect the City's natural resources, open spaces, and character by concentrating new growth in and around existing urbanized areas, and protecting the existing visual character of the Planning Area. This is expressed in Goals LU-G-2, LU-G-3-1, and LU-G-4-1 in the Land Use Element and is supported by various policies. Policy LU-P-2.1 establishes the City of Martinez's commitment to preserving existing hillsides and natural resources. LU-P-2.2 ensures that projects retain the channels, floodplains, riparian corridors (including suitable setbacks from top of bank) such as Alhambra Creek and its tributaries as significant open space areas. These areas should be maintained in their natural state to function as appropriate open space areas and to support a riparian habitat. This policy also requires development within the Creek watersheds to preserve watershed integrity, including natural vegetation, soil and slope stability, water quality, scenic values and potential archaeological resources. LU-P 2.4 ensures that new multi-family residential development is visually and functionally integrated and consistent in scale, mass, and character when located within an existing residential neighborhood. LU-P 3.1 limits development intensity on constrained sites and designates some sensitive sites, hillsides and natural resources as very low density residential. This policy recommends that hillside development is sited and designed appropriately to protect the scenic beauty and natural terrain. LU-P 3.2 ensures that projects retain setbacks from existing creeks to protect the resource, habitat and any recreation value associated with waterways. LU-P 3.3 recommends that new development along a creek or adjacent to a natural watercourse prepare a creek preservation plan. LU-P 4.1 encourages the protection of the historic character of Downtown Martinez by continuing the Design Review process for residential and commercial projects to ensure compatibility with the existing historic character.

Goals and Policies in the Open-Space and Conservation Element also promote the protection and preservation of open space lands and natural resources (including visual amenities) throughout the Planning Area. Goal OSC-G-1 aims to maintain and enhance the integrity of Martinez's visual environment, OSC-11-1 calls for the protection of scenic visual resources that help define the beauty of Martinez and the surrounding ridgelines, and OSC-G-3 preserves productive agricultural lands in Martinez Planning Area.

Alternative 1 would not include many of the goals and policies listed above, which enhance visual resource protection as future development occurs within the Planning Area. However, Alternative 1 would result in less conversion of open space land to developed uses and would retain more of the scenic visual character. Under Alternative 1, fewer visual resource protection policies would be implemented, and the potential for significant impacts to visual resources is greater under Alternative 1, when compared to the proposed project. Therefore, impacts associated with Alternative 1 would be **comparable** in comparison to the proposed project.

Adverse Effects Associated with Emissions from Construction Activities

As described under Impact 3.3-2 in Section 3.3, implementation of the General Plan Update would result in short-term emissions from construction activities associated with subsequent development, including site grading, asphalt paving, building construction, and architectural coating. Emissions commonly associated with construction activities include fugitive dust from soil disturbance, fuel combustion from mobile heavy-duty diesel- and gasoline-powered equipment, portable auxiliary equipment, and worker commute trips. Implementation of Mitigation Measure AQ-1 would reduce this impact to less than significant in most cases. However, it is not possible to ensure that very large construction projects could be mitigated to a level of less than significant. Under both Alternative 1 and the proposed project, future construction and demolition projects would be subject to BAAQMD-Recommended Measures to Control Particulate Matter Emissions during Construction. However, under both Alternative 1 and the proposed project, these impacts may remain significant and unavoidable. As such, this alternative is **comparable** to the proposed project.

Adverse Effects Associated with Exposure of Sensitive Receptors to Substantial Pollutant Concentrations

As described under Impact 3.3-4 in Section 3.3, subsequent land use activities associated with implementation of the General Plan Update could potentially include short-term construction sources of TACs and long-term operational sources of TACs, including stationary and mobile sources. According to the BAAQMD CEQA Air Quality Guidelines, for a plan to have a less-than-significant impact with respect to TACs, overlay zones must be established around existing and proposed land uses that would emit these air pollutants. Overlay zones to avoid TAC impacts must be reflected in local plan policies, land use maps, or implementing ordinances. The General Plan Update would permit and facilitate the development of new sensitive receptors, such as new homes, in locations near arterial and collector roadways, highways, rail lines, and stationary sources of TAC emissions. Screening levels indicate that sensitive receptors within the Planning Area would be exposed to levels of TACs and or PM_{2.5} that could cause an unacceptable

cancer risk or hazard near highways and stationary sources. Implementation of Mitigation Measure AQ-3 would reduce this impact. However, it is not possible to determine at this stage of the planning process that all impacts could be reduced to a less-than-significant level from larger sources such as the Shell Refinery, for example. Under both Alternative 1 and the proposed project, future projects that would generate TACs or place sensitive receptors in the vicinity of existing uses that generate TACs, would be subject to BAAQMD requirements for permitting and cancer screening. However, under both Alternative 1 and the proposed project, these impacts may remain significant and unavoidable. As such, this alternative is **comparable** to the proposed project.

Effects from Greenhouse Gases and Climate Change

Under the proposed project, impacts associated with greenhouse gases and climate change would be less than significant. The proposed project represents a comprehensive and long-term commitment by the City to reduce GHGs and the effects of climate change from community-wide and municipal operations over the life of the City's General Plan. The 2009 City of Martinez Climate Action Plan includes goals and measures that will be implemented by the City and by future development projects within the City over the life of the General Plan.

The City's Climate Action Plan identifies existing and proposed initiatives to reduce greenhouse gas emissions. The CAP ensures that the City's future activities and development patterns conform to California climate change legislation. The purpose of the CAP is to identify how the City will help the State achieve the State GHG emission reduction target of 15 percent by the year 2020. The CAP provides goals and associated measures, also referred to as GHG reduction measures, in the sectors of energy use, transportation, land use, water, and solid waste. In addition, the CAP provides goals and measures for longer-term adaptation to the potential risks associated with climate change.

The CAP includes all of the elements identified under CEQA Guidelines Section 15183.5(b)(1), which identifies the elements that a plan for the reduction of GHGs should include. Specifically, the CAP complies with the provisions of CEQA Guidelines Section 15183(b)(1) by providing a quantified inventory of GHG emissions and by providing a level based on substantial evidence below which activities subject to the plan will not make a cumulatively considerable contribution to GHG impacts. That level is based on the State's AB 32 goals.

While the City's General Plan takes a broad and comprehensive approach to sustainability, the CAP focuses specifically on GHG reductions. The CAP identifies and quantifies the impact of the City's sustainability vision, policies, and programs on GHG emissions. The sustainability components of the General Plan and the CAP function together as part of the City's comprehensive toolkit to achieve a vibrant and sustainable community.

Under Alternative 1, the CAP would continue to be implemented, and the City would continue to make progress towards the established GHG reduction targets established by the CAP. However, under Alternative 1, the General Plan would not be updated in order to better tie the CAP to the General Plan, and under this scenario, the ongoing implementation of the CAP may

not be as effective as it would be under the proposed project. As such, this impact would be slightly **worse** under Alternative 1, when compared to the proposed project.

Adverse Effects from Noise and Transportation

Under the proposed project, impacts associated with transportation and noise would be significant and unavoidable. Additionally, construction-related noise impacts would be significant and unavoidable.

Under the No Project Alternative, future development could continue to occur in the City at the similar intensity and locations when compared to the proposed project. The primary difference would be that under the No Project Alternative the General Plan policies would not be updated, which would limit the City's ability to address sustainability, encourage live/work housing units, encourage new development and redevelopment that meets the community's needs, encourage mixed use developments, and ensure that the City's transportation and circulation system meets the needs of the community and provides complete streets.

The proposed project encourages construction of infrastructure improvements, such as bus stops and bike lanes, to encourage alternative modes of transportation and retrofitting of structures to improve energy efficiency and reduce traffic and air quality emissions. The proposed project also includes transportation improvements to improve service levels on the transportation system as described in Section 3.15. These types of improvements could occur under Alternative 1; however, such improvements may occur at a lesser rate since the proposed project includes specific measures to encourage these types of improvements. Under Alternative 1, short-term construction-related noise impacts would remain significant and unavoidable. Further, under Alternative 1, measures to encourage alternative modes of transportation, improve energy efficiency, and a range of other measures that would provide long-term improvements to the environment, including air quality resources, noise, and transportation effects would not occur. Therefore, Alternative 1 would be **worse** than the proposed project, as there would be no long-term benefit related to noise or transportation.

Effects on Public Services & Utilities

Under the proposed project, there would be increased population which would increase the demand on public services and utilities. Under Alternative 1, development would be similar to the proposed project; however, the primary difference would be that under the No Project Alternative the General Plan policies would not be updated, which would limit the City's policy direction on maintaining and upgrading public services and utilities to meet current and future demands. It is anticipated that, with the exception of water supply, the city and utility providers could accommodate increased demand for public services regardless of the policy updates. Impacts associated with water supply would be significant and unavoidable under the proposed project. Under the existing General Plan, less development would occur and would result in less demand for water supply. However, development under the existing General Plan could result in development in excess of growth projections used for water supply planning and a water supply deficit could occur under Alternative 1. This alternative would also not include specific

actions to address potential water supply issues, particularly the requirement for new development to address water supply issues. This impact would remain **comparable** to the proposed project.

Adverse Effects from Geology & Soils, Hazards, and Hydrology & Water Quality

Under the proposed project, there would be increased development which would increase the risks to people and structures associated with geologic and natural hazards that exist in the city. Additionally, it is anticipated that there would be an increase in impervious surfaces which could create additional flood concerns. Under Alternative 1, development would be largely similar to the proposed project; however, the primary difference would be that under the No Project Alternative the General Plan policies would not be updated, which would limit the City's policy direction relative to these environmental topics. It is anticipated that these risks will occur regardless of the policy updates; therefore, this alternative is **comparable** to the proposed project.

Adverse Effects on Agricultural and Biological Resources

The proposed General Plan designates agricultural lands within the Planning Area to preserve and protect lands capable of, and generally used for agriculture and grazing activities, which also provide important biological functions. These designations include 135.8 acres of designated Agricultural Land, and 413.3 acres of designated Alhambra Valley Agricultural Land. The Open Space Preservation land use designation also allows agricultural plantings with the condition it is consistent with the intent of preserving the intended scenic resource. The Open Space Preservation designation preserves 2,365.9 acres within the Planning Area that allow for grazing activities.

Alternative 1 would be virtually the same as the proposed General Plan in all respects, with the exception of a comprehensive update to General Plan policies. This comprehensive update provides important policy direction relative to these environmental topics, the absence of which would make this alternative **worse** when compared to the proposed project.

Adverse Effects on Cultural Resources

There are known significant historical and/or archaeological resources located within the planning area. Indications are that humans have occupied the Bay Area for over 10,000 years and it is not always possible to predict where artifacts and/or human remains may occur outside of formal burials. Therefore, excavation and construction activities, regardless of depth, may yield artifacts and/or human remains that may not be interred in marked, formal burials. Many of the rock formations that surround Martinez contain fossils, and it is possible that one or more of these fossil-bearing formations underlie the Plan area at unknown depths. Therefore, the Plan area has a low-to-moderate potential to contain fossils.

Alternative 1 would be virtually the same as the proposed General Plan in all respects, with the exception of a comprehensive update to General Plan policies. This comprehensive update

provides important policy direction relative to these environmental topics, the absence of which would make this alternative **worse** when compared to the proposed project.

Effects on Land Use & Population

Impacts associated with Land Use and Population would be less than significant under the proposed project. Under the No Project Alternative, development patterns in the City would remain essentially unchanged when compared to the proposed project. However, under Alternative 1 the General Plan goals and policies would not be updated to reflect current codes, trends, design guidelines, and programs that have been initiated or adopted by the City since the last update. The General Plan would not be updated to reflect existing conditions and to include improvements necessary to accommodate currently proposed, approved, and anticipated development. While this impact would remain less than significant under the No Project Alternative, the No Project Alternative would be **worse** than the proposed project in the context of land use planning.

ALTERNATIVE 2- INCREASED DOWNTOWN RESIDENTIAL DENSITY PROJECT ALTERNATIVE

Alternative 2 would be similar to the proposed project in that it would include a comprehensive update of all General Plan elements. However, under this alternative, the residential densities permitted in the Downtown Land Use Designations, which include the Downtown Core (D/C), Downtown Shoreline (D/S), and Downtown Transition (D/T), would increase by approximately 30 percent, as described below.

Downtown Core (D/C): Under the proposed project, the residential development density is from 29 to 43 dwelling units per acre. Under Alternative 2, the residential development density would be from 39 to 55 dwelling units per acre.

Downtown Shoreline (D/S): Under the proposed project, the residential development density is from 18 to 30 dwelling units per acre. Under Alternative 2, the residential development density would be from 24 to 39 dwelling units per acre.

Downtown Transition (D/T): Under the proposed project, the residential development density is from 19 to 29 dwelling units per acre. Under Alternative 2, the residential development density would be from 24 to 39 dwelling units per acre.

This alternative would provide an opportunity for the City to increase residential densities in the Downtown area, which is expected to lead to opportunities for a live/work environment, enhanced transit connectivity due to increased ridership rates, an increase in bike and pedestrian use, and increased retail and commercial opportunities downtown to support the increase in population density. This alternative would also result in greater numbers of multi-family housing units, which may provide additional opportunities to provide affordable housing.

No changes to the proposed Land Use Map were assumed for this alternative. The Land Use Element would be revised to identify the increased densities in the Downtown designations.

Adverse Effects on Visual Character and the Visual Environment

The proposed project would result in significant and unavoidable impacts associated with adverse effects on visual character, including scenic resources, as described under Impacts 3.1-1 and 3.1-3 in Section 3.1. Under Alternative 2, development patterns within the city limits would be generally comparable to the proposed project; however, increased residential development intensities would occur within the Downtown area. While buildout under Alternative 2 would not eliminate the potential for new development to occur in areas that have historically been undeveloped and currently remain in a semi naturalized condition, it would concentrate more residential development in the Downtown area of the City. This may result in increased building heights, greater floor area ratios, and the intensification of urban development in the Downtown, which would change the existing visual character of the Downtown. The new development in the historically undeveloped and currently semi naturalized areas of the city would still occur. This new development in the Downtown and in the undeveloped areas may result in changes to the skyline throughout the Planning Area. Some development could obstruct or interfere with views of the surrounding hillsides, Mount Diablo, the Carquinez Strait, and the foothill areas surrounding the Martinez Planning Area.

A central theme of the proposed General Plan is to preserve and protect the City's natural resources, open spaces, and character by concentrating new growth in and around existing urbanized areas, and protecting the existing visual character of the Planning Area. This is expressed in Goals LU-G-2, LU-G-3-1, and LU-G-4-1 in the Land Use Element and is supported by various policies. Policy LU-P-2.1 establishes the City of Martinez's commitment to preserving existing hillsides and natural resources. LU-P-2.2 ensures that projects retain the channels, floodplains, riparian corridors (including suitable setbacks from top of bank) such as Alhambra Creek and its tributaries as significant open space areas. These areas should be maintained in their natural state to function as appropriate open space areas and to support a riparian habitat. This policy also requires development within the Creek watersheds to preserve watershed integrity, including natural vegetation, soil and slope stability, water quality, scenic values and potential archaeological resources. LU-P 2.4 ensures that new multi-family residential development is visually and functionally integrated and consistent in scale, mass, and character when located within an existing residential neighborhood. LU-P 3.1 limits development intensity on constrained sites and designates some sensitive sites, hillsides and natural resources as very low density residential. This policy recommends that hillside development is sited and designed appropriately to protect the scenic beauty and natural terrain. LU-P 3.2 ensures that projects retain setbacks from existing creeks to protect the resource, habitat and any recreation value associated with waterways. LU-P 3.3 recommends that new development along a creek or adjacent to a natural watercourse prepare a creek preservation plan. LU-P 4.1 encourages the protection of the historic character of Downtown Martinez by continuing the Design Review process for residential and commercial projects to ensure compatibility with the existing historic character.

Goals and Policies in the Open-Space and Conservation Element also promote the protection and preservation of open space lands and natural resources (including visual amenities) throughout the Planning Area. Goal OSC-G-1 aims to maintain and enhance the integrity of

Martinez's visual environment, OSC-11-1 calls for the protection of scenic visual resources that help define the beauty of Martinez and the surrounding ridgelines, and OSC-G-3 preserves productive agricultural lands in Martinez Planning Area.

Alternative 2 would include these same goals and policies listed above, which enhance visual resource protection as future development occurs within the Planning Area. However, under Alternative 2, some additional new development may be concentrated in existing urbanized areas to a greater extent than under the proposed project. This new concentrated development in the existing urbanized area (Downtown) would change the existing visual character of the Downtown area by increasing building heights, floor area ratios, and the intensification of urban development. A determination of the significance of such a change is highly subjective and open to a wide variety of opinions from individual perceptions. Some may view such a change to the Downtown as a beneficial or positive impact, while others may view the change as detrimental to the existing character of the Downtown. While it could be argued either way, for purposes of this EIR analysis it is concluded that change in the existing visual character would make this Alternative **slightly worse** in comparison to the proposed project.

Adverse Effects Associated with Emissions from Construction Activities

As described under Impact 3.3-2 in Section 3.3, implementation of the General Plan Update would result in short-term emissions from construction activities associated with subsequent development, including site grading, asphalt paving, building construction, and architectural coating. Emissions commonly associated with construction activities include fugitive dust from soil disturbance, fuel combustion from mobile heavy-duty diesel- and gasoline-powered equipment, portable auxiliary equipment, and worker commute trips. Under Alternative 2, the construction activities in the historically undeveloped and currently semi naturalized areas of the city would still occur; however, there would be new development in the Downtown area that would include the addition of demolition activities and new construction that would not otherwise exist under the proposed project.

Under both Alternative 2 and the proposed project, future construction and demolition projects would be subject to BAAQMD-Recommended Measures to Control Particulate Matter Emissions during Construction. Mitigation Measure AQ-1 was presented to reduce the construction related air quality impact to a less than significant level to the extent feasible; however, it is not possible to ensure that very large construction projects could be universally mitigated to a level of less than significant. Under both Alternative 3 and the proposed project, these impacts would remain significant and unavoidable; however, under Alternative 2 there would be an increase in the total amount of land constructed (or redeveloped in the case of the Downtown), which would increase the construction related emissions. The increase in the total construction related emissions make this alternative **worse** when compared to the proposed General Plan.

Adverse Effects Associated with Exposure of Sensitive Receptors to Substantial Pollutant Concentrations

As described under Impact 3.3-4 in Section 3.3, subsequent land use activities associated with implementation of the General Plan Update could potentially include short-term construction sources of TACs and long-term operational sources of TACs, including stationary and mobile sources. According to the BAAQMD CEQA Air Quality Guidelines, for a plan to have a less-than-significant impact with respect to TACs, overlay zones must be established around existing and proposed land uses that would emit these air pollutants. Overlay zones to avoid TAC impacts must be reflected in local plan policies, land use maps, or implementing ordinances. The General Plan Update would permit and facilitate the development of new sensitive receptors, such as new homes, in locations near arterial and collector roadways, highways, rail lines, and stationary sources of TAC emissions. Screening levels indicate that sensitive receptors within the Planning Area would be exposed to levels of TACs and or PM_{2.5} that could cause an unacceptable cancer risk or hazard near highways and stationary sources. Mitigation Measure AQ-3 is intended to reduce this impact to the extent feasible; however, it is not possible to determine at this stage of the planning process that all impacts could be reduced to a less-than-significant level from larger sources such as the Shell Refinery, for example. Under both Alternative 2 and the proposed project, future projects that would generate TACs or place sensitive receptors in the vicinity of existing uses that generate TACs, would be subject to BAAQMD requirements for permitting and cancer screening. However, under both Alternative 2 and the proposed project, these impacts may remain significant and unavoidable. Alternative 2 would provide for increased densities in the Downtown area and could expose an increased number of persons to substantial pollutant concentrations. As such, this alternative is **worse** than the proposed project.

Effects from Greenhouse Gases and Climate Change

Under the proposed project, impacts associated with greenhouse gases and climate change would be less than significant. The proposed project represents a comprehensive and long-term commitment by the City to reduce GHGs and the effects of climate change from community-wide and municipal operations over the life of the City's General Plan. The 2009 City of Martinez Climate Action Plan includes goals and measures that will be implemented by the City and by future development projects within the City over the life of the General Plan.

The City's Climate Action Plan identifies existing and proposed initiatives to reduce greenhouse gas emissions. The CAP ensures that the City's future activities and development patterns conform to California climate change legislation. The purpose of the CAP is to identify how the City will help the State achieve the State GHG emission reduction target of 15 percent by the year 2020. The CAP provides goals and associated measures, also referred to as GHG reduction measures, in the sectors of energy use, transportation, land use, water, and solid waste. In addition, the CAP provides goals and measures for longer-term adaptation to the potential risks associated with climate change.

The CAP includes all of the elements identified under CEQA Guidelines Section 15183.5(b)(1), which identifies the elements that a plan for the reduction of GHGs should include. Specifically, the CAP complies with the provisions of CEQA Guidelines Section 15183(b)(1) by providing a quantified inventory of GHG emissions and by providing a level based on substantial evidence below which activities subject to the plan will not make a cumulatively considerable contribution to GHG impacts. That level is based on the State's AB 32 goals.

While the City's General Plan takes a broad and comprehensive approach to sustainability, the CAP focuses specifically on GHG reductions. The CAP identifies and quantifies the impact of the City's sustainability vision, policies, and programs on GHG emissions. The sustainability components of the General Plan and the CAP function together as part of the City's comprehensive toolkit to achieve a vibrant and sustainable community.

Under Alternative 2, the CAP would continue to be implemented, and the City would continue to make progress towards the established GHG reduction targets established by the CAP. Additionally, under Alternative 2, the General Plan would be updated in order to better tie the CAP to the General Plan, and under this scenario, the ongoing implementation of the CAP would be as effective as it would be under the proposed project.

Under Alternative 2 there would be an increase in the total amount of land constructed (or redeveloped in the case of the Downtown), which would increase the construction related GHG emissions. However, the increased residential densities in the Downtown area that would be facilitated under this alternative may provide opportunities to increase the use of alternative modes of transportation and reduce per capita GHG emissions. For example, in areas with higher residential densities, walking and biking to work, shops, restaurants, etc., may increase if there are greater population concentrations near these types of uses and services. Additionally, higher population concentrations may support expanded transit and bus facilities, which may decrease per capita VMT throughout the Planning Area. As such, this impact would be slightly **reduced** under Alternative 2, when compared to the proposed project.

Adverse Effects from Noise and Transportation

Under the proposed project, impacts associated with traffic and noise would be significant and unavoidable. Additionally, construction-related noise impacts would be significant and unavoidable.

Under Alternative 2, future development would continue to occur in the City but development would be at higher intensities and densities focusing in the downtown area. The increase of residential densities in the Downtown area would be expected to lead to opportunities for a live/work environment, enhanced transit connectivity due to increased ridership rates, an increase in bike and pedestrian use, and increased retail and commercial opportunities downtown to support the increase in population density.

Under Alternative 2, the construction activities in the historically undeveloped and currently semi naturalized areas of the city would still occur and all the noise and traffic impacts associated with development in these areas would still exist. New development in the

Downtown area would increase the total number of trips generated in the downtown area because the total population would increase; however, it is expected that there would be an increased use of alternative modes of transportation including transit and non-motorized modes which would reduce the per capita trip rate in this area.

Under Alternative 2, short-term construction-related noise impacts would remain significant and unavoidable and the addition of new projects in the Downtown area would increase the amount of projects contributing to the short-term construction noise impacts within the Planning Area.

While Alternative 2 provides a mechanism to encourage alternative modes of transportation, improve energy efficiency, and a range of other measures that would provide long-term improvements to the environment on a per capita basis, including per capita air emissions and daily trips, under this alternative total traffic and noise within the downtown core is expected to increase above the conditions under the proposed project. Increased levels of traffic and noise combined with additional noise sensitive receptors in the Downtown and adjacent to railroad corridors would create worse localized traffic and noise impacts. The increase in the total residential units in the Downtown under this alternative makes this alternative **worse** when compared to the proposed General Plan.

Effects on Public Services & Utilities

Under the proposed project, there would be increased population which would increase the demand on public services and utilities. Under Alternative 2, future development would continue to occur in the City but development would be at higher intensities and densities focusing in the downtown area. Under Alternative 2, the construction activities in the historically undeveloped and currently semi naturalized areas of the city would still occur and all the increased demand on public services and utilities associated with development in these areas would still exist; however, the increase of residential densities in the Downtown area would be expected to lead to a higher demand for public services and utilities in the Downtown area when compared to the proposed project. It is anticipated that the city and utility providers, with the exception of water supply, could accommodate increased demand for public services through the increased revenues that would be generated by the additional development. Impacts associated with water supply would be significant and unavoidable under the proposed project. Under Alternative 2, more residential development would occur and would result in increased demand for water supply. , the increase in the total residential units in the Downtown under this alternative makes this alternative **slightly worse** when compared to the proposed General Plan.

Adverse Effects from Geology & Soils, Hazards, and Hydrology & Water Quality

Under Alternative 2 future development could continue to occur as previously anticipated in the undeveloped areas; however, additional development would occur in the Downtown core area that wouldn't be anticipated in the proposed project. It is anticipated that in-fill and underutilized sites would be developed under both scenarios; however, it is anticipated that

more Downtown buildings would be demolished and replaced with higher density structures. As a result more people would be subject to geologic and natural hazards that exist in the city, and it is anticipated that there would be an increase in impervious surfaces which could create additional flood concerns. Overall, this alternative is **slightly worse** when compared to the proposed General Plan.

Adverse Effects on Agricultural and Biological Resources

The proposed General Plan designates agricultural lands within the Planning Area to preserve and protect lands capable of, and generally used for agriculture and grazing activities, which also provide important biological functions. These designations include 135.8 acres of designated Agricultural Land, and 413.3 acres of designated Alhambra Valley Agricultural Land. The Open Space Preservation land use designation also allows agricultural plantings with the condition it is consistent with the intent of preserving the intended scenic resource. The Open Space Preservation designation preserves 2,365.9 acres within the Planning Area that allow for grazing activities.

Alternative 2 would be virtually the same as the proposed General Plan in all respects, with the exception of increased development and density in the Downtown area. The Downtown area does not contain agricultural resources and the urbanized environment under both the proposed General Plan and Alternative 2 would be virtually the same from a biological perspective. Therefore, impacts associated with Alternative 2 would be **comparable** in comparison to the proposed project.

Adverse Effects on Cultural Resources

There are known significant historical and/or archaeological resources located within the planning area. Indications are that humans have occupied the Bay Area for over 10,000 years and it is not always possible to predict where artifacts and/or human remains may occur outside of formal burials. Therefore, excavation and construction activities, regardless of depth, may yield artifacts and/or human remains that may not be interred in marked, formal burials. Many of the rock formations that surround Martinez contain fossils, and it is possible that one or more of these fossil-bearing formations underlie the Plan area at unknown depths. Therefore, the Plan area has a low-to-moderate potential to contain fossils.

The majority of land within Martinez is developed and has been previously disturbed by construction and site grading activities. All future development would be required to be consistent with the General Plan. A central theme of the proposed General Plan is to preserve and protect the City's cultural and archeological resources, and historical character. This is expressed in the Historic, Cultural and Arts element Goal HCA-G-1, which fosters the protection, preservation, and rehabilitation of Martinez's historic and cultural heritage. Goal HCA-G-1 is supported by various policies including: Policy HCA-P-1.1 promotes community and visitor appreciation for the history of Martinez. HCA-P-1.3 encourages relocation of older buildings for preservation and restoration, rather than demolition. HCA-P-1.4 recognizes the importance of protecting significant archaeological resources by identifying, when possible, archaeological

resources and potential impacts on such resources. HCA-P-1.5 calls for the avoidance of damaging effects to any tribal cultural resource when feasible. HCA-P-1.6 calls for the treatment of any Native American and human remains with culturally dignity when discovered during development or otherwise. HCA-P-1.7 encourages new development to be compatible with adjacent historical structures in scale, massing, building materials, and general architectural treatment. HCA-P-1.8 encourages the design review process to include adaptation and compatible reuse of historic buildings in order to preserve the historic resources that are a part of Martinez's heritage. HCA-P-1.9 encourages upkeep, restoration, rehabilitation, and reconstruction of private historic structures to conserve the integrity of the buildings with respect to the character of the buildings and their settings, in the best possible condition whenever possible and feasible. HCA-P-1.10 requires compliance with State and Federal laws to preserve and protect archaeological resources including the assessment and recovery of the resources. HCA-P-1.11 coordinates historic preservation activities and historic preservation groups, community groups, non-profits, and grass root efforts to educate the community and visitors through tours, special events, and commemorative arts.

Additionally Implementation Measure LU-2.1a requires the City to continue to implement the Downtown Specific Plan. The Downtown Specific Plan includes goals and policies related to the protection and preservation of historic structures. Policy UD-1-1 ensures that architectural elements are compatible and in scale with the existing historic structures in the downtown. Goal HP-1 is intended to strengthen and enhance the historic character of Downtown Martinez through the preservation and maintenance of Downtown's historically significant sites and structures. This goal is supported by several policies including: Policy HP-1-1, which promotes community appreciation for the history of Martinez; Policy HP-1-2, which provides incentives to encourage the restoration of private historic structures to conserve the integrity of the buildings in the best possible condition; and Policy HP-1-3, which encourages new development to be compatible with adjacent historical structures in scale, massing, building materials, and general architectural treatment.

Under Alternative 2 future development could continue to occur as previously anticipated in the undeveloped areas; however, additional development would occur in the Downtown core area that wouldn't be anticipated in the proposed project. It is anticipated that in-fill and underutilized sites would be developed under both scenarios; however, it is anticipated that more Downtown buildings would be demolished and replaced with higher density structures. The demolition of buildings in the Downtown poses an increased risk to historical buildings and the cultural character of the Downtown area. This increase in the demolition and replace of buildings makes this alternative **worse** when compared to the proposed General Plan.

Effects on Land Use & Population

Impacts associated with Land Use and Population would be less than significant under the proposed project. Under Alternative 2, development patterns in the City would be similar when compared to the proposed project, with the exception of higher residential densities in the Downtown area. Increased residential densities in the Downtown area would result in more multi-family housing units constructed within the City under full buildout. Multi-family housing

provides opportunities for large-unit projects that would be subject to the applicable inclusionary housing requirements, which may result in greater numbers of affordable housing within the City. Additionally, multi-family housing units are often affordable to lower income households when sold at market rate, which may further the City's goals of providing housing affordable to a range of income levels. As such, this impact would be **slightly better** under this alternative when compared to the proposed project.

ALTERNATIVE 3- AGRICULTURAL PRESERVATION ALTERNATIVE

Alternative 3 would be similar to the proposed project in that it would include a comprehensive update of all General Plan elements. Additionally, the land use map would be largely the same. However, under this alternative, the only land that is designated on the Important Farmlands map within the city limits would be designated Agricultural Lands and would remain under agricultural uses. More specifically, the 4.36 acres of Unique Farmland that is located within the city limits and currently designated for residential development (Residential Low) would instead be designated as Agricultural Lands. This land is currently part of a larger existing vineyard operation that extends beyond the city limits into the sphere of influence. All other components of the proposed General Plan would be the same. This alternative would eliminate the significant and unavoidable impact associated with the conversion of the Important Farmland to a non-agricultural use.

Adverse Effects on Visual Character and the Visual Environment

The proposed project would result in significant and unavoidable impacts associated with adverse effects on visual character, including scenic resources, as described under Impacts 3.1-1 and 3.1-3 in Section 3.1. Under Alternative 3, development patterns within the city limits would be essentially the same as the proposed project, however, residential development would be reduced by 4.36 acres, which would account for a reduction in residential units at General Plan buildout of up to 21 units.

Buildout of Alternative 3 and the proposed General Plan would allow for new development to occur in areas that have historically been undeveloped, which remain in a semi naturalized condition. Additionally, new development may result in changes to the skyline throughout the Planning Area, which could obstruct or interfere with views of the surrounding hillsides, Mount Diablo, the Carquinez Strait, and the foothill areas surrounding the Martinez Planning Area.

Like the proposed General Plan, Alternative 3 would preserve expansive areas of open space to ensure that new development is located in and around existing urbanized areas, thus ensuring that new development is an extension of the existing urban landscape and minimizes interruption of views of Mount Diablo, local hillsides, waterways, natural resources, riparian areas, open space, the build environment, and agricultural lands.

Like the proposed General Plan, Alternative 3 would have approximately 1,921 acres of land within the city limits, and an additional 445.2 acres in the SOI as OS-P: Open Space Preservation. This land use designation is intended to ensure that these areas remain preserved and undeveloped throughout the planning horizon, and assists in preserving the scenic value of the

lands within the city limits and SOI. Any development in an area designated for OS-P would require an amendment to the General Plan. In addition to the 1,921 acres of land in open space, Alternative 3 would add 4.36 acres of Agricultural Lands for preservation. Agricultural Lands have scenic value, similar to open space.

All future development would be required to be consistent with the General Plan. A central theme of the proposed General Plan is to preserve and protect the City's natural resources, open spaces, and character by concentrating new growth in and around existing urbanized areas, and protecting the existing visual character of the Planning Area. Additionally, the General Plan strives to achieve visual compatibility with nearby open space resources to the extent possible. This approach would reduce impacts to visual resources, including scenic views, by maximizing opportunities for open space preservation outside of established urban areas. Additionally, General Plan policies would further ensure that new development is designed in a way that enhances the visual quality of the community, compliments the visual character of the city, and that adverse effects on public views are minimized or avoided to the extent possible. Alternative 3 would not change any of the General Plan goals or policies as described above.

Under Alternative 3, buildout of the General Plan would allow for new development to occur in areas that have historically been undeveloped, which remain in a semi naturalized condition. Additionally, new development may result in changes to the skyline throughout the Planning Area, which could obstruct or interfere with views of the surrounding hillsides, Mount Diablo, the Carquinez Strait, and the foothill areas surrounding the Martinez Planning Area.

Alternative 3 would be virtually the same as the proposed General Plan in all respects, with the exception of 4.36 acres of land that is currently designated as Residential Low. Under Alternative 3, the 4.36 acres of Residential Low land would be designated Agricultural Lands and would remain open and under an agricultural use. This would reduce the impact associated with degradation of the existing visual character or quality of the Planning Area and its surrounding; however, it would not eliminate the significant and unavoidable impact. Additionally, because the 4.36 acres in question is currently designated Residential Low, this alternative would be comparatively better than the no project alternative. Therefore, impacts associated with Alternative 3 would be **reduced** in comparison to the proposed project and the no project alternative.

Adverse Effects Associated with Emissions from Construction Activities

Alternative 3 would be virtually the same as the proposed General Plan in all respects, with the exception of 4.36 acres of land that is currently designated as Residential Low. As described under Impact 3.3-2 in Section 3.3, implementation of the General Plan Update would result in short-term emissions from construction activities associated with subsequent development, including site grading, asphalt paving, building construction, and architectural coating. Emissions commonly associated with construction activities include fugitive dust from soil disturbance, fuel combustion from mobile heavy-duty diesel- and gasoline-powered equipment, portable auxiliary equipment, and worker commute trips. Under both Alternative 3 and the proposed project, future construction and demolition projects would be subject to BAAQMD-

Recommended Measures to Control Particulate Matter Emissions during Construction. Mitigation Measure AQ-1 was presented to reduce this impact to a less than significant level in most cases; however, it is not possible to ensure that very large construction projects could be universally mitigated to a level of less than significant. Under both Alternative 3 and the proposed project, these impacts would remain significant and unavoidable; however, under Alternative 3 there would be a reduction in the total amount of land constructed, which would reduce the construction related emissions. While the total reduction may not be significant relative to the total construction emissions, it would be **slightly better** when compared to the proposed General Plan.

Adverse Effects Associated with Exposure of Sensitive Receptors to Substantial Pollutant Concentrations

Alternative 3 would be virtually the same as the proposed General Plan in all respects, with the exception of 4.36 acres of land that is currently designated as Residential Low. As described under Impact 3.3-4 in Section 3.3, subsequent land use activities associated with implementation of the General Plan Update could potentially include short-term construction sources of TACs and long-term operational sources of TACs, including stationary and mobile sources. According to the BAAQMD CEQA Air Quality Guidelines, for a plan to have a less-than-significant impact with respect to TACs, overlay zones must be established around existing and proposed land uses that would emit these air pollutants. Overlay zones to avoid TAC impacts must be reflected in local plan policies, land use maps, or implementing ordinances. The General Plan Update would permit and facilitate the development of new sensitive receptors, such as new homes, in locations near arterial and collector roadways, highways, rail lines, and stationary sources of TAC emissions. Screening levels indicate that sensitive receptors within the Planning Area would be exposed to levels of TACs and or PM_{2.5} that could cause an unacceptable cancer risk or hazard near highways and stationary sources. Mitigation Measure AQ-3 is intended to reduce this impact to the extent feasible; however, it is not possible to determine at this stage of the planning process that all impacts could be reduced to a less-than-significant level from larger sources such as the Shell Refinery, for example. Under both Alternative 3 and the proposed project, future projects that would generate TACs or place sensitive receptors in the vicinity of existing uses that generate TACs, would be subject to BAAQMD requirements for permitting and cancer screening. Under both Alternative 3 and the proposed project, these impacts would remain significant and unavoidable; however, under Alternative 3 there would be a reduction in the total amount of land constructed to house sensitive receptors, which would reduce the potential for impact comparably. While the total reduction may not be significant relative to the total sensitive receptors that could be exposed to TACs, it would be **slightly better** when compared to the proposed General Plan.

Effects from Greenhouse Gases and Climate Change

Alternative 3 would be virtually the same as the proposed General Plan in all respects, with the exception of 4.36 acres of land that is currently designated as Residential Low. Under the proposed project, impacts associated with greenhouse gases and climate change would be less than significant. The proposed project represents a comprehensive and long-term commitment

by the City to reduce GHGs and the effects of climate change from community-wide and municipal operations over the life of the City's General Plan. The 2009 City of Martinez Climate Action Plan includes goals and measures that will be implemented by the City and by future development projects within the City over the life of the General Plan.

The City's Climate Action Plan identifies existing and proposed initiatives to reduce greenhouse gas emissions. The CAP ensures that the City's future activities and development patterns conform to California climate change legislation. The purpose of the CAP is to identify how the City will help the State achieve the State GHG emission reduction target of 15 percent by the year 2020. The CAP provides goals and associated measures, also referred to as GHG reduction measures, in the sectors of energy use, transportation, land use, water, and solid waste. In addition, the CAP provides goals and measures for longer-term adaptation to the potential risks associated with climate change.

The CAP includes all of the elements identified under CEQA Guidelines Section 15183.5(b)(1), which identifies the elements that a plan for the reduction of GHGs should include. Specifically, the CAP complies with the provisions of CEQA Guidelines Section 15183(b)(1) by providing a quantified inventory of GHG emissions and by providing a level based on substantial evidence below which activities subject to the plan will not make a cumulatively considerable contribution to GHG impacts. That level is based on the State's AB 32 goals.

While the City's General Plan takes a broad and comprehensive approach to sustainability, the CAP focuses specifically on GHG reductions. The CAP identifies and quantifies the impact of the City's sustainability vision, policies, and programs on GHG emissions. The sustainability components of the General Plan and the CAP function together as part of the City's comprehensive toolkit to achieve a vibrant and sustainable community.

Under Alternative 3, the CAP would continue to be implemented, and the City would continue to make progress towards the established GHG reduction targets established by the CAP. Additionally, under Alternative 3, the General Plan would be updated in order to better tie the CAP to the General Plan, and under this scenario, the ongoing implementation of the CAP would be as effective as it would be under the proposed project. Under Alternative 3 there would be a reduction in the total amount of land constructed, which would reduce the construction related GHG emissions and the long-term operational GHG emissions. While the total reduction may not be significant relative to the total GHG emissions, it would be **slightly better** when compared to the proposed General Plan.

Adverse Effects from Noise, and Transportation

Alternative 3 would be virtually the same as the proposed General Plan in all respects, with the exception of 4.36 acres of land that is currently designated as Residential Low. Under the proposed project, impacts associated with transportation and noise would be significant and unavoidable. Additionally, construction-related noise impacts would be significant and unavoidable.

Under Alternative 3, 4.36 acres of land currently designated for Residential Low would not be developed. This would eliminate the potential for 21 residential units to be developed on this site, which would eliminate an estimated 200 daily trips (9.52 trips/day/unit for single family detached). The reduction in the average daily trips in the Planning area would reduce impacts on transportation facilities such as roadways, freeways, and intersections. While the total reduction in daily trips may not be significant relative to the total daily trips under the proposed General Plan, it would be **slightly better** when compared to the proposed General Plan.

Under Alternative 3, the elimination of 4.36 acres of land for development would eliminate any noise associated with construction activities on this particular site. Additionally, the reduction of an estimated 200 daily trips would reduce long-term noise impacts from mobile sources of noise. While the total reduction in daily trips and the resulting reduction in noise may not be significant relative to the total daily trips under the proposed General Plan, it would be **slightly better** when compared to the proposed General Plan.

Effects on Public Services & Utilities

Under the proposed project, there would be increased population which would increase the demand on public services and utilities. Alternative 3 would be virtually the same as the proposed General Plan in all respects, with the exception of 4.36 acres of land that is currently designated as Residential Low. Under Alternative 3, 4.36 acres of land currently designated for Residential Low would not be developed. This would eliminate the potential for 21 residential units to be developed on this site, which would reduce demand for public services and utilities slightly in comparison to the proposed project in terms of impacts associated with public services and utilities. Impacts associated with water supply would be significant and unavoidable under the proposed project. This alternative would slightly reduce total development, resulting in a decreased demand for water supply and a slight reduction in overall impacts associated with water supply. Therefore, impacts associated with Alternative 3 would be **slightly better** than the proposed project.

Adverse Effects from Geology & Soils, Hazards, and Hydrology & Water Quality

Alternative 3 would be virtually the same as the proposed General Plan in all respects, with the exception of 4.36 acres of land that is currently designated as Residential Low. Under Alternative 3, 4.36 acres of land currently designated for Residential Low would not be developed. This would eliminate the potential for 21 residential units to be developed on this site, which would eliminate and potential geologic and natural hazards posed to the people and structures on this property. Additionally, the 4.36 acres would remain 100 percent pervious, which would aid in reducing flood potential within the city limits. Therefore, impacts associated with Alternative 3 would be **reduced** in comparison to the proposed project.

Adverse Effects on Agricultural and Biological Resources

The proposed General Plan designates agricultural lands within the Planning Area to preserve and protect lands capable of, and generally used for agriculture and grazing activities, which also

provide important biological functions. These designations include 135.8 acres of designated Agricultural Land, and 413.3 acres of designated Alhambra Valley Agricultural Land. The Open Space Preservation land use designation also allows agricultural plantings with the condition it is consistent with the intent of preserving the intended scenic resource. The Open Space Preservation designation preserves 2,365.9 acres within the Planning Area that allow for grazing activities.

There are 4.36 acres of Unique Farmland within the city limits, and 1.5 acres of Prime Farmland, and 30.47 acres of Unique Farmland located outside the city limits but within the Planning Area. Development under the proposed General Plan would result in the loss of the only designated Important Farmland within the city limits—4.36 acres—which is part of an existing vineyard operation. Alternative 3 would be virtually the same as the proposed General Plan in all respects, with the exception of the 4.36 acres of Unique Farmland. Under Alternative 3, the 4.36 acres of Residential Low land would be designated Agricultural Lands and would remain open and under an agricultural use. This would reduce the potential impact associated the loss of this Important Farmland, as well as a reduced impact on biological resources by maintaining the site open and available for wildlife. Therefore, impacts associated with Alternative 3 would be **reduced** in comparison to the proposed project.

Adverse Effects on Cultural Resources

There are known significant historical and/or archaeological resources located within the planning area. Indications are that humans have occupied the Bay Area for over 10,000 years and it is not always possible to predict where artifacts and/or human remains may occur outside of formal burials. Therefore, excavation and construction activities, regardless of depth, may yield artifacts and/or human remains that may not be interred in marked, formal burials. Many of the rock formations that surround Martinez contain fossils, and it is possible that one or more of these fossil-bearing formations underlie the Plan area at unknown depths. Therefore, the Plan area has a low-to-moderate potential to contain fossils.

The majority of land within Martinez is developed and has been previously disturbed by construction and site grading activities. All future development would be required to be consistent with the General Plan. The General Plan includes numerous goals and policies aimed at protecting and preserving cultural resources.

Alternative 3 would be virtually the same as the proposed General Plan in all respects, with the exception of 4.36 acres of land that is currently designated as Residential Low. Under Alternative 3, the 4.36 acres of Residential Low land would be designated Agricultural Lands and would remain open and under an agricultural use. This would reduce the potential impact associated with unknown cultural resources, if they were proving to exist on this site. Therefore, impacts associated with Alternative 3 would be **slightly reduced** in comparison to the proposed project and the no project alternative.

Effects on Land Use & Population

Impacts associated with Land Use and Population would be less than significant under the proposed project. Under Alternative 3, development patterns in the City would be similar when compared to the proposed project, with the exception of 4.36 acres of land currently designated Residential Low. This land use designation allows for residential uses at densities of between one and five units to the acre, which would allow approximately 21 units to be developed. The 21 units are assumed under Alternative 1 No Project, because it is an existing land use under the currently adopted General Plan. Additionally, the proposed General Plan would maintain the existing land use so it too assumes the development of 21 units on this site under the buildout scenario. The reduction of these units would eliminate the site as an available housing site, and would reduce the population capacity of the residential land uses. As such, this alternative is **slightly worse** when compared to the proposed project.

ENVIRONMENTALLY SUPERIOR ALTERNATIVE

CEQA requires that an environmentally superior alternative be identified among the alternatives that are analyzed in the EIR. If the No Project Alternative is the environmentally superior alternative, an EIR must also identify an environmentally superior alternative among the other alternatives (CEQA Guidelines Section 15126.6(e)(2)). The environmentally superior alternative is that alternative with the least adverse environmental impacts when compared to the proposed project.

As summarized in Table 5-1 below, Alternative 3 (Agricultural Preservation Alternative) is the environmentally superior alternative because it provides the greatest reduction of potential impacts in comparison to the proposed project and the other alternatives. Alternative 1 (No Project) and Alternative 2 (Increased Residential Density) are both worse than the proposed project.

5.0 ALTERNATIVES

TABLE 5-1: COMPARISON OF ALTERNATIVES TO THE PROPOSED PROJECT

<i>ENVIRONMENTAL ISSUE</i>	<i>PROPOSED PROJECT</i>	<i>ALTERNATIVE 1 NO PROJECT</i>	<i>ALTERNATIVE 2 INCREASED RESIDENTIAL DENSITY</i>	<i>ALTERNATIVE 3 AGRICULTURAL PRESERVATION</i>
Aesthetics	Same	Comparable	Slightly worse	Slightly better
Air Quality	Same	Same	Slightly worse	Slightly better
Greenhouse Gases and Climate Change	Same	Worse	Slightly better	Slightly better
Noise and Transportation	Same	Worse	Worse	Slightly better
Agricultural and Biological Resources	Same	Same	Same	Better
Public Services and Utilities	Same	Same	Slightly worse	Slightly better
Geology, Soils, Hazards, Hydrology, and Water Quality	Same	Worse	Slightly Worse	Slightly better
Cultural Resources	Same	Worse	Worse	Slightly better
Land Use and Population	Same	Worse	Better	Slightly worse
Overall	No Change	Worse	Worse	Better

CITY OF MARTINEZ

Dina Tasini Planning Manager

Laura Austin Administrative Aide III

DE NOVO PLANNING GROUP

Steve McMurtry..... Principal Planner

Ben Ritchie Principal Planner

Beth Thompson Principal Planner

William Crenshaw..... Associate Planner

Josh Smith Associate Planner

Jennifer DeMartino..... GIS Analyst

OMNI MEANS

Todd Tregenza Project Manager

ILLINGWORTH RODKIN

Joshua Carmen Consultant

WALTER & PISTOLE

Veronica A. F. Nebb Sr. Assistant City Attorney

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