5.3 SOCIOECONOMIC IMPACTS, ENVIRONMENTAL JUSTICE, AND CHILDREN’S ENVIRONMENTAL HEALTH AND SAFETY RISKS

This section assesses the potential socioeconomic impacts, environmental justice impacts, and children’s environmental health and safety risks that would occur as a result of implementing the No Action Alternative or Alternative B, D, or E.

5.3.1 SIGNIFICANCE CRITERIA

Federal Aviation Administration (FAA) Order 1050.1F states the FAA has not established a significance threshold for socioeconomic impacts, environmental justice impacts, and children’s health and safety risks.

FAA Order 1050.1F identifies factors to consider when determining whether an action would have the potential to have socioeconomic impacts, which include:

- Induce substantial economic growth in an area, either directly or indirectly (e.g., through establishing projects in an undeveloped area);
- Disrupt or divide the physical arrangement of an established community;
- Cause extensive relocation when sufficient replacement housing is unavailable;
- Cause extensive relocation of community businesses that would cause severe economic hardship for affected communities;
- Disrupt local traffic patterns and substantially reduce the levels of service of roads serving an airport and its surrounding communities; or
- Produce a substantial change in the community tax base.

FAA Order 1050.1F identifies factors to consider when determining whether an action would have the potential to have a significant impact on environmental justice populations, which include actions which would have the potential to lead to a disproportionately high and adverse impact to an environmental justice population, i.e. a low-income or minority population, due to:

- Significant impacts to other environmental impact categories; or
- Impacts on the physical or natural environment that affect an environmental justice population in a way that the FAA determines are unique to the environmental justice population and significant to that population.

While FAA Order 1050.1F does not specify a significance threshold for children’s environmental health and safety risks, it does direct that the FAA to consider such risks when making a significance determination whether an action would have the potential to lead to a disproportionate health or safety risk to children.
5.3.2 SOCIOECONOMIC IMPACTS

5.3.2.1 Future Conditions: 2024

The following section analyzes the impacts that the Sponsor’s Proposed Project and its alternatives would have with respect to the above factors.

Alternative A: No Action

**Induced Growth:** Alternative A would not result in economic growth for the area near the Airport because no construction activity would occur. Therefore, no impacts to socioeconomic resources would occur.

**Divide Communities:** Alternative A would not result in the division of established communities near the Airport. No construction activities would occur on the Airport; therefore, no impacts to socioeconomic resources would occur.

**Relocation of Residences:** Alternative A would not result in the acquisition or the conversion of residential properties to Airport property. Therefore, no impacts to socioeconomic resources would occur as a result of relocation of residences.

**Relocation of Businesses:** Alternative A would not result in impacts to businesses located on or off-Airport. Therefore, no impacts to socioeconomic resources would occur as a result of relocation of businesses.

**Disruptions of Local Traffic Patterns:** Alternative A would not result in modifications to off-Airport roadways or increase surface traffic. Therefore, no impacts to socioeconomic resources would occur as a result of disruptions of local traffic patterns.

**Substantial Loss in Community Tax Base:** Alternative A would not result in a substantial loss in community tax base. Therefore, no impacts to socioeconomic resources would occur as a result.

Implementation of Alternative A would not have a significant impact on socioeconomic resources.
Alternative B: Extend Runway to the Northwest by 1,100 feet (Sponsor’s Proposed Project)

*Induced Growth:* The construction and implementation of Alternative B would not result in long-term economic growth for the area near the Airport. Temporary growth in economic activity from the creation of construction jobs is likely to occur during construction. Therefore, no adverse impacts to socioeconomic resources would occur.

*Divide Communities:* The construction and implementation of Alternative B would occur on existing Airport property. Alternative B would not result in the division of established communities near the Airport. Therefore, no impacts to socioeconomic resources would occur.

*Relocation of Residences:* The construction and implementation of the Sponsor's Proposed Project would not result in the acquisition or the conversion of residential properties to Airport property. Therefore, no impacts to socioeconomic resources would occur as a result of relocation of residences.

*Relocation of Businesses:* The construction and implementation of the Sponsor's Proposed Project would not result in impacts to businesses located on or off-Airport property. Therefore, no impacts to socioeconomic resources would occur as a result of relocation of businesses.

*Disruptions of Local Traffic Patterns:* The construction and implementation of the Sponsor's Proposed Project does not include proposed modifications to off-Airport roadways. The Sponsor’s Proposed Project would not result in an increase in surface traffic other than a temporary increase during construction. It is anticipated that construction of the Sponsor’s Proposed Project would add up to 28 vehicles (mainly trucks) a day to the local roadways, with the average over the 18-month construction period being approximately 19 vehicles a day. Depending on the origin and destination of the vehicles, roadways likely to be used would include Atherton Road, Highway 101 north and south, Airport Road, and Binford Road. Being the primary access point to the Airport, Airport Road and Binford Road would receive all of these vehicles, while the other roadways would receive some portion. Given the relatively low levels of traffic on Airport Road and Binford Road, it is concluded that they are sufficient enough to handle this temporary increase during construction. The other roadways in the area are physically capable of handling the additional vehicles and the number of vehicles would be relatively small compared to the existing level of traffic on these roads. Therefore, there would be no significant disruption of local traffic patterns as a result of implementing the Sponsor’s Proposed Project.

*Substantial Loss in Community Tax Base:* As noted in the preceding sections, the implementation of the Sponsor's Proposed Project would not result in the relocation of any residences or local businesses. However, the Sponsor’s Proposed Project would require the acquisition of property.
The Sponsor’s Proposed Project would require acquisition of 0.1 acre of land to the southeast of the runway for the extension of the runway safety area to the south. This property is part of a 37-acre parcel that is located immediately off the southern end of the runway. The parcel is owned by JHW Family Limited Partners\textsuperscript{1}, but due to an existing easement that Marin County holds on the property, the height of any structures can be restricted so that it would not become a hazard to navigation.\textsuperscript{2} For the area being discussed, the maximum vertical height would be less than two feet, making it impossible to construct buildings. For tax purposes, the value of the 37-acre parcel is estimated to be $483,253 and the portion of the parcel to be acquired is estimated to be valued at $915. The loss in tax revenue would be approximately $10.43 annually. This loss in tax revenue would not be considered substantial. Therefore, the Sponsor’s Proposed Project would not significantly affect the local tax base for Marin County. In addition, Marin County intends to keep the Airport open for business during construction of the proposed runway extension. As a result, no loss of revenue for the airport-related businesses is anticipated.

Implementation of Alternative B would not have a significant impact on socioeconomic resources.

**Alternative D:**

**Extend Runway to the Southeast by 240 feet and to the Northwest by 860 feet**

**Induced Growth:** The construction and implementation of Alternative D would not result in long-term economic growth for the area near the Airport. Temporary growth in economic activity from the creation of construction jobs is likely to occur during construction. Therefore, no adverse impacts to socioeconomic resources would occur.

**Divide Communities:** The construction and implementation of Alternative D would occur on existing Airport property. Alternative D would not result in the division of established communities near the Airport. Therefore, no impacts to socioeconomic resources would occur.

**Relocation of Residences:** The construction and implementation of Alternative D would not result in the acquisition or the conversion of residential properties to Airport property. Therefore, no impacts to socioeconomic resources would occur as a result of relocation of residences.

**Relocation of Businesses:** The construction and implementation of Alternative D would not result in impacts to businesses located on or off-Airport. Therefore, no impacts to socioeconomic resources would occur as a result of relocation of businesses.

\textsuperscript{1} Marin County Assessor-Recorder - Property Inquiry Details, accessed online at http://www.co.marin.ca.us/depts/ar/COMPASS/index.asp on October 8, 2013.

\textsuperscript{2} Avigation Easement between Rancho Del Pantano, Inc. and Marin County, April 10, 1967.
Disruptions of Local Traffic Patterns: The construction and implementation of Alternative D does not include proposed modifications to off-Airport roadways. Alternative D would not result in an increase in surface traffic other than a temporary increase during construction. It is anticipated that construction of Alternative D would add up to 28 vehicles (mainly trucks) a day to the local roadways, with the average over the 18-month construction period being approximately 19 vehicles a day. Depending on the origin and destination of the vehicles, roadways likely to be used would include Atherton Road, Highway 101 north and south, Airport Road, and Binford Road. Being the primary access point to the Airport, Airport Road and Binford Road would receive all of these vehicles, while the other roadways would receive some portion. Given the relatively low levels of traffic on Airport Road and Binford Road, it is concluded that they are sufficient enough to handle this temporary increase during construction. The other roadways in the area are physically capable of handling the additional vehicles and the number of vehicles would be relatively small compared to the existing level of traffic on these roads. Therefore, there would be no significant disruption of local traffic patterns as a result of implementing Alternative D.

Substantial Loss in Community Tax Base: As noted in the preceding sections, the implementation of Alternative D would not result in the relocation of any residences or local businesses. However, Alternative D would require the acquisition of property.

Alternative D would require the acquisition of 3.7 acres of land to the southeast of the runway for the extension of the runway and runway safety area to the south. This property is part of a 37-acre parcel that is located immediately off the southern end of the runway. The parcel is owned by JHW Family Limited Partners, but due to an existing easement that Marin County holds on the property, the height of any structures can be restricted so that it would not become a hazard to navigation.\(^3\) For the area being discussed, the maximum vertical height would be less than ten feet, making it virtually impossible to construct buildings with any useful purpose. For tax purposes, the value of the 37-acre parcel is estimated to be $483,253 and the portion of the parcel to be acquired is estimated to be valued at $48,325. The loss in tax revenue would be approximately $551.10 annually. This loss in tax revenue would not be considered substantial. Therefore, Alternative D would not significantly affect the local tax base for Marin County.

Implementation of Alternative D would not have a significant impact on socioeconomic resources.

\(^3\) Avigation Easement between Rancho Del Pantano, Inc. and Marin County, April 10, 1967.
Alternative E: Extend Runway to the Northwest by 300 feet

**Induced Growth:** The construction and implementation of Alternative E would not result in long-term economic growth for the area near the Airport. Temporary growth in economic activity from the creation of construction jobs is likely to occur during construction. Therefore, no adverse impacts to socioeconomic resources would occur.

**Divide Communities:** The construction and implementation of Alternative E would occur on existing Airport property. Alternative E would not result in the division of established communities near the Airport. Therefore, no impacts to socioeconomic resources would occur.

**Relocation of Residences:** The construction and implementation of Alternative E would not result in the acquisition or the conversion of residential properties to Airport property. Therefore, no impacts to socioeconomic resources would occur as a result of relocation of residences.

**Relocation of Businesses:** The construction and implementation of Alternative E would not result in impacts to businesses located on or off-Airport property. Therefore, no impacts to socioeconomic resources would occur as a result of relocation of businesses.

**Disruptions of Local Traffic Patterns:** The construction and implementation of Alternative E does not include proposed modifications to off-Airport roadways. Alternative E would not result in an increase in surface traffic other than a temporary increase during construction. It is anticipated that construction of Alternative E would add up to 28 vehicles (mainly trucks) a day to the local roadways, with the average over the 18-month construction period being approximately 19 vehicles a day. Depending on the origin and destination of the vehicles, roadways likely to be used would include Atherton Road, Highway 101 north and south, Airport Road, and Binford Road. Being the primary access point to the Airport, Airport Road and Binford Road would receive all of these vehicles, while the other roadways would receive some portion. Given the relatively low levels of traffic on Airport Road and Binford Road, it is concluded that they are sufficient enough to handle this temporary increase during construction. The other roadways in the area are physically capable of handling the additional vehicles and the number of vehicles would be relatively small compared to the existing level of traffic on these roads. Therefore, there would be no significant disruption of local traffic patterns as a result of implementing Alternative E.

**Substantial Loss in Community Tax Base:** As noted in the preceding sections, the implementation of Alternative E would not result in the relocation of any residences or local businesses. Additionally, implementation of Alternative E would not require the acquisition of property.

Therefore, implementation of Alternative E would not have a significant impact on socioeconomic resources.
5.3.3 ENVIRONMENTAL JUSTICE

Executive Order 12898, Federal Actions to Address Environmental Justice in Minority and Low-Income Populations, requires all Federal agencies to address disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority and low-income populations. The Executive Order also directs Federal agencies to incorporate environmental justice as part of their overall mission by conducting their programs and activities in a manner that provides minority and low-income populations an opportunity to participate in agency programs and activities.

The U.S. Department of Transportation (USDOT) Order 5610.2(a) provides definitions for minority and low-income populations:

a. Low-Income means a person whose median household income is at or below the Department of Health and Human Services (HHS) poverty guidelines.

b. Minority means a person who is:
   (1) Black: a person having origins in any of the black racial groups of Africa;
   (2) Hispanic or Latino: a person of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race;
   (3) Asian American: a person having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent;
   (4) American Indian and Alaskan Native: a person having origins in any of the original people of North America, South America (including Central America), and who maintains cultural identification through tribal affiliation or community recognition; or
   (5) Native Hawaiian and Other Pacific Islander: people having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands.

c. Low-Income Population means any readily identifiable group of low-income persons who live in geographic proximity, and, if circumstances warrant, geographically dispersed/transient persons (such as migrant workers or Native Americans) who will be similarly affected by a proposed DOT program, policy or activity.

d. Minority Population means any readily identifiable groups of minority persons who live in geographic proximity, and if circumstances warrant, geographically dispersed/transient persons (such as migrant workers or Native Americans) who will be similarly affected by a proposed DOT program, policy or activity.
The Executive Order relates to requirements in Title VI of the Civil Rights Act of 1964 (Title VI), the National Environmental Policy Act (NEPA), the Uniform Relocation Assistance and Real Property Acquisition Policies Act (Title 49 Code of Federal Regulations (CFR) Part 24), and other applicable statutes and regulations. Title VI provides that no person will, on the grounds of race, color, religion, sex, national origin, marital status, disability, or family composition, be excluded from participation in, be denied the benefits of, or be otherwise subject to discrimination under any program of the Federal, state, or local government. Title VIII of the 1968 Civil Rights Act guarantees each person equal opportunity in housing.

FAA Order 1050.1F, Environmental Impacts: Policies and Procedures, provides guidance for the preparation of environmental justice analysis in support of an Environmental Impact Statement (EIS). The action would have the potential to lead to a disproportionately high and adverse impact to an environmental justice population, i.e., a low-income or minority population, due to:

- Significant impacts in other environmental impact categories; or
- Impacts on the physical or natural environment that affect an environmental justice population in a way that the FAA determines are unique to the environmental justice population and significant to that population.

As discussed in Section 4.3, Socioeconomic Overview, of this Supplement to the Final EIS (SEIS), there are no readily identifiable minority or low-income populations in the GSA who live within geographic proximity to DVO.

Disproportionately high and adverse effect on minority and low-income populations means an adverse effect that:

1. Is predominately borne by a minority population and/or a low-income population; or
2. Will be suffered by the minority population and/or low-income population and is appreciably more severe or greater in magnitude than the adverse effect that will be suffered by the nonminority population and/or non-low-income population.

Even though there are no identifiable minority or low-income populations in the GSA, this document still considered whether any significant environmental impacts associated with implementation of Alternative B, D, or E would have the potential to affect such populations if they were present.

The only significant environmental impacts identified in this document are the impacts identified in Section 5.9, Biological Resources, and in Section 5.10, Wetlands and Streams. As discussed in those sections, with mitigation, those significant impacts can be reduced to a not-significant level.
There are no minority or low-income populations in the GSA, and implementation of Alternative B, D, or E would not result in significant environmental impacts that could affect such populations if they were present. Therefore, implementation of Alternative B, D, or E would not have a disproportionate environmental impact on any minority or low-income population.

5.3.4 CHILDREN’S ENVIRONMENTAL HEALTH AND SAFETY RISKS

Executive Order 13045, Protection of Children from Environmental Health Risks and Safety Risks, requires all Federal agencies to make it a high priority to identify and assess environmental health risks and safety risks that may disproportionately affect children; and shall ensure that its policies, programs, activities, and standards address disproportionate risks to children that result from environmental health risks or safety risks.

Based on a review of available data conducted as part of this SEIS, implementation of the Sponsor’s Proposed Project or its alternatives would not result in an elevated risk related to health or safety concerns for children. Typically, the primary children’s health concern is asthma and related lung disorders. In order to determine whether the Proposed Project or its alternatives would increase the likelihood of children contracting these health problems, the analysis conducted in Section 5.5, Air Quality, was examined. According to the analysis in Section 5.5, none of the alternatives would create air quality conditions that would worsen breathing conditions for children. Based on the analyses detailed in Section 5.6, Water Quality, none of the alternatives would result in the release of harmful agents into surface or groundwater resources above levels permitted by the State of California and Federal regulations.

Based on the analyses conducted in this SEIS, implementation of Alternative B, D, or E would not result in the release of, or exposure to, significant levels of harmful agents in the water, air, or soil that would affect children’s health or safety.