

## **5.H.1 SOCIOECONOMIC IMPACTS; ENVIRONMENTAL JUSTICE; AND CHILDREN'S ENVIRONMENTAL HEALTH AND SAFETY RISKS**

### **5.H.1.1 Socioeconomic Impacts**

FAA Order 5050.4B, *Airport Environmental Handbook*, states that airport development actions may affect not only the natural environment but also the human environment. The effects on the human environment are generally considered as social and economic impacts, and encompass a wide range of variables. The principal social impacts considered with airport actions include:

- Relocation of housing units and/or businesses;
- Disruption of established communities;
- Disruption of orderly, planned development; and
- Creation of an appreciable change in employment.

The FAA policy is to ensure fair compensation in the event acquisition of housing and businesses prior to the construction of a project under the Airport Improvement Program is necessary. The *Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970* (the Uniform Act) and the implementing regulations (49 CFR Part 24), also provide for the fair relocation of homeowners and business owners impacted by an airport development project. The FAA Advisory Circular, *Land Acquisition and Relocation Assistance for Airport Improvement Program Assisted Projects* (Advisory Circular 150/5100-17) provides land acquisition and relocation guidance for airport sponsors in accordance with the Uniform Act and the 49 CFR Part 24.

The Relocation Assistance Program outlined in Advisory Circular 150/5100-17 requires the airport sponsor to engage professionals experienced in the development and implementation of airport acquisition and relocation programs. These professionals will work closely with the homeowners and business owners being displaced by the airport project. This guidance also provides procedures for a "Housing of Last Resort" to ensure that homeowners are relocated to decent, safe, and sanitary replacement housing. This provision allows for a wider range of relocation procedures to be used if comparable replacement housing is not available or if that housing is beyond the financial means of the homeowner and exceeds the Federal or state legal limitation.

### **5.H.1.2 Environmental Justice**

On February 11, 1994, President Clinton issued Executive Order 12898 and an accompanying presidential memorandum to focus Federal actions on the environmental and human health conditions in minority and low-income communities. Executive Order 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, provides that, to the greatest extent practicable and permitted by law, and consistent with the principles set forth in the report on the National Performance Review, each Federal agency must make achieving environmental justice part of its mission.

USDOT Order 5610, *Environmental Justice in Minority Populations and Low-Income Populations*, was issued to implement Executive Order 12898. Consistent with policies of the USDOT, U.S. Environmental Protection Agency (USEPA), and the U.S. Census Bureau, the populations for the environmental justice analysis for this EIS were defined as follows:

- Minority population refers to any readily identifiable group of *minority persons* (Black, Hispanic, Asian or Pacific Islander, American Indian or Alaskan Native, and other non-White populations). The environmental justice analysis used the definitions from the 2000 Census collectively as a comparison between white and non-white population.
- Low-income population for purposes of this EIS was defined as any readily identifiable group of persons whose median household income is at or below the poverty guidelines of the U.S. Department of Health and Human Services, 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 USDOT program or project. For the environmental justice analysis in this EIS, the low-income threshold was based on a percent below the poverty level from the 2000 Census.
- Adverse effects are those effects that include a totality of significant individual or cumulative human health or environmental effects, including interrelated social and economic effects, which can include, but are not limited to: bodily impairments, infirmity, illness or death; air, noise, water pollution, and soil contamination; destruction or disruption of man-made or natural resources; community cohesion or a community's economic vitality; destruction or disruption of the availability of public and private facilities and services; vibration; adverse employment effects; displacement of persons, businesses, farms, or non-profit organizations; increased traffic congestion, isolation from the community or from the broader community; and the denial of, reduction in, or significant delay in the receipt of benefits of proposed programs, policies, or activities.
- Disproportionate high and adverse effect on minority and low-income populations are adverse effects that are predominantly borne by a minority population and/or low-income populations, and are appreciably more severe or greater in magnitude than the adverse effect that will be suffered by the non-minority population and/or non-low-income populations.

To be considered a minority by the USEPA Office of Environmental Justice, the minority composition would either exceed 50 percent or be greater than the minority population percentage in the general population of the geographic area under analysis. The appropriate unit of geographic analysis may be a governmental jurisdiction, a neighborhood, a census tract, or other similar unit. The proposed airport expansion construction areas and areas that could be subject to mitigation are within the EIS Study Area and encompassed by the jurisdiction of Broward County. Broward County has been determined by the FAA to be the appropriate unit of geographic area under analysis.

A threshold was developed for determining whether the demographic study area included a population with environmental justice concerns. The threshold was based on whether the proportion of minority, low-income, or elderly population within the study area exceeded the proportions within the surrounding communities (reference population). The reference population for the analysis was Broward County.

**5.H.1.2.1 Study Area**

The environmental justice analysis was conducted within the Study Area, which is encompassed by Broward County. The analysis was conducted for relevant demographic factors based on Census block group information shown below.

**Existing Conditions:** As summarized in **Table 5.H.1.2-1**, 2000 Census data indicates that the population within the study area has characteristics similar to that of Broward County.

**Table 5.H.1.2-1  
ENVIRONMENTAL JUSTICE DEMOGRAPHIC CHARACTERISTICS  
(BROWARD COUNTY AND STUDY AREA)  
Fort Lauderdale-Hollywood International Airport**

POPULATION CATEGORY	BROWARD COUNTY		STUDY AREA	
	NUMBER	PERCENT	NUMBER	PERCENT
<b>Minority Population:</b>				
Black or African-American	322,516	19.9	29,909	16.7
American Indian & Alaskan Native	2,912	0.2	842	0.5
Asian	36,148	2.2	3,422	1.9
Native Hawaiian / Pacific Islander	570	0.0	65	0.0
Hispanic/Latino	271,523	16.7	30,301	16.9
<i>Total Minority</i>	<i>633,669</i>	<i>48.8</i>	<i>64,539</i>	<i>36.0</i>
<i>Other (Caucasian) Population</i>	<i>989,349</i>	<i>51.2</i>	<i>114,534</i>	<i>64.0</i>
<b>Total Population</b>	<b>1,623,018</b>	<b>100.0</b>	<b>179,073</b>	<b>100.0</b>
<b>Low-Income Population:</b>				
Households With Income Below the Poverty Level	<b>70,684</b>	<b>10.8</b>	<b>8,107</b>	<b>11.4</b>
Total Households	<b>654,787</b>	<b>100.0</b>	<b>71,330</b>	<b>100.0</b>

Source: U.S. 2000 Census

As indicated by Table 5.H.1.2-1, the overall percentage of minority groups in the Study Area is less than that of Broward County. Conversely, the overall percentage of low-income households in the Study Area is greater than the percentage present in Broward County. There are concentrations of various minority populations and low-income residents scattered throughout the Study Area.

### **5.H.1.3 Children's Environmental Health and Safety**

In April 2000, 17 percent of Broward County's population was between 5 and 17 years of age. Census 2000 showed that there were 279,888 school-age persons living in Broward County. Human exposure to harmful agents in air, water, and soil contributes to diseases and deaths. Low environmental quality worsens the health of already weak persons such as children, pregnant women, and senior citizens. The health indicators analyzed in *Healthy People 2010*, a nationwide study, show that although encouraging progress has been made concerning outdoor air quality, water quality, toxics, and waste during the last decade, the global effort towards improved environment should not be stopped.

Poor air quality can cause premature death, cancer, and damage to lungs and hearts. According to the Florida Department of Public Health (FDPH), the main concern for children statewide is asthma and respiratory diseases. The assessment of air quality for airport development projects is prepared following the guidance and regulations contained in the Clean Air Act including the 1999 amendments and the National Environmental Policy Act. The baseline assessment of air quality, in general, is provided in Chapter Five, Section 5.B, *Air Quality*. The assessment of potential air quality impacts with the development of the Airport Sponsor's Proposed Project or any of the runway development alternatives is discussed in Chapter Six, *Environmental Consequences*, Section 6.B, *Air Quality*. While this air quality analysis does not address a specific population, it is assumed that if *de minimis* thresholds are not exceeded there would be no significant adverse affect on children populations resulting from the implementation of the Airport Sponsor's Proposed Project or its alternatives. There are no federal guidelines regarding the assessment of air quality impacts on any specific populations.

Although the link between drinking water quality and infectious diseases is sometimes difficult to establish, the airport should aim at eliminating biological and chemical contaminants from surface water. Toxic and hazardous substances used in aviation-related activities have various, but harmful effects on human health if released in the environment. Proper identification and the assessment of the level of exposure to those substances are essential.