

CHAPTER 10. ENVIRONMENTAL JUSTICE

1. INTRODUCTION AND DEFINITIONS.

a. **General.** Environmental justice analysis considers the potential of Federal actions to cause disproportionate and adverse effects on low-income or minority populations. Environmental justice ensures no low-income or minority population bears a disproportionate burden of effects resulting from Federal actions. Since the late 1980s, Federal agencies have used various definitions for environmental justice issues. To help describe environmental justice, this Desk Reference incorporates the following definition from the U.S. Environmental Protection Agency's (EPA) Office of Environmental Justice:

"The fair treatment and meaningful involvement of all people, regardless of race, color, national origin, or income with respect to the development, implementation and enforcement of environmental laws, regulations and policies. Fair treatment means that no group of people, including racial, ethnic, or socioeconomic group, should bear a disproportionate share of the negative environmental effects resulting from industrial, municipal, and commercial operations or the execution of Federal, State, local, and tribal programs and policies."

b. **Low-income.** According to DOT Order 5610.2, *Environmental Justice in Minority and Low-Income Populations*, Appendix 1.a, this is a person having a median household income at or below the Department of Health and Human Services' (HHS) poverty guidelines. Although DOT Order 5610.2 directs DOT agencies to HHS poverty guidelines, guidance from the Council on Environmental Quality (CEQ) and the EPA uses the Census Bureau's annual statistical poverty thresholds on income and poverty (Series P-60) to define low income. Normally, HHS and Census Bureau data differ. As a result, the responsible FAA official may use either HHS or Census Bureau data.

c. **Low-income population.** A low-income population is 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 program, policy, or activity.

d. **Minority.** DOT Order 5610.2 Appendix 1.c defines this term as a person who is:

- (1) *Black* (a person having origins in any of the black racial groups of Africa);
- (2) *Hispanic* (a person of Mexican, Puerto Rican, Cuban, Central or South American, or 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, the Indian subcontinent, or the Pacific Islands); or
- (4) *American Indian and Alaskan Native* (a person having origins in any of the original peoples of North America and who preserves cultural identification through tribal affiliation or community recognition).

e. Minority population. This population is one the action would affect. It is comprised of Black, Hispanic, Asian-American, or American Indian and Alaskan Native individuals. Each, several, or all of these ethnic groups may live in geographic proximity to one another or may be geographically scattered or transient (e.g., migrant workers) who will be similarly affected by a proposed program, policy, or activity. When examining a population living in geographic proximity, analysts should consider areas within a governing body's jurisdiction, a neighborhood, a census tract, or other similar limit. This reduces the potential for artificially diluting or inflating the minority population(s) analyzed.

Note: CEO's definition of minority population states that: 1) the minority population of an affected area exceeds 50 percent; or 2) the minority population percentage of the affected area is meaningfully greater than the minority population percentage in the general population or other appropriate geographic analysis. In addition, a minority population also exists if there is more than one minority group present and the minority percentage, when calculated by aggregating all minority persons, meets one of the above thresholds. FAA recognizes this definition, but for purposes of this Desk Reference will use the definition in DOT Order 5610.2 to comply with DOT policy.

f. General population. This is the population that an action affects, but that is not a low-income or minority population.

2. APPLICABLE STATUTES AND IMPLEMENTING REGULATIONS.

APPLICABLE STATUTES AND IMPLEMENTING REGULATIONS	SUMMARY DESCRIPTION	OVERSIGHT AGENCY
<i>Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations</i> (59 FR 7629, February 11, 1994)	Requires Federal agencies to provide public involvement for low-income or minority populations. This includes demographic analysis identifying and addressing potential action impacts on low-income or minority populations that may experience a disproportionately high and adverse effect.	CEQ, EPA
U.S. Department of Transportation (DOT) Order 5610.2, <i>Environmental Justice in Minority and Low-Income Populations</i> , April 15, 1997	Outlines the DOT's commitment to the principles of environmental justice and presents a program for department-wide implementation.	DOT
<i>Environmental Justice: Guidance Under the National Environmental Policy Act</i> , December 10, 1997	Presents CEO's guidance on addressing environmental justice issues under the National Environmental Policy Act of 1969, as amended (NEPA).	CEQ
<i>Final Guidance for Consideration of Environmental Justice in Clean Air Act 309 Reviews</i> , July 1999	Provides EPA guidance and answers often-asked questions about environmental justice.	EPA

3. APPLICABILITY TO AIRPORT DEVELOPMENT ACTIONS.

a. Any airport development action funded under the Airport Improvement Program (AIP) or any airport action subject to Federal Aviation Administration (FAA) approval may cause environmental justice impacts. Typical actions that may involve environmental justice issues are: a new airport; airfield/landside expansion (new or expanded terminal and hangar facilities, new or extended runways and taxiways, navigational aids [NAVAIDS], etc.); land acquisition for aviation-related use, new or moved access roadways, remote parking

facilities, and rental car lots; significant changes in aircraft operations; and significant amounts of construction activity.

b. To properly apply environmental justice requirements, it is important to determine if a low-income or minority population occurs in the area the action or its reasonable alternatives would affect. It is also important to know if a low-income or minority population uses a particular action-affected resource or if an affected resource is important to that population. Impacts due to aircraft noise, air quality degradation, direct and induced socioeconomic effects, degraded water quality, and effects to cultural or community cohesion, traffic, and history often affect low-income or minority populations. However, other impacts may be of concern. As noted in section 5 of this chapter, timely consultation with human resource agencies regarding locations of low-income or minority populations relative to an action's impact areas is important.

4. **PERMITS, CERTIFICATIONS, AND APPROVALS.** No legal or regulatory requirements for formal permits or certificates exist for environmental justice issues. However, to comply with Executive Order 12898 and DOT Order 5610.2, FAA environmental documents must demonstrate that FAA has considered carefully and properly the goals of those Orders.

5. ENVIRONMENTAL COMPLIANCE PROCEDURES - ENVIRONMENTAL ANALYSIS.

a. **Required consultation.** Compliance with Executive Order 12898, the Presidential Memorandum on environmental justice, and Order 5610.2, requires FAA to analyze impacts on low-income and minority populations. FAA must discuss those impacts after considering demographic data on populations exposed to or who use the resources a Federal action would affect. This allows FAA to identify adverse (i.e., unfavorable in a meaningful or unique way) effects that may disproportionately affect low-income or minority populations.

b. **Timely consultation is critical.** Timely consultation with State and local human resource agencies very early in the NEPA process is critical because it:

(1) ensures identification of resources the action would adversely affect;

(2) helps determine if a low-income or minority population sustains the identified effect or if the affected resource is important to that population;

(3) helps determine if mitigation or offsetting benefits would avoid or reduce disproportionate effects on an affected low-income or minority population.

c. **The importance of public outreach.** CEQ notes it is important to recognize that the cultural, historic, or social concerns of a low-income or minority population amplify that population's perceptions of an action's effects.¹ Consequently, reaching out to local community leaders, tribal elders, or other suitable spokespeople early in the environmental process is a very important step in completing efficiently and effectively an environmental justice analysis. Often, that contact is the best way to collect information essential to addressing an affected population's culturally important concerns and needs (e.g.,

¹ CEQ. 1997. *Environmental Justice Guidance Under the National Environmental Policy Act*, page 9.

subsistence consumption of fish, vegetation, and wildlife; unique ceremonial lands; or water bodies, landforms, buildings, or vistas important to a population's culture). In some instances, outreach efforts scheduled for certain times and places may be the only way to gather that information.

d. Non-English speaking populations. The responsible FAA official should consider providing *summaries* of important issues in languages other than English. This helps ensure that affected minority populations whose primary language is not English are aware of the action's most critical aspects.

e. Information sources for environmental analyses. As needed, review DOT Order 5610.2 to ensure the NEPA document contains information on environmental justice. To aid in preparing the environmental justice analysis, use the following information sources for demographic information:

(1) The U.S. Census Bureau provides geographic data and Series P-60 reports that provide information on income and poverty.

(2) HHS provides poverty data used to define "low-income populations" per DOT Order 5610.2.

(3) EPA's *Environmental Justice Query Mapper* provides information on EPA-permitted facilities and their surrounding communities and access to other databases (superfund, toxics release inventories, safe drinking water information system, etc.).

(4) State, county, regional, and local planning agencies.

(5) State and local tax and employment agencies or other agencies that may collect economic indicator data.

(6) Chambers of Commerce, civic groups, trade associations, and other commercial organizations.

(7) Standard demographic surveys identifying ethnic "pockets" and living patterns within an affected community.

(8) Community associations or groups (churches, sports clubs, social groups outreach groups, community leaders, and economic departments of colleges or universities) may provide information on how community members depend on or use natural resources for subsistence or cultural reasons.

6. DETERMINING IMPACTS.

a. Examples of environmental justice concerns. The following information highlights some environmental areas to consider when assessing environmental justice impacts. This is a partial list. Contact local, regional, State, and Federal agencies to help complete this analysis if needed.

(1) Human health. After determining that mitigation or offsetting benefits would not reduce adverse impacts, consider the following to determine the action's human health effects as needed.

(a) A health-related environmental justice issue would result if either of these occurs:

(1) The risk to any low-income or minority population is greater than the general community would experience.

(2) The risk to low-income or minority populations is unacceptable when compared to the norms set for the affected area's general population. If all affected population segments experience an unacceptable level of risk, no environmental justice issue would occur. This is because the action would not cause disproportionately high and adverse effects on minority or low income populations.

(b) Describe how a population's ethnic, racial, or social segments use the affected resource.

(c) Analyze the affected community's dose-response to the identified hazard.

(2) Historic or cultural resources. When assessing an action's adverse impacts to a historic site on or eligible for the National Register of Historic Places (NRHP), determine if affected resources are important to the history or culture of low-income or minority populations. When compared to the general population, determine if these populations would experience the effects of the adverse impact more than the general population would experience (i.e., a disproportionately high level of adverse effect).

(3) Community disruptions. Determine if a proposed action would disrupt the continuity of a low-income or minority neighborhood and if suitable relocation is available for displaced residents or businesses. Determine if the disruption would adversely affect the ability of a low-income or minority population to efficiently use public and private community services or substantially alter traffic patterns. Determine if any of these disruptions are disproportionately more adverse than those the generally affected public would experience.

(4) Cumulative effects. This part of the analysis should focus on identified adverse cumulative impacts. Determine if any low-income or minority populations experience a disproportionately high level of cumulative effects. As needed, consult planning authorities for support.

b. Determining environmental justice impacts. The following information provides an outline on how the responsible FAA official may determine if an action would cause environmental justice impacts.

(1) Identify those resources the action would affect.

(2) Using information from Step (1), identify the populations:

- (a) that would experience the impact;
- (b) that would use the affected resources; or
- (c) to whom the affected resources are important for subsistence or cultural reasons.

(3) Would the effects identified in Step (1) be adverse (unfavorable in a meaningful or unique way)? The following information should guide the analysis:

- (a) Examine each effect to decide if the effect meets a significance threshold.
- (b) To do so, use the significance threshold for that resource as defined in FAA Order 1050.1E Appendix A. A conclusion that an effect is significant indicates the effect's potential to cause a disproportionately high and adverse effect to a minority or low-income population.
- (c) Note that not all "adverse impacts" within the meaning of DOT Order 5610.2 will meet or exceed a significance threshold. Some adverse impacts are not significant impacts as defined in FAA Order 1050.1E Appendix A, yet they may be unfavorable in a meaningful or unique way. As a result, the responsible official must undertake a case-by-case analysis of an action's unique facts. The official does this to determine if impacts not rising to a level of significance for NEPA purposes nonetheless represent a disproportionately high and adverse effect for environmental justice analysis purposes.²

(4) If examination of these considerations reveals that the effects identified in Step 1 are not adverse, stop the analysis. If effects are found to be adverse, continue the analysis as indicated below.

(5) Are any of the populations identified in Step (2), low-income or minority populations?

- (a) If no, stop this analysis.
 - (b) If yes, continue to Step (6).
- (6) Calculate the percentage of low-income or minority people the action would adversely affect by using the following equation. ³ To do so, divide the number of low-income

² The following is one example of an unfavorable, but not significant impact that must be considered for environmental justice concerns: An airport action requires residential relocations that do not, standing alone, represent a significant impact under the criteria set forth in FAA Order 1050.1E Appendix A. However, the relocations fall exclusively on low-income households. Further, there is insufficient relocation housing for persons of limited means. In this instance, although the relocations alone are not a significant impact, the relocation of only low-income households may nonetheless be a disproportionately high and adverse effect.

or minority people identified in Step 5 by the number of people in the general population (see section 1.f of this chapter).

(7) Does the percentage derived in Step 6 exceed 50%? If yes, a disproportionately high and adverse effect on low-income or minority populations may occur. Note that in some cases the percentage derived in Step (6) may not be an appropriate way to determine if a disproportionately high and adverse effect to minority populations would occur. This is especially so when the action does not disproportionately affect any population segment (i.e., the percentage in Step (6) is less than or equal to 50), but the low-income or minority populations experience a more severe impact because they have a unique relationship to the affected resource.⁴

(8) Would mitigation or offsetting benefits counterbalance or prevent the disproportionate effects identified in Step (7)? An example of an offsetting benefit would be an action that creates a shift of the 65 DNL contour that results in removal of a minority population, or a portion of a minority population, from that contour

(a) If no, you have identified an environmental justice impact. Consult regional counsel or APP-400 if needed and review information in section 8 of this chapter.

(b) If yes, you have identified an environmental justice impact that has been properly mitigated or offset. No further environmental analysis is needed.

c. Displaying or reporting environmental justice impacts. To aid in presenting information regarding environmental justice effects, consider using a spatial display or Geographic Information Systems (GISs). These displays are effective aids in presenting information. GIS is especially effective because it visually integrates the relationship among the biological, physical, cultural, social, and demographic concerns of the affected population(s). The environmental justice discussion in an environmental document should cross-reference information addressing effects determinations presented in the other parts of the document's Environmental Consequences section. This reduces the repeating of information found elsewhere in that document.

d. Mitigation. Normally, environmental justice mitigation would relate to measures reducing a particular adverse effect on a particular resource. After consulting with the parties noted in section 5 of this chapter, mitigation measures or offsetting benefits that reduce the impact to the affected low-income or minority communities must be identified in

³ For example, FAA may need to determine if a proposed action would significantly affect water quality, making a river segment unsuitable to support a coho salmon population a Tribe consumes or sells to sustain itself.

⁴ An example would be when an action adversely affects a salmon population important to all affected populations, but a tribe is more severely affected because it relies on the salmon for subsistence living or cultural ceremonies. To determine if this is the case, the responsible FAA official or analyst should consult the leaders of affected groups. This consultation is often helpful in determining if the affected community depends on the affected resource for subsistence or cultural reasons.

the EA or EIS pursuant to Order 5610.2, Section.8.c. If no mitigation or offsets can be identified, or if such measures or offsets are not practicable, the environmental document must explain this conclusion and its basis. This is because Order 5610.2, paragraph 8.c explicitly requires that actions involving disproportionately high and adverse effects to EJ communities will only be carried out if further mitigation measures or alternatives that would avoid or reduce the disproportionately high and adverse effects are not practicable.

7. DETERMINING IMPACT SIGNIFICANCE.

a. General. The responsible FAA official should consider the information obtained from the process in section 6 of this chapter. The official may wish to consult representatives of the affected low-income or minority population(s) when deciding if a disproportionate effect would occur as discussed in section 6

ORDER 1050.1E THRESHOLD	FACTORS TO CONSIDER
A significant impact may occur when an action would cause disproportionately high and adverse human health or environmental effects on low-income or minority populations.	None.

From: Table 7-1, FAA Order 5050.4B.

b. Mitigation. During the environmental review process, entities noted in section 5 of this chapter may send letters that include recommended measures to mitigate or offset those effects. An appendix to the environmental document should include copies of those letters. The environmental document should summarize the most important information in those letters and accurately cross-reference the appendix and pages in that appendix for further information. If the FAA or the sponsor rejects any recommended mitigation or offsetting benefits, the environmental document should clearly explain why the recommendation was rejected.

8. ENVIRONMENTAL IMPACT STATEMENT CONTENT.

a. General. DOT Order 5610.2 requires FAA to attempt to resolve significant environmental justice impacts before the responsible FAA official can approve the preferred alternative. The EIS’s environmental justice analysis should describe efforts to achieve final resolution for impacts affecting low-income or minority populations. Environmental justice impacts and mitigation usually involve substantial coordination among the affected population, FAA, the airport sponsor, and local jurisdictional agencies and municipalities. The resolution may involve intense negotiations among these parties to clearly identify issues concerning FAA or the affected population. Negotiations assist in developing reasonable guidelines to design measures that satisfy both parties and meet FAA eligibility criteria. The goal of negotiating is to develop measures satisfactory to all parties involved. This would allow the preferred alternative to serve its intended purpose, while protecting the health, environmental, cultural, ethnic, and social context of the affected population group.

b. Assessing further mitigation and practicable alternatives. Section 6.d of this chapter addresses mitigation. The EIS should explain any limits on mitigation involving regulatory or safety impacts such as major noise or access restrictions. If FAA concludes a

preferred alternative would cause a disproportionately high and adverse effect to a low-income or minority population, DOT Order 5610.2 requires FAA to determine if any mitigation or practicable alternatives that reduce or avoid environmental justice impacts exist. This is accomplished by consulting the entities mentioned in section 5 of this chapter and considering the following factors:

(1) Do further mitigation measures exist that would avoid or reduce the disproportionately high and adverse effects of the preferred alternative? If so, does such mitigation of the preferred alternative's impacts require extraordinary costs of a social, economic or environmental nature (are the measures practicable)?

(2) Does an alternative that would avoid or reduce the disproportionately high and adverse effects exist? If such an alternative exists, does the totality of its impacts in all resource categories exceed those of the preferred alternative or does the alternative entail extraordinary social, economic or environmental costs when compared to the preferred alternative (is the alternative practicable)?

c. Mitigation and Title VI of the Civil Rights Act. If the preferred alternative will have a disproportionately high and adverse effect on populations protected by Title VI (minority populations) and FAA determines no practicable alternative exists after completing Step 8.c, FAA must demonstrate that:

(a) based on overall public interest, there is a great need for the preferred alternative; and

(b) another alternative that would have less adverse effect on the protected population (and still meet purpose and need) would cause social, economic, environmental or human health effects more severe than the preferred alternative or would entail extraordinary costs.

d. Further mitigation. The EIS should describe proposed mitigation when agencies provide that information. FAA or the sponsor should fully consider the mitigation and balance its benefits against those of the proposed action.

NEPA requires a Federal agency preparing an EIS to discuss mitigation in sufficient detail to disclose that environmental consequences have been fairly evaluated (*Robertson vs. Methow Valley*, 490 U.S. 332 (1989)). In addition, under 49 USC Section 47106 (c)(1)(B), FAA may not approve a Federal funding for major airport development projects, unless the agency determines that no possible and prudent alternative to the project exists and that every reasonable step has been taken to minimize the adverse effect. Major airport development projects are those that involve the location of a runway, new airport, or major runway extension. The EIS should discuss and adopt mitigation measures to address environmental justice issues in accordance with NEPA and 49 USC Section 47106(c)(1)(B).

If feasible, provide an estimated schedule for undertaking accepted mitigation.