

In 1994 it was determined that a disproportionate number of less desirable facilities such as waste treatment plants, power plants, hazardous or noxious chemical processing facilities, etc. were being located in or near minority or low income neighborhoods; neighborhoods with little or no capability to oppose such actions. Executive Order (EO) 12898 was developed to try to more equitably share the adverse impacts of such activities and facilities, at least as far as Federal or federally-funded actions are concerned. This EO directs Federal agencies to evaluate their actions to determine if there are any potential adverse human health or environmental effects, and if there are, to evaluate the affected population to determine if those adverse effects have a disproportionately high impact on minority populations or low-income populations. If such a disproportionate impact is found, the Federal agency should seek ways to minimize the impacts.

I. -1 Determine if there are low income or minority populations in your project area

For purposes of EO 12898, a low-income population is defined as a group of individuals living in geographic proximity to one another, or a geographically dispersed or transient (migrant) group of individuals that have household incomes at or below poverty level.

Individuals who are members of the following population groups are considered minorities: American Indian or Alaskan Native, Asian or Pacific Islander, Black (not of Hispanic origin), or Hispanic.

A low income or minority population can be identified where either:

- Low income or minority individuals constitute more than 50% of the population of the project area; or
- The percentage of low income or minority individuals in an affected area is twice that as the county or state as a whole (for example: 30% of the project area is low income but only 15% of the county is low income)

Several methods can be used to determine if there are low income or minority populations present in your project area. The most common and defensible method is to review data provided by the US Census Bureau. This data can be obtained from the *American Factfinder* portion of Census Bureau website (http://factfinder.census.gov/servlet/DTGeoSearchByListServlet?ds_name=DEC_2000_SF3_U&lang=en&ts=121258945450). The website maintains data for a variety of different areas, including: the entire country, a state, county, census tract, block group, and block. For most projects, data from the census tract or block group level are the most relevant.

The U.S. Census Bureau maintains a variety of data sets on populations, and makes available hundreds of queries describing different population attributes. From the perspective of environmental justice, 4 data sets are the most important:

- P1. – Total Population
- P6. – Race

- P53. – Median Household Income in 1999
- P87. – Poverty Status in 1999 by Age

To determine if there is a low income or minority population in your project area, compare the 4 data sets for the census tract for the project area to the data for the county and state where the project is located.

Another way to determine the presence of low income or minority populations is to conduct interviews with representatives from local schools, health and human services, places of worship, local businesses, and community representatives and leaders. To ensure a good representation, interviews should be conducted from a number of representatives who interact with the public and would have a good idea of the make-up of the population.

If you determine that there are low-income or minority populations in your project area, answer “yes” to Section I, Question 1 in the PDM Environmental/Historic Preservation Questions. If you determine that there are not low-income or minority populations present in your project area, answer “no” to Section I, Question 1.

I-2 Determining if your project has disproportionate adverse effects

For most FEMA hazard mitigation projects, adverse effects to nearby populations are generally temporary, limited to annoyances associated with construction activities. In addition, most hazard mitigation projects also reduce potential hazardous conditions, resulting in long-term beneficial effects to nearby populations. However, especially if there are low-income or minority populations nearby, you should consider the full range of potential adverse effects resulting from your project.

To trigger Executive Order 12898, the effects of the project must be both adverse, and effect a low-income or minority population more so than it would the general public (disproportionate). Any adverse effects that appreciably put a minority or low-income population at an increased health risk, or appreciably affect their physical or economic well being, will trigger Executive Order 12898. For some examples of projects that could result in disproportionate adverse effects to minority, click the following link:

- Consider the construction of a retention pond on land that is the only recreational playing field and community gathering place in a Hispanic neighborhood. The project involves totally replacing this community area with the retention pond. In this instance, the project will result in both short-term adverse impacts to the Hispanic community (effects of nearby construction), and long-term adverse impacts (effects associated with loss of community area). In this case, project alternatives, increased public involvement, or mitigation may be necessary to minimize impacts to the social community.
- Consider the acquisition and demolition of 22 upscale houses in a small, isolated, low-income, rural town comprised of 100 residences. Due to surrounding land use and property ownership, most of the residents have

chosen to relocate to the next closest town 15 miles away. As a result, the tax-paying population is expected to decrease by 20 percent, placing a greater financial burden on the remaining residents to support municipal revenues. In this case, public involvement, mitigation, or the development of alternatives may be helpful in minimizing the extra burden to the remaining low-income population.

The applicant should not immediately discount a proposed project if there are potential adverse impacts to low income or minority populations, especially if they are short term. Often the long term benefits provided by the project outweigh any short term adverse impacts during construction. For example, a flood damage reduction project may have significant short term adverse impacts to the project area due to increased noise, dust, traffic delays, and general inconvenience. In the long-term however, the community could benefit as a result of the project by alleviating the financial and emotional burden of repetitive losses due to flooding. Some communities have elected to highlight the fact that the primary beneficiaries of a proposed project would be low income or minority residents.

I-3 How to address adverse effects

If the project will cause disproportionate adverse effects to a minority or low-income population, you should take efforts to reduce the impact to people in the project area, using creativity and common sense to determine acceptable measures. The measures should be tailored to the activities and interests of the impacted populations. For example, if the project is occurring in a residential neighborhood, construction activities should occur during the daytime hours to reduce the disruption to residents, who are often away during the day and sleeping at night. Other measures can include spaying water on excavated areas and dirt roads to reduce dust, timing material deliveries to avoid rush hour, informing residents when utilities will not be available, and creating a community areas on land that is reclaimed.

If you anticipate that your project will have disproportionate adverse effects to a low-income or minority population, then you should consider ways to avoid those effects, minimize the effects, and if necessary, compensate for the effects. When possible, all projects should be designed to avoid disproportionate adverse effects to minority and low-income populations. If adverse effects cannot be avoided, develop appropriate treatment measures into the scope of work so adverse effects are reduced and minimized. Listed below are some of the possible adverse effects that your project may have, together with possible treatment measures that you may include in your project to avoid, reduce or minimize, or compensate for adverse effects. The list is illustrative, and does not include all adverse effects that a project may have or all of the ways to potentially treat those effects.

Adverse Effects (Disproportional to minority or low-income)	Treatment measures
<ul style="list-style-type: none"> • Adverse health effects <ul style="list-style-type: none"> ○ Bodily impairment, infirmity, illness, or death ○ Air, noise, soil, or water pollution or contamination • Adverse economic effects <ul style="list-style-type: none"> ○ Displacement or removal of persons, businesses, farms, or non-profit organizations ○ Adverse employment effects ○ Increased traffic congestion, isolation, or exclusion • Adverse social effects <ul style="list-style-type: none"> ○ Loss of recreation or community gathering areas ○ Destruction or disruption of man-made or natural resources ○ Destruction or diminution of aesthetic values ○ Destruction or disruption of community cohesion 	<ul style="list-style-type: none"> • Avoid or minimize adverse effects by considering project alternatives. • Install safety fencing and signage. • Maintain a clean construction site. • Involve the public. • Implement mitigation to minimize temporary effects such as noise or reduced air quality. • Remediate construction site of hazardous materials and conditions once project is finished. • Provide for relocation of businesses, non-profit organizations, and residents within the community. • Utilize local work force. • Develop a route for business access and use signage to increase the visibility of business and retail entrances. • Implement traffic control plans so roadways are maintained. • Include crosswalks and transit stops in the project design. • Consider alternate project location. • Provide for temporary recreation or community gathering areas. • Rebuild recreation or community gathering areas in other accessible locations. • Acquire adjacent land and designate park land. • Landscape the project area once construction activities are concluded. • Incorporate comments from the public in to the design or implementation of the project. • Develop a route for business access and use signage to increase the visibility of business and retail entrances.

<ul style="list-style-type: none"> ○ Increased traffic congestion, isolation, or exclusion ○ Destruction or disruption of the availability of public and private facilities and services ○ Displacement of persons or businesses 	<ul style="list-style-type: none"> ● Include crosswalks and transit stops in the project design. ● Provide for relocation of businesses, non-profit organizations, and residents within the community. ● Consider project alternatives.
---	--

I-4 How to provide relevant and helpful support documentation

Whether or not you answered “yes” to Section I, Question 1, you should include a narrative about the presence or absence of low income or minority populations in the project area, including how you made the determination and the sources of your information (e.g., interviews, site survey, or US census data). If there are high concentrations of low income or minority populations in your project area, indicate the U.S. Census tract number for the project area in the comments box in Section I of the PDM Environmental and Historic Preservation questions.

If there are high concentrations of low-income or minority populations in your project area, include a narrative in the comments box in Section I of the PDM Environmental/Historic Preservation Questions identifying the range of potential adverse effects to those populations. Indicate which effects will be short-term and which will be long-term, and what measures have been taken to avoid, minimize, or reduce adverse effects. If any public involvement has occurred in the development of the project, indicate how they were involved and what the general opinion of the project was.