

4.12 SOCIOECONOMICS AND ENVIRONMENTAL JUSTICE

4.12.1 Impact Methodology

The impact analysis presents projected conditions under No Action and the Proposed Action alternatives. Potential disproportionate effects on low-income or minority populations and the potential for increased adverse health effects on children are also assessed to identify environmental justice effects.

The impact analysis identifies and describes the potential project impacts on ROI population, employment, income, business volume, and schools (the ROI is defined for MMR as Honolulu County and for PTA as Hawai'i County). Also assessed are the effects on housing, environmental justice, and the protection of children. To determine whether low-income and minority populations could be disproportionately affected by the alternatives, the proportion of these groups in the areas surrounding the proposed project were identified. If high percentages of low-income and minority populations were identified, the potential was addressed for these populations to be disproportionately affected by environmental or public health and safety effects (e.g., increased traffic through their neighborhoods, potential exposure to hazardous materials). To evaluate whether children could encounter disproportionate environmental health or safety risks, the population under the age of 18 surrounding the proposed project areas was estimated. The potential environmental health and public safety risks for each alternative were identified and evaluated for disproportionate proximity to populations of children, in comparison to other age groups.

4.12.2 Factors Considered for Determining Significance of Impacts

Factors considered in determining whether an alternative would have a significant impact on socioeconomics and environmental justice include the extent or degree to which its implementation would result in the following:

- Adversely affect the unemployment rate for the county;
- Change total income;
- Change business volume;
- Affect the local housing market and vacancy rates, particularly with respect to the availability of affordable housing;
- Change any social, economic, physical, environmental, or health conditions in such a way as to disproportionately affect any particular low-income or minority group; or

- Disproportionately endanger children in areas on or near the project site.

In addition to the project description in Chapter 2, the following assumptions were used for the analysis of project impacts:

- The Proposed Action would not generate any employment either in the short term or long term; and
- The Proposed Action would have no impact on population or housing. Therefore, in terms of socioeconomic resources, no impacts would be expected.

4.12.3 Summary of Impacts

Summary of Potential Socioeconomics and Environmental Justice Impacts

Impact Issues	No Action Alternative	Alternative 1 MMR (Reduced Capacity Use with Some Weapons Restrictions)	Alternative 2 MMR (Full Capacity Use with Some Weapons Restrictions)	Alternative 3 MMR (Full Capacity Use with Fewer Weapons Restrictions)	Alternative 4 PTA (Full Capacity Use with Fewer Weapons Restrictions)
Economic development	○	○	○	○	⊕+
Protection of children	⊙	⊙	⊙	⊙	○
Environmental justice	⊙	⊗	⊗	⊗	○

LEGEND:

- ⊗ = Significant impact
- ⊙ = Significant impact mitigable to less than significant
- ⊕ = Less than significant impact
- = No impact
- + = Beneficial impact

***No Action Alternative
Less Than Significant Impacts***

Protection of children and environmental justice. There would be less than significant impacts under this alternative. Non-live fire training would occur. Ammunition would not be transported on Farrington Highway through Wai‘anae. There would be military vehicular traffic on Farrington Highway and aircraft and UAV flights over MMR. Security fencing at the installation would be maintained to prevent unauthorized access and potential exposure to site hazards.

Under No Action, non-live fire training would impact the number of days when ATIs and archaeological sites could be accessed. Aircraft lasing and UAV training would probably be at a frequency well less than CALFEX exercises and CLF training. Combined with consultation discussions with the Wai‘anae community, impacts would be reduced to less than significant.

No Impacts

Economic development. Under No-Action, no effects are expected because there would be no substantial change to population, employment, or business volumes in the ROI. The Army would continue to train at MMR, although it would be non-live-fire training. No change in employment or business volume associated with this alternative (such as purchasing supplies from local businesses) is expected.

Alternative 1 (Reduced Capacity Use with Some Weapons Restrictions)

Significant Impacts

Impact 1: Environmental justice (access to Areas of Traditional Importance and archaeological sites). Impacts on public access of ATIs are addressed in Section 4.10. Under Alternative 1, use of the range for 242 training days would reduce the number of days when ATIs and archaeological sites could be accessed. Because community members within the Wai‘anae CCD have been the primary participants in cultural access events at MMR, they would be disproportionately affected by the access restrictions.

Regulatory and administrative mitigation 1. Regulatory and administrative measures to mitigate this impact would be the same as those identified in Section 4.10 for cultural resources relative to cultural site access. However, consultation measures identified in that section would not likely be able to reduce the impacts below the significance threshold and Alternative 1 would result in a significant impact.

Additional mitigation 1. No additional mitigation measures have been identified.

Significant Impacts Mitigable to Less than Significant

Impact 2: Protection of children and environmental justice (transport of ammunition). Under Alternative 1, the Army would transport live ammunition, weapons, and propellants to and from MMR. During the occasional times that ground transport would be used, Army inconsistencies with Hawai‘i DOT policies and instructions concerning ammunition transport are considered to be a significant impact (see Section 4.6). The Army would provide no advance notification to allow

the police or fire departments to undertake preventative measures to protect the public in event of an accidental explosion when ammunition is being transported on Farrington Highway through Wai‘anae. The Wai‘anae CCD has a high percentage of low-income and minority populations, as well as children who walk along or wait for buses along the Farrington Highway. Because ammunition transportation routes pass through the Wai‘anae CCD, this community, relative to other communities on O‘ahu, would bear a disproportionate potential public health and safety risk from any accidental explosions.

Regulatory and administrative mitigation 2. No regulatory and administrative mitigation measures have been identified.

Additional mitigation 2. Additional mitigation measures for this impact are the same as those identified in Section 4.6 for traffic and transportation relative to ammunition hauling policies (see Impact 1 under Section 4.6). The Army would transport ammunition in accordance with all Hawai‘i DOT rules and regulations.

No Impacts

Economic development. No effects are expected because Alternative 1 would not change population, employment, or business volumes in the ROI. The Army would continue to train at MMR. No change in employment or business volume associated with MMR training (such as purchasing supplies from local businesses) is expected.

Protection of children (hazardous materials and waste). Hazardous materials or waste would not compromise the health or safety of children. As discussed in Sections 4.7, 4.8, and 4.11, MMR has no known contamination sources that would affect off-post residences. The Army has conducted extensive field investigations as part of this EIS to evaluate the potential for contaminants to migrate beyond the boundaries of MMR. MMR also has a spill plan to minimize spills of hazardous materials.

Environmental justice (hazardous materials and waste). Hazardous materials or waste would not compromise the health or safety of low-income or minority populations. As discussed in Sections 4.7, 4.8, and 4.11, MMR has no known contamination sources that would affect off-post residences. The Army has conducted extensive field investigations as part of this EIS to evaluate the potential for contaminants to migrate beyond the boundaries of MMR. MMR also has a spill plan to minimize spills of hazardous materials.

Environmental justice (recreation at Mākua Beach). No environmental justice effects are expected. There would be no disproportionately high or

adverse human health or environmental effects on minority or low-income populations as a result of implementing Alternative 1 under either the 19 or 28 CALFEX scenarios. MMR has sufficient acreage to provide SDZs between the training range and any residential or public areas.

Recreational users of Mākua Beach would be exposed to noise from helicopter overflights, mortars and artillery, and demolitions if the recreational users are on the beach when the Army is conducting training at MMR. Significant and unmitigable noise impacts would occur under Alternative 1. Projected US Army CHPPM noise contours from the level of ordnance to be used under Alternative 1 would result in Mākua Beach being within a Zone III (greater than 70 dB CDNL) noise contour (see Figures 4.5-1 and 4.5-2 in Section 4.5). The Zone III contour extends over the beach area. Zone III is considered incompatible with noise sensitive land uses (such as housing, schools, and in this case, a recreation area), so the impact level is considered significant. However, minority or low-income populations are not expected to bear a disproportionate share of the adverse noise impacts on recreation because Mākua Beach is a public beach, and all members of the public have equal access to the beach. Additionally, similar beaches are available north and south of Mākua Beach that are not highly used on weekday mornings and could be used during training. Therefore, no disproportionate adverse impacts from noise on minority or low-income populations would occur under Alternative 1. See Sections 4.1 and 4.5 for further discussion on impacts and mitigation measures considered.

Alternative 2 (Full Capacity Use with Some Weapons Restrictions)

Significant Impacts

Impact 1: Environmental justice (access to Areas of Traditional Importance and archaeological sites). Impacts and mitigation measures under Alternative 2 are similar to those described for Alternative 1.

Significant Impacts Mitigable to Less than Significant

Impact 2: Protection of children and environmental justice (transport of ammunition). The impacts and mitigation measures for this alternative are similar to those described for Alternative 1.

No Impacts

Economic development. Impacts identified under this alternative are similar to those described for Alternative 1.

Protection of children (hazardous materials and waste). Impacts identified under this alternative are similar to those described for Alternative 1.

Environmental justice (hazardous materials and waste). Impacts under Alternative 2 are similar to those described for Alternative 1.

Environmental justice (recreation at Mākua Beach). The impacts under this alternative are similar to those described for Alternative 1.

Alternative 3 (Full Capacity Use with Fewer Weapons Restrictions)

Significant Impacts

Impact 1: Environmental justice (access to Areas of Traditional Importance and archaeological sites). Impacts and mitigation measures under Alternative 3 are similar to those described for Alternative 1.

Significant Impacts Mitigable to Less than Significant

Impact 2: Protection of children and environmental justice (transport of ammunition). The impacts and mitigation measures are similar to those described for Alternative 1.

No Impacts

Economic development. Impacts identified under this alternative are similar to those described for Alternative 1.

Protection of children (hazardous materials and waste). Impacts identified under this alternative are similar to those described for Alternative 1.

Environmental justice (hazardous materials and waste). Impacts under Alternative 3 are similar to those described for Alternative 1.

Environmental justice (recreation at Mākua Beach). The impacts under this alternative are similar to those described for Alternative 1.

Alternative 4 (Full Capacity Use with Fewer Weapons Restrictions), Pōhakuloa Training Area

Less than Significant Impacts

Economy. The Proposed Action would be expected to have direct and indirect minor beneficial effects on employment, income, and business volume in Hawai'i County and Pā'auhau-Pa'auilo CCD, North Kona CCD, South Kohala CCD, and North Hilo CCD, resulting from range construction and training at PTA, and the resultant increased expenditures that would stimulate the economy within the ROI. The expenditures and employment associated with construction would increase ROI sales volume, income, and employment. The economic benefits would mainly last for the duration of the range construction. These changes in the specific economic parameters (sales, income, and employment) would fall

within historical fluctuations, be within the capacity of society and the economy to absorb, and are considered minor.

Employment. There would be a less than significant impact on employment. Construction activities for the range would result in a temporary increase in employment. Subsequent indirect increases in employment are produced by the multiplier effect resulting from increased spending by construction employees. Increased construction employment in Hawai'i County would be considered temporary and less than significant.

Income. There would be a less than significant impact on income. Changes in income represent the wage and salary payments made to construction workers, primarily during construction of the range. The Proposed Action would only temporarily increase total annual income of Hawai'i County.

No Impacts

Population and housing. There would be no impacts on population or housing. No new staff would be added at PTA. There would be no increased military population at PTA and, therefore, no increase in the demand for housing.

Protection of children. There would be no impact on the health and safety of children. A Girl Scout camp is located about 8 miles (13 kilometers) from the PTA cantonment area, a distance that would prevent the camp from being impacted by noise from proposed construction projects. Nor would the camp be impacted from noise or dust from training maneuvers because no training occurs near the camp. Proposed PTA construction projects would take place in areas that are off-limits to the general public. Restricted areas would continue to be posted with signs, enclosed by a fence, or stationed with guards. Risks to children and to the general public would be minimized by strictly adhering to applicable safety regulations and procedures.

Environmental justice. No disproportionate effects on environmental justice populations would occur. PTA is relatively isolated, and there are no military or civilian personnel permanently stationed there. There are no residential neighborhoods or schools nearby that would be affected by noise or traffic from training or construction activities. Potential effects to native Hawaiian cultural or spiritual resources, or to Hawaiian Homelands, are addressed in Section 3.10, Cultural Resources.