

5.13 SOCIOECONOMICS AND ENVIRONMENTAL JUSTICE

5.13.1 Affected Environment

SBMR is within the Wahiawā CCD. The population of the Wahiawā CCD represented approximately 4.4 percent of the population of Honolulu County in 2000. Between 1990 and 2000 the population of this area decreased by 12.6 percent (Table 5-35) (US Census Bureau 1990a, 2000a). Only 31.0 percent of the housing in this district was owner-occupied, and 12.6 percent were vacant in 2000 (US Census Bureau 1990a, 2000b). The Wahiawā CCD had one of the highest percentage Hispanic populations in Honolulu County (12.8 percent) and a total minority population of 26,235 (68.4 percent) (Table 5-35). The population identified as Asian/Pacific Islander was the largest minority ethnic group and made up 34.2 percent of the population (Table 5-35) (US Census Bureau 1990a, 2000a). Approximately 31 percent of the population of Wahiawā CCD was under the age of 18 in 2000, one of the highest percentages in Honolulu County. However, between 1990 and 2000 the population under the age of 18 decreased by 9.1 percent (US Census Bureau 1990a, 2000c).

Table 5-35
Wahiawā CCD Population Percentage by Race/Ethnicity

Race/Ethnicity	Percent of Total Population 1990	Percent of Total Population 2000	Percent Change in Actual Population 1990-2000
White	42.6	31.6	-35.0
Black or African American	14.0	11.0	-31.3
Native American, Eskimo, Aleut	0.7	0.7	-17.1
Asian and Pacific Islander	37.8	34.2	-20.9
Other and Two or More Races	4.9	22.5	301.2
Hispanic ¹	10.0	12.8	11.5
Minority ²	57.4	68.4	4.1

Sources: US Census Bureau 1990a, 2000a

¹Persons of Hispanic origin may be of any race.

²Minority includes Black or African American; Native American, Eskimo, and Aleut; Asian and Pacific Islander; and Other and Two or More Races.

In 2000, the ROI (i.e., Honolulu County) civilian labor force totaled about 423,600 (HDLIR, 2002). The ROI unemployment rate averaged 3.9 percent in 2000, lower than the state of Hawai'i's average unemployment rate of 4.3 percent, and just below the national rate of 4.0 percent.

The primary sources of employment in the ROI were the services, government, and retail trade sectors, which together accounted for 73 percent of total employment (BEA 2002a). Thirty-one percent of all jobs were in the services sector. The services industry includes establishments primarily engaged in providing a variety of services, such as hotels and other lodging places; establishments providing personal, business, repair, and amusement services; health, legal, engineering, and other professional services; educational institutions;

membership organizations; and other miscellaneous services (OSHA, 2001). The government sector accounted for about 25 percent of total employment in the ROI. Of that 25 percent, 9 percent were federal military jobs, 5 percent were federal civilian jobs, another 9 percent were employed by the state, and the remaining 2 percent were employed by with local government. Retail trade is the third largest employment sector, accounting for approximately 18 percent of total employment. Leading industry clusters in the ROI include agri-business (e.g., production of sugar and pineapple, fish harvesting), tourism, and national defense (Enterprise Honolulu 2003).

As of September 2001, SBMR employed approximately 12,000 personnel (HDBEDT 2003). About 10,100 were military personnel, 300 were civilian personnel, and the remaining 1,600 were other personnel (non-appropriated employees, government contractors, or foreign nationalists). SBMR accounts for approximately 9 percent of all government jobs in the ROI, and about 15 percent of the total federal government jobs in the ROI.

The per capita personal income (PCPI) of the ROI was \$29,960 (US DOC, BEA, 2002). This was higher than the state of Hawai'i's PCPI of \$27,851, and just above the national PCPI of \$29,469.

Six public schools serve the students at SBMR: Solomon Elementary School and Hale Kula Elementary School on SBMR; Wheeler Elementary School on WAAF; Wheeler Intermediate School on WAAF; Leilehua High School in the town of Wahiawā; and Mililani High School in the town of Mililani. Solomon Elementary School is located on SBMR and has an enrollment of approximately 790 students in pre-kindergarten through fifth grade (NCES 2002). Hale Kula Elementary School, also on SBMR, serves about 640 students in pre-kindergarten through fifth grade (NCES 2002). Wheeler Elementary School on WAAF has about 750 students in pre-kindergarten through 5th grade (NCES 2002). About 670 students attend Wheeler Intermediate School on Wheeler Army Airfield, which serves grades six through eight (NCES 2002). Leilehua High School in Wahiawā has an enrollment of about 1,780 students in grades nine through 12 (NCES 2002). About 50 percent of the students at Leilehua High School are from military families stationed on SBMR and the Naval Communication Station in Whitmore (Leilehua High School 2002). Mililani High School in Mililani also serves grades 9 through 12 and has about 2,280 students enrolled (Tamongdon 2003).

Public schools in Wahiawā that serve children living off-post are Helemanō Elementary School, 'Iliahi Elementary School, Ka'ala Elementary School, Wahiawā Elementary School, Wahiawā Middle School, Leilehua High School, and Mililani High School. These schools, like the schools on SBMR and WAAF, are part of the Honolulu County School District.

5.13.2 Environmental Consequences

Summary of Impacts

Long-term significant but mitigable effects on schools would be expected as a result of the Proposed Action. The Proposed Action would result in approximately 760 additional school-age children living on-post or near the post. The addition of 760 new students would

strain the capacity and resources of the schools, the extent of which would depend on the age distribution of the additional children, whether the children would live on-post, and when the school districts would be notified about changes in student population at affected schools.

The Proposed Action would be expected to have less than significant beneficial effects on population, employment, income and business volume in Honolulu County and the Wahiawā CCD, resulting from construction, staff additions, and the resultant increased expenditures that would stimulate the economy within the ROI. Chapter 4 discusses the EIFS model results. Only the results pertaining to Honolulu County would be applicable to SBMR.

No Action would have no impacts on socioeconomic or environmental justice factors or on the protection of children. Table 5-36 summarizes the socioeconomic and environmental justice impacts at SBMR.

**Table 5-36
Summary of Potential Socioeconomic and Environmental Justice Impacts at SBMR/WAAF**

Impact Issues	Proposed Action	Reduced Land Acquisition	No Action
Population	⊕+	⊕+	○
Employment	⊕+	⊕+	○
Income	⊕+	⊕+	○
Economy (Business Volume)	⊕+	⊕+	○
Housing	⊙	⊙	○
Schools	⊗	⊗	○
Environmental justice	⊙	⊙	○
Protection of children	⊙	⊙	○

In cases when there would be both beneficial and adverse impacts, both are shown on this table. Mitigation measures would only apply to adverse impacts.

LEGEND:

- ⊗ = Significant
- ⊕ = Beneficial impact
- ⊗ = Significant but mitigable to less than significant
- N/A = Not applicable
- ⊙ = Less than significant
- = No impact

Proposed Action (Preferred Alternative)

Significant Impacts Mitigable to Less than Significant

Impact 1: Schools. Long-term adverse effects on schools would be expected as a result of the Proposed Action alternative. The Proposed Action would result in 810 additional Soldiers at

SBMR accompanied by approximately 502 spouses and 1,053 children. Of the estimated 1,053 children, approximately 760 would be of school age (between 5 years and 18 years of age), assuming the age distribution of Soldier dependents is similar to that of the rest of the nation. Approximately half of this school-age population would attend elementary schools, while the remaining children would be split between middle school and high school. Accordingly, this would equate to about 380 additional elementary school students, and approximately 190 middle school students and 190 high school students. As described in Section 5.13.1, two elementary schools (both on post) with a current enrollment of approximately 1,440 students, one off post middle school with about 668 students, and one off post high school with approximately 1,778 students are the primary providers of public school education for dependents of SBMR Soldiers. A small number of students attend private schools or attend schools outside the local district. Nonetheless, the potential addition of 380 elementary school students would represent a 26 percent increase over current enrollment. Enrollment in the local middle and high schools would increase by about 28 percent and 11 percent, respectively.

The impact of the additional students would vary with the school. Currently, the intermediate school has an enrollment of less than 700, but has a physical capacity of about 1,000 (Matsukawa 2003). Similarly, Hale Kula Elementary School has an enrollment of about 540, significantly down from its peak enrollment of 1,200 (Ferreira 2003). Solomon Elementary School is at near capacity with its current enrollment (Matsukawa 2003). Leilehua High School's current enrollment is below capacity (Toyota 2003), but some type of accommodation might be needed to serve the additional students, depending on the size of future enrollments.

Regulatory and Administrative Mitigation 1. Federal aid will be made available to local school districts to compensate them for the increased burden through the Impact Aid Program. Such aid may take the form of basic support payments or grants for construction of new facilities to house new students who are dependents of Soldiers located at SBMR. Additional teachers would need to be hired to maintain the current student-to-teacher ratios.

Additional Mitigation 1. The Army proposes to notify the school districts as soon as possible before personnel increases to give them time to secure funding and hire new teachers and to assist in providing these new facilities. Although the local school districts receive additional funding for each military dependent attending public school, it is likely that the school districts would bear some of the costs for additional teachers and physical space, if needed. The RCI Office, as the lead department for planning Army Family Housing, closely coordinates future student requirements with the State Department of Education. To this end, the RCI Project Manager has been working with HDOE district superintendents. On behalf of the Army, the RCI Project Manager works with the DOE, to generate school enrollment projections with as much accuracy as possible. The development partnership plans its facilities work years in advance, coordinating with the DOE. Depending on future enrollments and funding levels, the Proposed Action could still adversely affect school budgets, but the impact would be less than significant.

Less than Significant Impacts

Population, employment, income, and business volume. Short- and long-term direct and indirect minor beneficial effects to population, employment, income, and business volume in Honolulu County and the Wahiawā CCD would be expected as a result of construction, staff additions, and training associated with the Proposed Action. The expenditures and employment associated with the construction of training ranges and associated facilities would increase Honolulu County sales volume, income, and employment, as determined from EIFS model results (see Table 4-14). The expenditures associated with these projects were spread out over a five-year period since the construction is scheduled to take place between 2004 and 2008. The EIFS model, its inputs, outputs, and significance measures (RTVs), are discussed in more detail in Appendix L. The economic benefits would last only for the duration of the construction period. These changes in the specific economic parameters (sales, income, employment, and population) would fall within historical fluctuations and would be considered minor.

The Proposed Action would involve the acquisition of up to 1,400 acres of land currently under cultivation for pineapples. Some portion of the land acquired would no longer be useable for pineapple production. This area would be used by the military as rangeland. Economic effects could include reduction in crop production and a decrease in taxes paid to local and state government entities by landowners. Some employment could be affected. The impact would likely be minor given the size of the land parcel and the minimal role agricultural production plays in the ROI economy. Furthermore, agriculture accounts for only 0.5 percent of employment and only 0.4 percent of earnings in Honolulu County and 1.7 percent of employment and 0.8 percent of earnings statewide (BEA 2002a). Since World War II, the role of the pineapple industry to the state economy declined in place of tourism and defense.

Long-term minor direct and indirect beneficial effects would be associated with the addition of 810 military personnel, 502 spouses, and 1,053 dependents (approximately 760 of the 1,053 would be primary or secondary school-age children) to SBMR. Assuming they would come from outside the ROI, the additional population would generate a small increase in overall spending on good and services, which in turn would stimulate further economic activity in the region (i.e., small additional increases in hiring by suppliers of these goods and services). Specifically, the added population would rent or purchase housing and spend money on food, clothing and other types of goods and services in the ROI, during the course of their residency. The overall impact of the additional population on the economy would be minor given that the proposed action would add much less than 1 percent to the current ROI population.

Population. Implementing the Proposed Action would have a less than significant population impact. It would increase the Honolulu County and the Wahiawā CCD population by 2,365 (810 Soldiers, 502 spouses, and 1,053 children). This represents a less than one percent change in the population of Honolulu County and a 6 percent change to the population of the Wahiawā CCD, if the new population were to relocate entirely within this CCD. No mitigation would be required.

Employment. Implementing the Proposed Action would have a less than significant beneficial impact on employment. Employment changes would be direct and indirect, short-term and long-term. The direct long-term change in local employment would be the increase in Soldiers to be based at SBMR as a result of transformation and employment associated with the construction of training ranges and associated facilities, which would temporarily increase employment. The federal military employed 49,829 Soldiers in the ROI in 2000; the addition of 810 Soldiers at SBMR under the Proposed Action would be an increase of 1.6 percent in military employment in Honolulu County and an increase of 0.1 percent of total employment in Honolulu County. Subsequent indirect increases in employment are produced by the multiplier effect, resulting from increased spending by the additional staff and construction employees. Increased military employment and construction employment both would be within the capacity of the ROI economy to absorb and would not be considered significant. No mitigation would be required.

Income. Implementing the Proposed Action would have a less than significant impact on income. Changes in income represent the wage and salary payments made to construction workers and to the resident workforce. The Proposed Action would have the beneficial effect of increasing the total income of Honolulu County. No mitigation would be required.

Economy (business volume). Implementing the Proposed Action would have a less than significant beneficial impact on business volume. Changes in local business activity resulting from transformation include direct business volume and induced business volume. Direct business volume is the change in the dollar value of sales in the retail and wholesale trade sector and receipts in the services sector resulting from local purchases by civilian and military personnel, as well as construction and procurement expenditures. Induced business volume is the additional business activity generated as a result of the direct change in sales. The Proposed Action would have the beneficial effect of increasing business volume in Honolulu County. Chapter 4 indicates that the changes related to the Proposed Action would be within the historic RTV range and would not be considered significant. No mitigation would be required.

Housing. Implementing the Proposed Action would have a less than significant impact on housing. The increased military population at Schofield Barracks would create a small increase in the demand for housing. Approximately 9.3 percent of the housing units (29,538) in Honolulu County were vacant in 2000. Of this total About 41.3 percent (12,203 units) were for rent and 8.7 percent (2,572 units) were for sale. In 2000 in Wahiawā CCD, 12.6 percent (1,485 units) of housing was vacant, 27.2 percent (404 units) of which was for rent and 5.9 percent (87 units) was for sale (US Census Bureau 2000b). The Proposed Action would increase the military population of SBMR and the surrounding housing market, and the available housing stock in the ROI (i.e., Honolulu County) would accommodate the demand for housing. No mitigation would be required.

Economic impacts to Environmental Justice. Short-term and long-term indirect minor adverse effects on environmental justice populations could occur. No minority or low-income residences would be displaced by land acquisition, training modifications, or new construction as a result of SBCT Transformation. While noise from construction project

sites or vehicle maneuver areas could have adverse noise impacts on nearby private residences or schools (see Section 4.6.3, Summary of Noise Impacts) the construction would be short-term, lasting only for the duration of the construction project. Noise impacts from vehicle maneuver training would be long-term. However, this type of training is currently occurring at SBMR. The magnitude of the noise would not be expected to warrant mitigation measures (see Section 4.6.3, Summary of Noise Impacts). Noise will increase as a result of an increase in munitions use however the increase will have a less than significant effect on environmental justice populations.

As discussed in more detail in Section 5.5, the substantial increase in fugitive PM₁₀ emissions from military vehicle use at SBMR, the likelihood of exceeding the federal 24-hour standard, and the potential impacts to quality of life to surrounding communities combined may result in a significant air quality impact at SBMR under the Proposed Action. Feasible mitigation measures are available to reduce the magnitude of this impact, especially for vehicle travel on unpaved roads, and will reduce these impacts to less than significant. These air quality impacts could affect the residential communities of Mililani Town and especially Wahiawa because of the location of those two communities near the SBMR training areas and because of prevailing wind patterns. These communities house some Army families stationed at SBMR and WAAF, many of whom are members of Hispanic or Asian minority groups. Neither Wahiawa nor Mililani, however, has a greater than state average of either low-income populations or Native Hawaiians. Kunia Village and Poamoho Village have large percentages of Native Hawaiian and low-income residents, but these communities will not be significantly affected by fugitive PM₁₀ emissions due to their distance from SBMR training areas. Air emissions, therefore, would not disproportionately affect Native Hawaiian, low-income, or other local ethnic minority groups.

Increased military traffic on public roads around SBMR would also accompany the proposed action. When military actions are conducted in areas accessible to the public, such as public roadways, the risk associated with the operations could extend to civilians. Risks to the public and military personnel inherent in training and day-to-day operations would be minimized or avoided through adherence to existing Army-wide, unit and installation, and other applicable safety regulations and procedures.

Potential effects to Native Hawaiian cultural resources or to Hawaiian homelands are addressed in the cultural resources section.

Protection of Children. Short-term and long-term indirect minor adverse effects on the health and safety of children could occur. As described under Environmental Justice above, noise sources or increased military traffic associated with the Proposed Action could result in less than significant adverse impacts on nearby schools or residences. Increased noise from munitions would not cause any change to noise levels at schools.

Although the risk is low, it is possible for the health of children to be affected by Proposed Action through exposure to smoke or noise, for example. Risks to children inherent in training and day-to-day operations would be minimized or avoided through adherence to existing Army-wide, unit and installation, and other applicable safety regulations and

procedures. Exercises at SBMR use pyrotechnics and blank ammunition. The last training incident involving the public occurred approximately three years ago at the northwest end of SBMR (see Section 5.12, Hazardous Materials). Smoke from a smoke grenade blew into a residential community and some children had to be examined at a hospital (Borja 2002b).

Construction and training activities would, for the most part, 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. Strict adherence to applicable safety regulations and procedures would continue to protect the health and safety of children.

Reduced Land Acquisition

Significant impacts would be the same as those under the Proposed Action.

Significant Impacts Mitigable to Less Than Significant

Impact 1: Schools. As described under the Proposed Action, Reduced Land Acquisition would have long-term significant adverse effects on schools. The nature and magnitude of school impacts and mitigation would be the same as those for the Proposed Action.

Regulatory and Administrative Mitigation 1. Mitigation measures are the same as those discussed under the Proposed Action.

Additional Mitigation 1. Mitigation measures are the same as those discussed under the Proposed Action.

Less than Significant Impacts

The socioeconomic impacts for Reduced Land Acquisition would be similar to those described in detail under the Proposed Action. Reduced Land Acquisition would be expected to have beneficial effects on population, employment, income and business volume, resulting from new construction, staff additions, and the resultant increased expenditures that would stimulate the economy within the ROI. Reduced Land Acquisition would have less than significant adverse effects on these resources and on housing, the protection of children, and environmental justice.

Reduced Land Acquisition would involve the conversion of fewer acres of land currently under cultivation for pineapples to military use than under the Proposed Action. This would represent a slightly smaller impact to the regional economy than the Proposed Action.

Employment, Income, and Economy (Business Volume). The shift in construction and construction expenditures from SBMR to PTA would likely result in slightly lower indirect employment increases in Honolulu County under Reduced Land Acquisition than under the Proposed Action. The effect on employment of Reduced Land Acquisition would be less than significant.

The shift in construction and construction expenditures from SBMR to PTA would likely result in slightly lower induced increases in business volume in Honolulu County under

Reduced Land Acquisition than under the Proposed Action. The effect on business volume in Honolulu County of Reduced Land Acquisition would be less than significant.

No Action

No Impacts

Implementing No Action at SBMR would not change the local economy or population, and no impacts on population, employment, income or the economy are anticipated. No effects on housing are expected because the number of people requiring housing on- or off-post would not change as a result of No Action. No effects on environmental justice are expected. No Action would not alter the existing health and safety, housing, or economic conditions of minority or low-income populations in Wahiawā CCD or Honolulu County. No effects on children are expected because No Action would not present any change in the public health or safety risk that could affect children. The Army would continue to provide measures to protect the safety of children, including using fencing, limiting access to certain areas, and providing adult supervision.