

# **Socioeconomic Data Reasonableness Report Oahu Regional Transportation Plan 2035 Project**

Deliverable 7.1.2



October 2009  
Prepared for the  
Oahu Metropolitan Planning Organization

Prepared by  
Parsons Brinckerhoff

***This report was funded in part through grants from the Federal Highway Administration and Federal Transit Administration, U.S. Department of Transportation. The views and opinions of the agency expressed herein do not necessarily state or reflect those of the U. S. Department of Transportation.***

# Table of Contents

---

<b>EXECUTIVE SUMMARY .....</b>	<b>III</b>
<b>1 INTRODUCTION .....</b>	<b>1-1</b>
1.1 Report Purpose .....	1-1
1.2 Report Overview.....	1-1
<b>2 SOCIOECONOMIC CONDITIONS .....</b>	<b>2-1</b>
2.1 Population and Households.....	2-1
2.2 Employment .....	2-8
2.3 Visitor Industry.....	2-12
2.4 Military .....	2-14
<b>3 REASONABLENESS OF DATA .....</b>	<b>3-1</b>
<b>4 REFERENCES .....</b>	<b>4-1</b>

## List of Tables

Table 2-1: Population by TAA for Oahu (2007 and 2035) .....	2-3
Table 2-2: Households by TAA for Oahu (2007 and 2035) .....	2-4
Table 2-3: Household Size by TAA for Oahu (2007 and 2035) .....	2-5
Table 2-4: Employment by TAA for Oahu (2007 and 2035) .....	2-9
Table 2-5: Employment by Category for Oahu (2007 and 2035).....	2-11
Table 2-6: Government Jobs by TAA for Oahu (2007 and 2035) .....	2-12
Table 2-7: Visitor Units for Oahu (2007 and 2035) by TAA .....	2-13
Table 2-8: Military Jobs Change by TAA: 2007 to 2035 .....	2-16

## List of Figures

Figure 2-1: Population Change by TAA: 2007 to 2035 .....	2-6
Figure 2-2: Households Change by TAA: 2007 to 2035 .....	2-7
Figure 2-3: Employment Change by TAA: 2007 to 2035 .....	2-10
Figure 2-4: Visitor Unit Change by TAA: 2007 to 2035.....	2-14
Figure 2-5: Military Jobs (2007).....	2-15

## Acronyms Used in this Document

PUC	Primary Urban Center
TAA	Transportation Analysis Area
DBEDT	Department of Business, Economic Development and Tourism

## *Executive Summary*

---

This report includes review and documentation of the existing 2007 and forecasted 2035 socioeconomic conditions, and it will form the basis for the 2035 socioeconomic conditions section of the *Oahu Regional Transportation Plan 2035*.

Socioeconomic characteristics influence travel patterns. Population and households data directly influence how many trips are produced from an area while jobs reveal how many trips are attracted to an area.

The population on Oahu is forecast to increase by 23 percent while households are forecast to increase by 31 percent between 2007 and 2035. Most of this growth is anticipated to be focused in six areas:

- Ward-Chinatown (83 percent growth in population, 93 percent growth in households)
- Kakaako (260 percent growth in population, 284 percent growth in households)
- Honouliuli-Ewa Beach (91 percent growth in population, 103 percent growth in households)
- Kapolei-Ko Olina-Kalaeloa (180 percent growth in population, 198 percent growth in households)
- Makakilo-Makaiwa (91 percent growth in population, 96 percent growth in households)
- Waiawa-Koa Ridge (291 percent growth in population, 298 percent growth in households)

In general, these areas also had the highest growth in population and number of households in absolute terms. The Punchbowl-Sheridan-Date area, which was not noted above, also showed somewhat higher growth in population and households in absolute terms, though the percent growth was somewhat lower than the above areas due to existing high population and households levels.

The growth in population for Ward-Chinatown and Kakaako is consistent with the *Primary Urban Center Development Plan*, while the growth for the Honouliuli-Ewa Beach, Kapolei-Ko Olina-Kalaeloa, Makakilo-Makaiwa, and Waiawa-Koa Ridge areas is consistent with the *General Plan for the City and County of Honolulu (General Plan)*.

Oahu is expected to gain 136,500 additional jobs by 2035, a 25 percent increase over current levels. Although future job growth will be more dispersed, the Primary Urban Center (PUC) is still expected to have the majority of jobs in 2035 (64 percent as compared to 71 percent in 2007). Areas forecast to experience the largest percentage increase in jobs are:

- Honouliuli-Ewa Beach
- Kapolei-Ko Olina-Kalaeloa
- Makakilo-Makaiwa
- Waiawa-Koa Ridge

The above areas will also see the highest growth in number of jobs in absolute terms. The Kakaako area, while not reflecting a high percent growth in jobs, will still have a high level of new jobs between 2007 and 2035.

These areas with the largest percentage increases in jobs are consistent with the *General Plan*. There is a large increase in the growth of government jobs forecasted for the Kapolei area (2,300 new jobs), which has been designated as the “secondary urban center.” Government services growth in this area along with growth in other job categories will generate additional travel demand, which may degrade service levels on local transportation facilities.

Tourism and military expenditures are expected to continue to be the major sources of revenue to the economy. The majority of jobs continue to be in tourism and military sectors as these two comprise 84 percent of all jobs.

Tourism covers the hotel, transportation, real estate, service and retail job sectors. These categories comprise 74 percent of all jobs in 2007 and 77 percent of all jobs in 2035. While Waikiki will continue to be the dominant generator of tourism trips, including those made by tourism service employees, major growth in visitor units in the Kapolei-Ko Olina-Kalaeloa areas will increase demand on transportation facilities serving these areas.

Meanwhile, eight percent of all jobs were military in 2007, while the military jobs are forecasted to make up seven percent of all jobs in 2035. Military job growth forecasts, which traditionally tend to be conservative, will remain dynamic as the major services respond to changes in national defense policy.

**1.1 Report Purpose**

This report includes review and documentation of existing and forecasted islandwide socioeconomic conditions. It will form the basis for the 2035 socioeconomic conditions section of the *Oahu Regional Transportation Plan 2035*.

**1.2 Report Overview**

This report provides a description and evaluation of the existing 2007 and forecasted 2035 socioeconomic conditions affecting the transportation system on the island of Oahu.



Socioeconomic and demographic characteristics influence the travel patterns found on the island of Oahu. The demand for travel is directly related to the density and geographic distribution of population and land use.

## 2.1 Population and Households

Table 2-1 lists population statistics by transportation analysis area (TAA). Examination of 2007 population figures reveals the total island population to be approximately 905,600 persons, growing to 1,113,600 by 2035. Table 2-2 lists household statistics by TAA and shows that total households in 2007 was 311,000 and is expected to grow to 405,900 by 2035.

Population is expected to increase in all but four TAAs. However, these four TAAs, which show a slight decrease in population, all have an increase in number of households. This means that the household size may be decreasing because of demographic changes over time. Table 2-3 shows the average household size by TAA. Overall, the average household size on Oahu is predicted to decrease.

Population and households are directly tied to the number of trips made from each area. So as these two variables increase, so do the number of trips. However, a slight decrease in household size for a certain area means fewer trips per household for that area. Also, as household size shrinks and the population grows older and drives less, there will be a higher demand for transit services in these areas.

The Kakaako TAA's population and households is expected to triple by the year 2035. This is consistent with the *Primary Urban Center Development Plan*, which shows that this area already has the infrastructure and regulations in place to build higher-density, residential and mixed-use development. The Kapolei-Ko Olina-Kalaehoa and Waiawa-Koa Ridge TAAs are expected to more than double in population and households between 2007 and 2035. This population and household growth is consistent with the policy set forth in the *General Plan* to encourage development within the secondary urban center of Kapolei and the Ewa and Central Oahu urban-fringe areas. Most of the population growth is anticipated to occur in the following areas:

- Ward-Chinatown
  - 83 percent growth in population (8,800 new people)
  - 93 percent growth in households (5,100 new households)
- Kakaako
  - 260 percent growth in population (26,900 new people)
  - 284 percent growth in households (16,200 new households)

- Honouliuli-Ewa Beach
  - 91 percent growth in population (48,600 new people)
  - 103 percent growth in households (16,000 new households)
- Kapolei-Ko Olina-Kalaeloa
  - 180 percent growth in population (33,000 new people)
  - 198 percent growth in households (10,700 new households)
- Makakilo-Makaiwa
  - 91 percent growth in population (14,300 new people)
  - 96 percent growth in households (4,600 new households)
- Waiawa-Koa Ridge
  - 291 percent growth in population (34,800 new people)
  - 298 percent growth in households (11,900 new households)

The Punchbowl-Sheridan-Date area, which was not noted above, also showed higher growth in population and households in absolute terms, though the percent growth was somewhat lower than the above areas due to existing high population and households levels.

Of special note is the proposed housing development in the North Shore area, more specifically at Malaekahana by the Church of Jesus Christ of Latter-day Saints. The Church is proposing 1,200 new homes here, which would require an amendment to the Koolauloa Sustainable Communities Plan. While the amount of housing proposed for this area is significantly lower than the above mentioned areas, this is a rural area and the planned development could have traffic impacts on the Kamehameha Highway.

Figure 2-1 shows the forecasted change in population between 2007 and 2035 by TAA. Figure 2-2 shows the forecasted change in households between 2007 and 2035 by TAA.

**Table 2-1: Population by TAA for Oahu (2007 and 2035)**

Transportation Analysis Area (TAA)	Population		Population Change (Year 2007 to Year 2035)	
	Year 2007	Year 2035	Difference	Percentage Difference
1. Ward-Chinatown	10,600	19,400	8,800	83%
2. Kakaako	10,400	37,300	26,900	260%
3. Punchbowl-Sheridan-Date	72,800	84,700	11,800	16%
4. Waikiki	19,500	21,800	2,300	12%
5. Kahala-Tantalus	73,300	76,100	2,800	4%
6. Pauoa-Kalihi	77,200	84,200	7,000	9%
7. Iwilei-Mapunapuna-Airport	16,300	19,800	3,500	21%
8. Hickam-Pearl Harbor	18,500	18,600	100	1%
9. Moanalua-Halawa	54,000	54,400	400	1%
10. Aiea-Pearl City	67,300	68,000	700	1%
11. Honouliuli-Ewa Beach	53,600	102,200	48,600	91%
12. Kapolei-Ko Olina-Kalaeloa	18,300	51,300	33,000	180%
13. Makakilo-Makaiwa	15,600	29,900	14,300	91%
14. Waipahu-Waikele-Kunia	56,100	60,900	4,800	9%
15. Waiawa-Koa Ridge	11,900	46,700	34,800	291%
16. Mililani-Melemanu-Kipapa	53,400	52,600	-800	-1%
17. Wahiawa-Whitmore-Schofield	35,700	34,500	-1,100	-3%
18. East Honolulu	48,800	49,300	600	1%
19. Kaneohe-Kahaluu-Kualoa	53,600	52,300	-1,200	-2%
20. Kailua-Mokapu-Waimanalo	62,500	61,800	-700	-1%
21. Koolauloa	14,400	16,200	1,800	12%
22. North Shore	18,000	20,400	2,400	13%
23. Waianae Coast	43,700	51,100	7,400	17%
<b>Total</b>	<b>905,600</b>	<b>1,113,600</b>	<b>208,000</b>	<b>23%</b>

Note: Individual TAA numbers may not sum to totals due to rounding.

Data source: City Department of Planning and Permitting, 2009.

**Table 2-2: Households by TAA for Oahu (2007 and 2035)**

Transportation Analysis Area (TAA)	Households		Households Change (Year 2007 to Year 2035)	
	Year 2007	Year 2035	Difference	Percentage Difference
1. Ward-Chinatown	5,500	10,600	5,100	93%
2. Kakaako	5,700	21,900	16,200	284%
3. Punchbowl-Sheridan-Date	38,300	46,100	7,800	20%
4. Waikiki	11,500	13,100	1,600	14%
5. Kahala-Tantalus	26,800	28,700	1,900	7%
6. Pauoa-Kalihi	23,500	26,900	3,400	14%
7. Iwilei-Mapunapuna-Airport	4,800	5,900	1,100	23%
8. Hickam-Pearl Harbor	5,500	5,700	200	4%
9. Moanalua-Halawa	17,600	18,300	700	4%
10. Aiea-Pearl City	22,100	23,300	1200	5%
11. Honouliuli-Ewa Beach	15,600	31,600	16,000	103%
12. Kapolei-Ko Olina-Kalaeloa	5,400	16,100	10,700	198%
13. Makakilo-Makaiwa	4,800	9,400	4,600	96%
14. Waipahu-Waikele-Kunia	15,200	17,900	2,700	18%
15. Waiawa-Koa Ridge	4,000	15,900	11,900	298%
16. Mililani-Melemanu-Kipapa	18,200	19,300	1100	6%
17. Wahiawa-Whitmore-Schofield	10,500	10,800	300	3%
18. East Honolulu	17,500	18,900	1400	8%
19. Kaneohe-Kahaluu-Kualoa	17,300	18,100	800	5%
20. Kailua-Mokapu-Waimanalo	18,700	19,700	1000	5%
21. Koolauloa	3,700	4,400	700	19%
22. North Shore	6,200	7,600	1,400	23%
23. Waianae Coast	12,400	15,600	3,200	26%
<b>Total</b>	<b>311,000</b>	<b>405,900</b>	<b>94,900</b>	<b>31%</b>

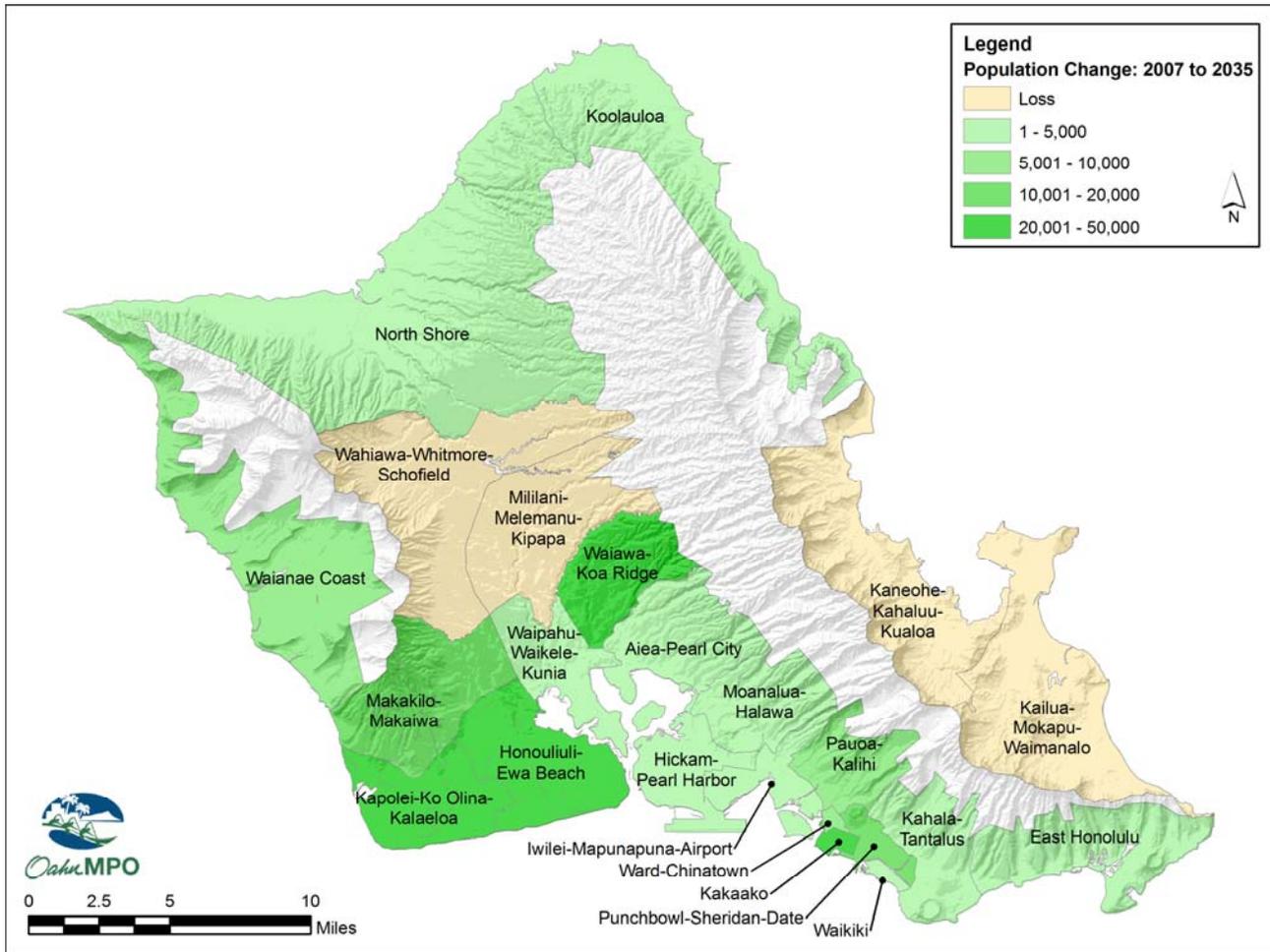
Note: Individual TAA numbers may not sum to totals due to rounding.  
 Data source: City Department of Planning and Permitting, 2009.

**Table 2-3: Household Size by TAA for Oahu (2007 and 2035)**

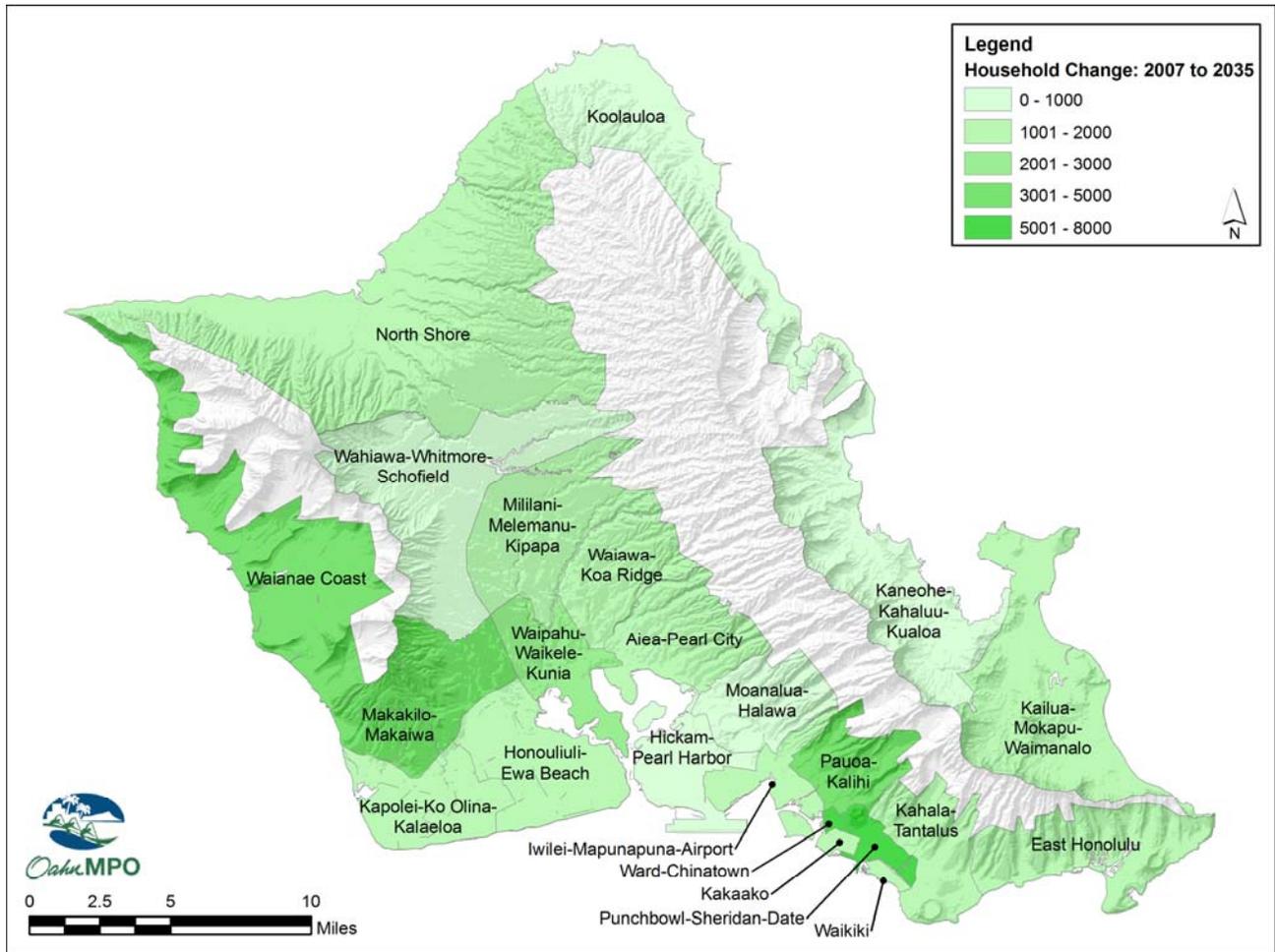
Transportation Analysis Area (TAA)	Household Size		Household Size Change (Year 2007 to Year 2035)	
	Year 2007	Year 2035	Difference	Percentage Difference
1. Ward-Chinatown	1.92	1.84	-0.08	-4%
2. Kakaako	1.81	1.71	-0.10	-6%
3. Punchbowl-Sheridan-Date	1.90	1.84	-0.06	-3%
4. Waikiki	1.70	1.67	-0.03	-2%
5. Kahala-Tantalus	2.73	2.65	-0.08	-3%
6. Pauoa-Kalihi	3.28	3.13	-0.15	-5%
7. Iwilei-Mapunapuna-Airport	3.38	3.32	-0.06	-2%
8. Hickam-Pearl Harbor	3.36	3.24	-0.12	-4%
9. Moanalua-Halawa	3.07	2.97	-0.10	-3%
10. Aiea-Pearl City	3.05	2.92	-0.12	-4%
11. Honouliuli-Ewa Beach	3.44	3.23	-0.21	-6%
12. Kapolei-Ko Olina-Kalaeloa	3.36	3.18	-0.19	-6%
13. Makakilo-Makaiwa	3.28	3.17	-0.11	-3%
14. Waipahu-Waikele-Kunia	3.69	3.41	-0.28	-8%
15. Waiawa-Koa Ridge	2.96	2.95	-0.01	0%
16. Mililani-Melemanu-Kipapa	2.93	2.73	-0.20	-7%
17. Wahiawa-Whitmore-Schofield	3.40	3.19	-0.21	-6%
18. East Honolulu	2.79	2.61	-0.18	-6%
19. Kaneohe-Kahaluu-Kualoa	3.10	2.90	-0.21	-7%
20. Kailua-Mokapu-Waimanalo	3.34	3.13	-0.21	-6%
21. Koolauloa	3.92	3.64	-0.27	-7%
22. North Shore	2.89	2.70	-0.19	-7%
23. Waianae Coast	3.51	3.27	-0.24	-7%
<b>Total</b>	<b>2.91</b>	<b>2.74</b>	<b>-0.17</b>	<b>-6%</b>

Data source: City Department of Planning and Permitting, 2009.

**Figure 2-1: Population Change by TAA: 2007 to 2035**



**Figure 2-2: Households Change by TAA: 2007 to 2035**



## 2.2 Employment

Table 2-4 shows employment statistics by TAA. 71 percent of the jobs are located in the PUC (TAAs 1 through 10). In 2035, almost all TAAs are expected to experience an increase in jobs. Even with a more dispersed pattern of job growth, the PUC is still expected to have the majority (64 percent) of all jobs on the island in 2035. This amounts to 52,100 more work trips in 2035 in the PUC and on Oahu's most congested roadways. The number of jobs in Honouliuli-Ewa Beach, Kapolei-Ko Olina-Kalaehoa, Makakilo-Makaiwa, and Waiawa-Koa Ridge are forecast to more than double to 71,100, but these areas would only consist of 17 percent of all jobs in 2035. This growth in jobs in these areas may take many work trips away from the PUC and Oahu's most congested roadways or may re-orient travel patterns somewhat between the PUC and these outlying areas. Increases in the number of jobs in these areas will place higher demand on Interstate H-1, the southern portion of Interstate H-2 and other major highways such as Farrington Highway and Kamehameha Highway.

Table 2-5 summarizes employment statistics by category. Total employment on Oahu in 2007 is estimated at about 556,900 jobs, growing to 693,300 by 2035. Figure 2-3 shows the forecasted change in employment between 2007 and 2035 by TAA.

The government sector is an important employment category and to help grow Kapolei as Oahu's "secondary urban center," city and state government offices have opened in Kapolei.

Table 2-6 shows that 5,400 jobs are forecasted for the Ewa and Kapolei areas in 2035. Government services growth in this area along with growth in other job categories will likely induce additional travel demand on local transportation facilities and services.

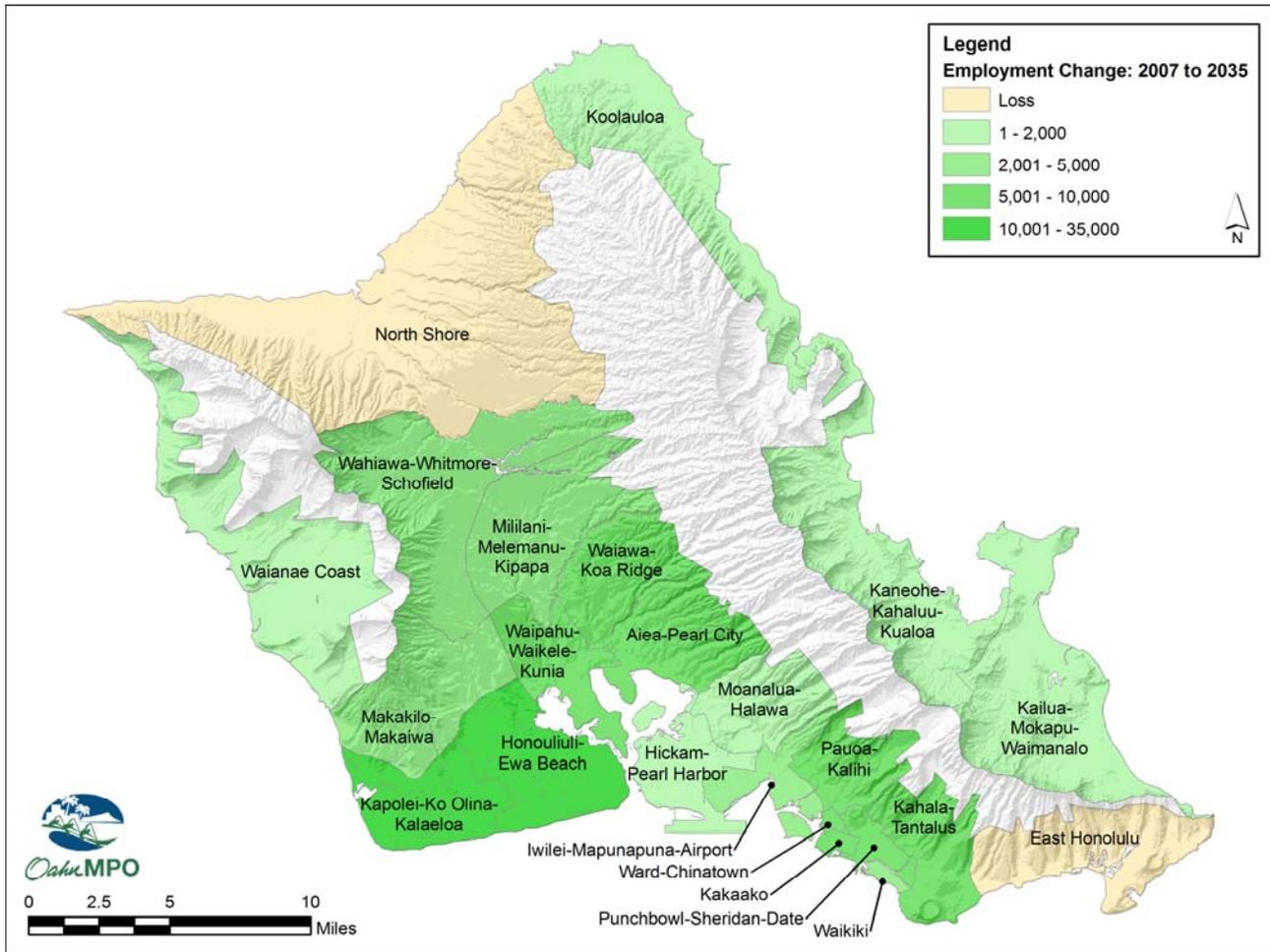
**Table 2-4: Employment by TAA for Oahu (2007 and 2035)**

Transportation Analysis Area (TAA)	Employment		Employment Change (Year 2007 to Year 2035)	
	Year 2007	Year 2035	Difference	Percentage Difference
1. Ward-Chinatown	57,300	64,200	6,900	12%
2. Kakaako	33,300	43,100	9,800	29%
3. Punchbowl-Sheridan-Date	52,600	61,600	9,000	17%
4. Waikiki	46,100	48,100	2,000	4%
5. Kahala-Tantalus	38,500	43,500	5,000	13%
6. Pauoa-Kalihi	22,500	29,200	6,700	30%
7. Iwilei-Mapunapuna-Airport	76,900	81,700	4,800	6%
8. Hickam-Pearl Harbor	26,800	27,700	900	3%
9. Moanalua-Halawa	16,500	17,700	1,100	7%
10. Aiea-Pearl City	24,300	30,100	5,800	24%
11. Honouliuli-Ewa Beach	14,000	40,300	26,200	187%
12. Kapolei-Ko Olina-Kalaheo	22,500	55,200	32,600	145%
13. Makakilo-Makaiwa	2,100	5,700	3,600	171%
14. Waipahu-Waikele-Kunia	17,500	23,000	5,500	31%
15. Waiawa-Koa Ridge	6,200	14,900	8,700	141%
16. Mililani-Melemanu-Kipapa	19,300	22,700	3,400	18%
17. Wahiawa-Whitmore-Schofield	19,500	21,800	2,300	12%
18. East Honolulu	7,000	6,600	-400	-6%
19. Kaneohe-Kahaluu-Kualoa	12,600	12,700	100	1%
20. Kailua-Mokapu-Waimanalo	25,000	25,800	800	3%
21. Koolauloa	5,800	7,100	1,300	22%
22. North Shore	4,000	3,900	-100	-2%
23. Waianae Coast	6,500	6,800	300	4%
<b>Total</b>	<b>556,900</b>	<b>693,300</b>	<b>136,500</b>	<b>25%</b>

Note: Individual TAA numbers may not sum to totals due to rounding.

Data source: City Department of Planning and Permitting, 2009.

**Figure 2-3: Employment Change by TAA: 2007 to 2035**



**Table 2-5: Employment by Category for Oahu (2007 and 2035)**

Employment Category	Year 2007	Year 2035	Difference	Percentage Difference
Military	44,300	46,700	2,400	5%
Government	37,400	42,500	5,100	14%
Hotel	16,500	18,800	2,300	14%
Agriculture	2,500	2,800	200	9%
Transportation/Communications/Utilities	42,500	49,800	7,300	17%
Industrial	30,400	34,600	4,200	14%
Finance/Insurance/Real Estate	28,900	35,900	6,900	24%
Service	224,100	306,100	82,100	37%
Retail	99,500	120,500	21,000	21%
Construction	30,900	35,700	4,900	16%
Total Employment	556,900	693,300	136,500	25%

Note: Individual categories may not sum to totals due to rounding.  
Data source: City Department of Planning and Permitting, 2009.

**Table 2-6: Government Jobs by TAA for Oahu (2007 and 2035)**

Transportation Analysis Area (TAA)	Government Jobs		Government Jobs Change (Year 2007 to Year 2035)	
	Year 2007	Year 2035	Difference	Percentage Difference
1. Ward-Chinatown	9,000	9,200	200	2%
2. Kakaako	4,600	4,700	100	2%
3. Punchbowl-Sheridan-Date	1,500	1,700	200	13%
4. Waikiki	400	400	0	0%
5. Kahala-Tantalus	1,600	1,800	200	13%
6. Pauoa-Kalihi	900	1,000	100	11%
7. Iwilei-Mapunapuna-Airport	4,400	4,600	200	5%
8. Hickam-Pearl Harbor	4,200	4,200	0	0%
9. Moanalua-Halawa	1,700	1,700	0	0%
10. Aiea-Pearl City	1,100	1,200	100	9%
11. Honouliuli-Ewa Beach	200	1,500	1,300	650%
12. Kapolei-Ko Olina-Kalaeloa	1,600	3,900	2,300	144%
13. Makakilo-Makaiwa	0	200	200	0%
14. Waipahu-Waikele-Kunia	500	500	0	0%
15. Waiawa-Koa Ridge	100	100	0	0%
16. Mililani-Melemanu-Kipapa	700	700	0	0%
17. Wahiawa-Whitmore-Schofield	2,000	2,100	100	5%
18. East Honolulu	300	300	0	0%
19. Kaneohe-Kahaluu-Kualoa	800	800	0	0%
20. Kailua-Mokapu-Waimanalo	1,400	1,500	100	7%
21. Koolauloa	100	100	0	0%
22. North Shore	100	100	0	0%
23. Waianae Coast	400	400	0	0%
<b>Total</b>	<b>37,400</b>	<b>42,500</b>	<b>5,100</b>	<b>14%</b>

Note: Individual TAA numbers may not sum to totals due to rounding.  
 Data source: City Department of Planning and Permitting, 2009.

## 2.3 Visitor Industry

The island of Oahu is a popular tourist destination and this is borne out by the number of hotel rooms on the island. There were an estimated 33,800 visitor units (visitor units include hotel rooms and housing units held for use by visitors) on Oahu in 2007, with over 85 percent of these located in Waikiki. The total visitor units are expected to increase to 39,600 by 2035 with Waikiki comprising only 70 percent of the share. According to the *General Plan*, the City's policy is not to intensify development in Waikiki, but rather to direct growth to resort areas such as Ko Olina (Kapolei-Ko Olina-Kalaeloa TAA – 588 percent growth) and Turtle Bay (Koolauloa TAA – 133 percent growth). Table 2-7 presents visitor unit estimates and forecasts, while Figure 2-4 visually shows the forecasted change in visitor units between 2007 and 2035 by TAA.

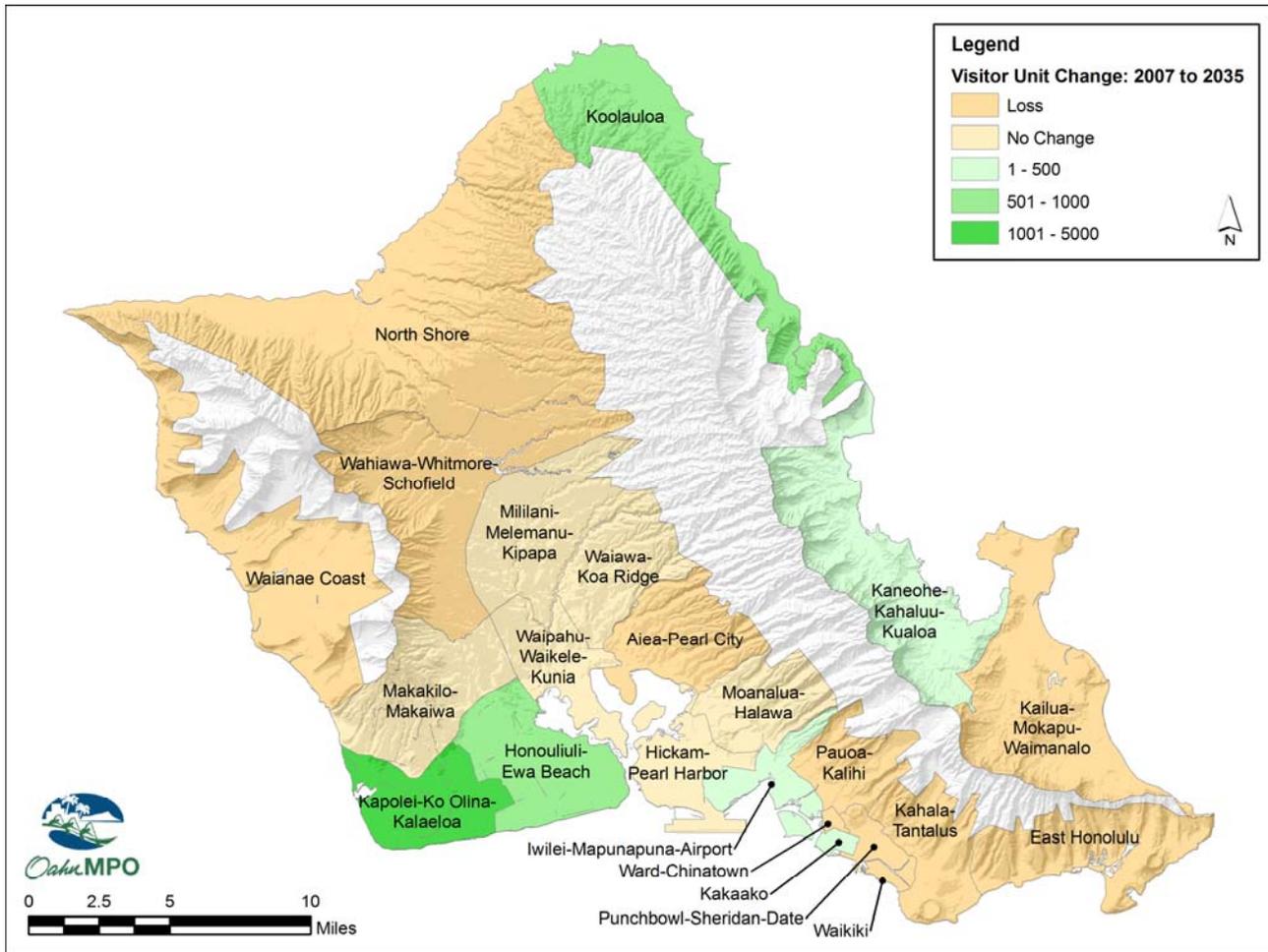
The visitor industry generates a quarter of Hawaii's tax revenue and approximately twenty percent of all economic activity. Total tourism spending in 2007 was \$12.8 billion (State of Hawaii, 2008). The Department of Business, Economic Development and Tourism (DBEDT) estimates that the economic activity generated by visitor related expenditures in 2005 resulted in over 211,000 jobs or as many as one in every three jobs in the state (*Tourism Workforce Strategic Plan 2007-2015*). Direct leisure and employment jobs totaled over 64,000 for the island of Oahu (DBEDT State of Hawaii Data Book 2007). Tourism also generates additional demands on the transportation system through use of transit services, rental cars, and other commercial transportation systems available on the island.

**Table 2-7: Visitor Units for Oahu (2007 and 2035) by TAA**

TAA	Visitor Units		Visitor Units Change (Year 2007 to Year 2035)	
	Year 2007	Year 2035	Difference	Percentage Difference
1. Ward-Chinatown	100	100	0	0%
2. Kakaako	0	300	300	0%
3. Punchbowl-Sheridan-Date	1,400	1,400	0	0%
4. Waikiki	28,800	27,800	-1,000	-3%
5. Kahala-Tantalus	300	200	-100	-33%
6. Pauoa-Kalihi	0	0	0	0%
7. Iwilei-Mapunapuna-Airport	700	1,000	300	43%
8. Hickam-Pearl Harbor	0	0	0	0%
9. Moanalua-Halawa	0	0	0	0%
10. Aiea-Pearl City	100	100	0	0%
11. Honouliuli-Ewa Beach	0	1,000	1,000	0%
12. Kapolei-Ko Olina-Kalaeloa	800	5,500	4,700	588%
13. Makakilo-Makaiwa	0	0	0	0%
14. Waipahu-Waikele-Kunia	0	0	0	0%
15. Waiawa-Koa Ridge	0	0	0	0%
16. Mililani-Melemanu-Kipapa	0	0	0	0%
17. Wahiawa-Whitmore-Schofield	200	200	0	0%
18. East Honolulu	400	400	0	0%
19. Kaneohe-Kahaluu-Kualoa	0	0	0	0%
20. Kailua-Mokapu-Waimanalo	100	0	-100	-100%
21. Koolauloa	600	1,400	800	133%
22. North Shore	0	0	0	0%
23. Waianae Coast	200	200	0	0%
<b>Total</b>	<b>33,800</b>	<b>39,600</b>	<b>5,800</b>	<b>17%</b>

Data source: City Department of Planning and Permitting, 2009.

**Figure 2-4: Visitor Unit Change by TAA: 2007 to 2035**

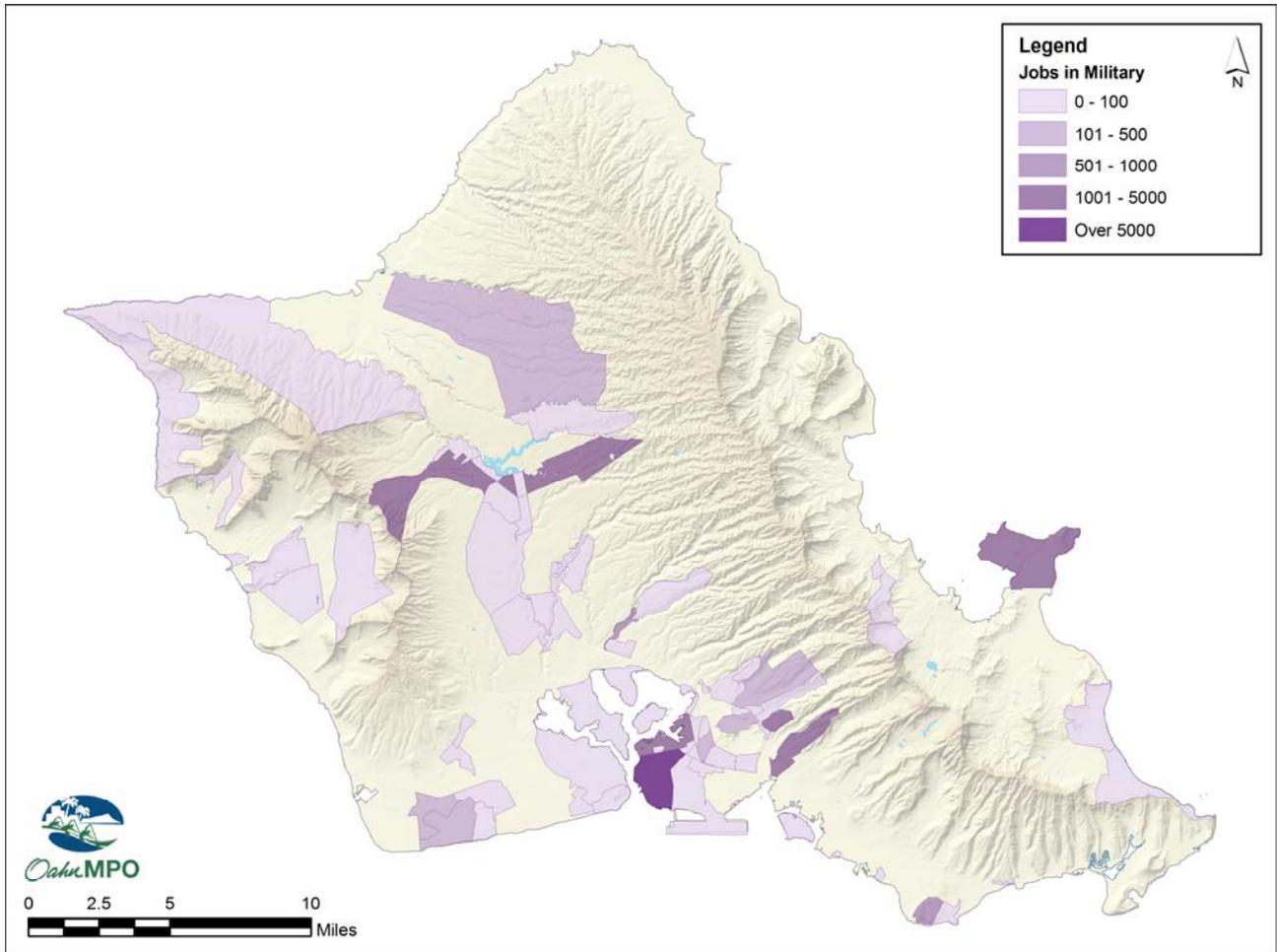


## 2.4 Military

United States military presence in Hawaii contributes towards ensuring that peace and stability are maintained throughout the Asia Pacific region. With expenditures totaling \$8.2 billion in 2007, defense expenditures remain the second major source of revenue to Hawaii's economy, next to tourism. The \$8.2 billion in spending results in direct and indirect impacts totaling \$12.2 billion to Hawaii's economy, and accounting for more than 110,000 jobs (Chamber of Commerce of Hawaii, 2009). Figure 2-5 shows the locations and number of military jobs in 2007.

Table 2-8 shows military employment statistics by TAA. The forecasts for military employment tend to be conservative for national security reasons, and the 2035 forecast shows that there would only be a 5 percent increase overall. However, military job growth forecasts, particularly those changes that impact the island of Oahu, will remain dynamic as the major services respond to changes in national defense policy.

**Figure 2-5: Military Jobs (2007)**



**Table 2-8: Military Jobs Change by TAA: 2007 to 2035**

Transportation Analysis Area (TAA)	Military Jobs		Military Jobs Change (Year 2007 to Year 2035)	
	Year 2007	Year 2035	Difference	Percentage Difference
1. Ward-Chinatown	0	200	200	0%
2. Kakaako	400	800	400	100%
3. Punchbowl-Sheridan-Date	0	0	0	0%
4. Waikiki	0	0	0	0%
5. Kahala-Tantalus	800	800	0	0%
6. Pauoa-Kalihi	0	0	0	0%
7. Iwilei-Mapunapuna-Airport	6,200	6,600	400	6%
8. Hickam-Pearl Harbor	11,100	11,200	100	1%
9. Moanalua-Halawa	2,400	2,500	100	4%
10. Aiea-Pearl City	1,200	1,300	100	8%
11. Honouliuli-Ewa Beach	0	0	0	0%
12. Kapolei-Ko Olina-Kalaeloa	400	400	0	0%
13. Makakilo-Makaiwa	0	0	0	0%
14. Waipahu-Waikale-Kunia	100	100	0	0%
15. Waiawa-Koa Ridge	100	400	300	300%
16. Mililani-Melemanu-Kipapa	6,600	6,800	200	3%
17. Wahiawa-Whitmore-Schofield	6,500	6,800	300	5%
18. East Honolulu	0	0	0	0%
19. Kaneohe-Kahaluu-Kualoa	0	0	0	0%
20. Kailua-Mokapu-Waimanalo	8,200	8,600	400	5%
21. Koolauloa	0	0	0	0%
22. North Shore	100	100	0	0%
23. Waianae Coast	100	100	0	0%
<b>Total</b>	<b>44,300</b>	<b>46,700</b>	<b>2,400</b>	<b>5%</b>

The forecasted socioeconomic data for 2035 appears to be consistent with both the *General Plan* and the various Development and Sustainable Communities Plans for Oahu. For example, major increases in population, households, and employment in the Kakaako area agree with policies in the *Primary Urban Center Development Plan*. Furthermore, the increases in population, households, and employment in the Ewa, Kapolei, and Central Oahu areas correspond with the policies in the *General Plan* as do the increases in visitor units in Ko Olina and Turtle Bay.

In conclusion, based on review of the socioeconomic data sets and land use plans, it is reasonable and appropriate to use the 2007/2035 socioeconomic data for future travel demand analyses prescribed as part of the long-range transportation planning for Oahu.



Chamber of Commerce of Hawaii. 2009. *Economic Impact of the Military in Hawaii*. Retrieved July 7, 2009, from <http://cochawaii.com/hawaiis-military.asp>.

City Department of Planning and Permitting. 1992. *General Plan for the City and County of Honolulu*.

City Department of Planning and Permitting. 2004. *Primary Urban Center Development Plan*.

City Department of Planning and Permitting. 2009. *Socioeconomic data tables*. Received January 2009.

Oahu Metropolitan Planning Organization (OahuMPO). 2006. *Oahu Regional Transportation Plan 2030 Technical Report*.

Department of Business, Economic Development and Tourism. 2007. Retrieved October 7, 2009, from <http://hawaii.gov/dbedt/info/visitor-stats/visitor-research/>

Hawaii Tourism Authority. 2007. *Tourism Workforce Strategic Plan 2007-2015*.