Task 4: Deliverable E2

Model Validation Memorandum

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Central Oahu Transportation Study

Prepared for

Oahu Metropolitan Planning Organization

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OVERVIEW OF THE CENTRAL OAHU TRANSPORTATION STUDY

The Central Oahu Transportation Study (COTS) will assess the multi-modal transportation needs of the region and identify key transportation system improvements, strategies and policies that can improve regional transportation mobility and access in a sustainable way. The strategies and system improvements will be technically feasible, financially realistic, sustainable, and meet regional transportation needs.

This report comprises the deliverable for **Task 4, Deliverable E2.** The full list of tasks are:

- Task 1: Coordinate and review past and on-going traffic, transit, and land use studies prepared by other agencies, establish a project management working group, and develop a stakeholder involvement process.
- Task 2: Identify performance measures and measures of economic sustainability to collect and establish a comprehensive baseline multi-modal transportation dataset.
- Task 3: Analyze and evaluate regional transportation, demographic, economic, and land use trends and issues.
- **Task 4: Determine and assess current and future multi-modal needs and opportunities for the region through technical methodologies, user survey and stakeholder outreach. The technical forecasting of future traffic, transit, land use, and other related projections will utilize and be done in coordination with OahuMPO's current travel demand forecast model and Congestion Management Process.**
- Task 5: Identify potential strategies and system improvements for key corridors in the region, including but not limited to, transit improvements with connections to the Honolulu rail transit system and H-2.
- Task 6: Assess order-of-magnitude of impacts of the potential strategies and system improvements utilizing identified performance measures. This order-of-magnitude assessment will include expected project and strategy implementation timing, project delivery costs including land acquisition, environmental impacts, and estimates of operations and maintenance costs.
- Task 7: Define the benefits and costs of the potential strategies and system improvements and compare those benefits and costs to each other.
- Task 8: Compare and prioritize those potential strategies and system improvements that meet the desired purpose mentioned above (technically feasible, financially realistic, and sustainable).
- Task 9: Develop recommendations and an implementation timeframe to set priorities for those strategies and system improvements.

Twelve deliverables document the results of the nine tasks and their subtasks. The reports include:

A. Assessment of Previous Studies and Surveys associated with the study area and recommendations for further data collection or survey work as needed. Report A provides the assessment of the studies and surveys identified in two deliverables that have been submitted: List of Previous Studies and List of Previous Surveys.

B. Identification of the Trends and Issues impacting the COTS area. This report will include the demographics, economics and land trends occurring in the study area as well as identify the impacts of those trends.

B.2 Identification and definitions of Performance Performance Measures, Sustainability Performance Measures, Baseline and Data Elements that will be used to guide and evaluate project alternatives.

C. Data Memorandum that lists the information needed based upon Deliverables A through B.2 and documents the results of the data collection.

D. A discussion of previous Alternatives as well as strategies for improvements will be presented in this report.

E. **The Preliminary Ranking of identified Alternatives will be detailed in this report (Deliverable E1). The performance measures identified in Report B will be applied to the alternatives. TransCAD model using the OahuMPO model runs will provide a means to compare alternatives (as applicable). The outcome of these tasks will be a ranking of alternatives and their impacts on the study area.** A review of the model's applicability based on base year and existing volumes will be documented in a separate report (Deliverable E2).

F. Documents the Feasibility Assessment of the alternatives. Documentation will include identifying criteria for feasibility and sustainability assumptions; reporting on the impacts by performance measure; identification of environmental impacts and identified mitigations; and, assumptions for implementation all leading to a refinement of the alternative rankings.

G. The Financial Assessment will be documented in this report. Financial assumptions and requirements including costs will be reviewed. The benefits and costs of the alternatives will be assessed and compared including any identified trade-offs.

H. The Final Report on Prioritization and Recommendations for Implementation will summarize and prioritize strategies; identify recommendations; identify impacts of no implementation; recommend an implementation timeframe; and, identify any impacts if implementation is not accomplished within the recommended timeframe.

I. This report will provide a summary of the Community Input and how that input was used to inform the study.

J. Survey Results from any new surveys will be documented in this report.

Deliverable E2 is organized as follows:

- Overview of the COTS Project and this Deliverable
- Chapter 1: Introduction
- Chapter 2: OahuMPO Regional Travel Demand Model
- Chapter 3: Future Traffic Forecasts in Central Oahu

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1.0 INTRODUCTION

The Central Oahu Transportation Study (COTS) seeks to identify potential multi-modal transportation projects that could improve current and future mobility within the study area, reduce congestion, improve safety, and ensure efficient movement of people and goods.

A preliminary list of candidate improvement projects was prepared during the first phase of this study based on a variety of sources of information including:

- Previous studies
- Community input at a public meeting and subsequent submittals
- Experience of the consultant team members

Future forecasts in Central Oahu will be developed using the OahuMPO forecast model. This report is Deliverable E2 and describes that model and the study team's validation of it for use in this study. The forecast model will be used in this phase to compare the future transportation benefits of potential roadway, transit, and multi-modal projects.

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2.0 OAHUMPO REGIONAL TRAVEL DEMAND MODEL

The OahuMPO Planning Model is the regional travel demand model which forecasts travel behavior for the island of Oahu using computer-based software programs. The model provides a common foundation for transportation planning and decision-making by agencies within the region. It was last updated in April 2016 and is named the OahuMPO Regional Travel Demand Forecasting Model.

The OahuMPO Planning Model is a computer program that simulates traffic levels and travel patterns for the island of Oahu. The program consists of input files that summarize the area's land uses, street network, travel characteristics, and other key factors. Using this data, the model performs a series of calculations to project the amount of trips generated, the beginning and ending location of each trip, and the route taken for each trip. For more information on the OahuMPO model, please refer to *the User's Guide for the OahuMPO Planning Model in TransCAD 6.0.*

2.1 OahuMPO Model Review and Validation Procedure Used

Before any model is applied for use, it should first be reviewed to see how well the model is performing. The document entitled *Guidelines for Project-Level Traffic Forecasting for Hawaii Department of Transportation* (Prevedouros/Horowitz, December 2015) includes information and procedures for establishing a travel demand model's validitity for use in various studies. This document includes criteria from the Federal Highway Administration (FHWA) and the State of Hawaii Department of Transportation.

These criteria were developed to ensure that a model is developed such that it can accurately forecast existing conditions based on land use and roadway network information, which improves the model's ability to forecast future conditions. Validating a base year model is a state-of-the-art practice starting point for developing forecasts for changes in the roadway network and/or changes to the proposed land use. For the purpose of this project, a model review and a model validation were performed to ensure that the model is operating reasonably well.

Two types of validation procedures can be applied: static validation and dynamic validation. Static validation looks at the statistical outputs of the model while dynamic validation involves testing the model based on various network and land use changes to ensure a reasonable response. For this study, only a static validation was conducted. A dynamic validation would be performed as part a more comprehensive model evaluation by OahuMPO or its consultant.

The model's static validation was analyzed using the "Model Volume to Count Ratio" metric. This volume-to-count ratio is compared by dividing the total volume assigned by the model by the actual traffic count for individual roadways model-wide. The volume-to-count ratio should be within 10% for higher volume roadways such as freeways with greater variation permitted for lower volume facilities.

2.2 Application of the Validation Procedure

For this project, an evaluation of the model validation was performed for Daily conditions. The validation locations were chosen based on key facilities and where total volumes were focused on several regional roadway segments. In addition to individual roadways, volumes across several roadways were added together representing a screenline to review the model's total estimate of the amount of vehicles traveling to, from, and through the study area. Screenlines were identified across the northern, central, and southern portions of the COTS area, and a threshold of ±10% is also applicable for screenline comparisons. **Figure 1** illustrates the locations of the screenlines. Base year model volumes were compared to the 2012 HDOT daily traffic volumes, as the base year model represents 2012 conditions. Unless otherwise noted, "volume" refers to the two-way or total daily volume on a roadway (i.e. they are not directional).

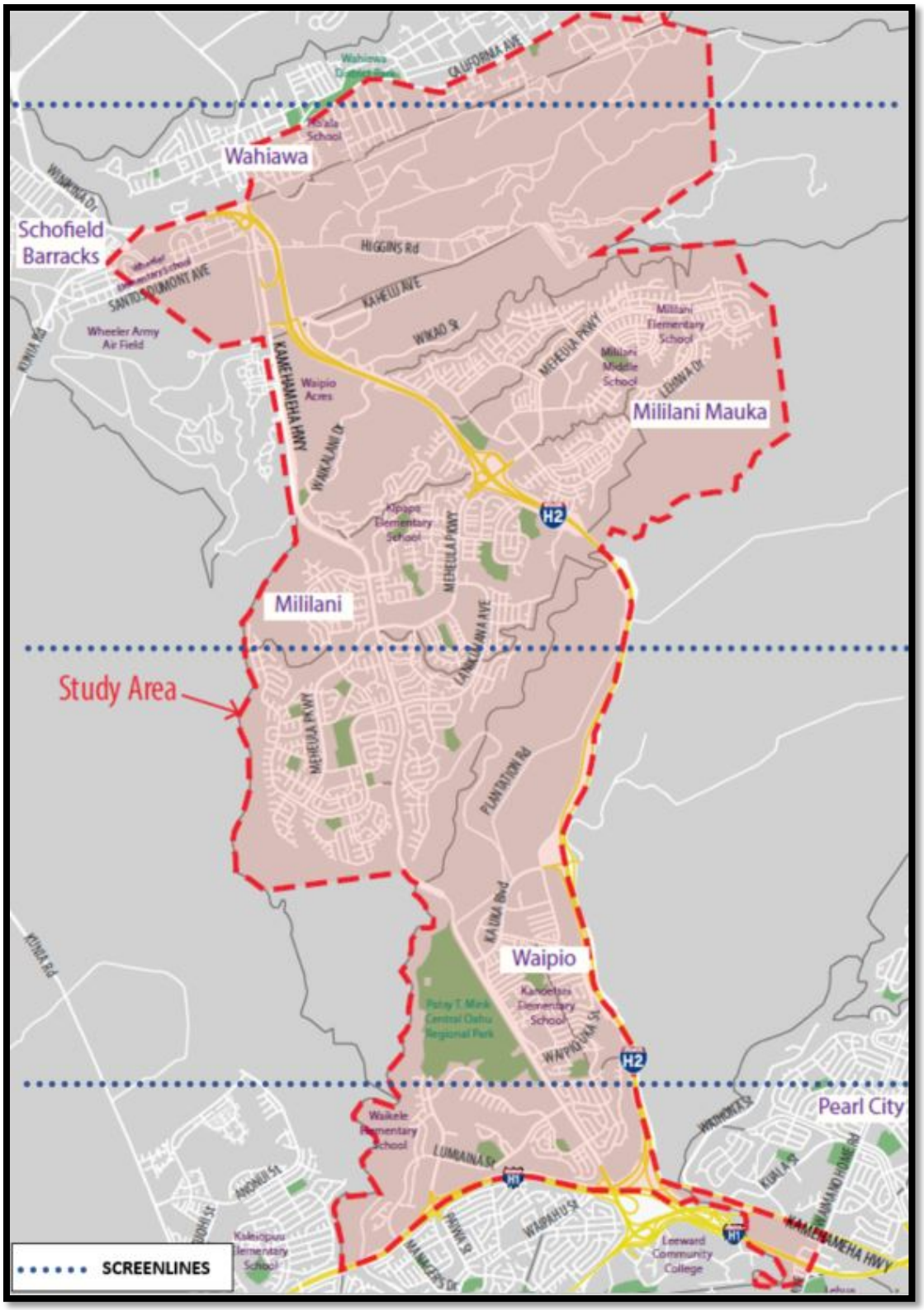
OahuMPO model TAZs for the island of Oahu, and highlights in blue the TAZs located in the Central Oahu study area. The model validation statistics are summarized in **Table 1**.

Table 1. Static Model Validation – Model/Count Ratio

Roadway		2012 DAILY VOLUMES		Percent Difference
		HDOT Count	OMPO Model	
Northern Screenline	Wilikina Dr east of Kamananui Rd	22,139	32,088	44.9%
	Kamehameha Hwy east of Kamananui Rd	15,957	15,875	-0.5%
	SCREENLINE TOTAL	**38,096**	**47,963**	**25.9%**
Center Screenline	H-2 south of Meheula Pkwy	98,591	87,608	-11.1%
	Kamehameha Hwy south of Meheula Pkwy	12,890	32,065	148.8%
	SCREENLINE TOTAL	**111,481**	**119,673**	**7.3%**
Southern Screenline	H-2 south of Ka Uka Blvd	110,814	85,751	-22.6%
	Kamehameha Hwy south of Waipio Uka St	33,207	66,049	98.9%
	SCREENLINE TOTAL	**144,021**	**151,800**	**5.4%**

Source: HDOT 2012 Traffic Count Database and OMPO Travel Demand Model (2012 Base Year Scenario)

Figure 1. Screenlines



As shown in **Table 1**, the model forecasts on the Center and Southern screenlines are within the desired threshold of 10% of the corresponding traffic counts at 7.3% and 5.4%, respectively. The forecasts at the Northern screenline are nearly 26% higher or just under 9,900 vehicles per day (vpd) than the counts, indicating that the existing base year model is over-predicting travel demand north of the study area. However, a greater variation is expected across the Northern screenline where this volume is approximately 1/3 of the volume of each of the two other screenline locations, and greater likelihood of variation is expected with a regional model on lower volume facilities.

On an individual segment basis, only two of the key individual roadway segments are within roughly 10% of the comparable traffic count: H-2 south of Mehula Parkway (-11%), and Kamehameha Highway east of Kamananui Road (-0.5%). In general, the model is assigning more traffic to Kamehameha Highway than to the H-2 freeway at the Center and Southern screenlines, where the model is overestimating traffic on Kamehameha Highway by 20,000 to 30,000 vpd. At the Northern screenline, the model closely matches the count on Kamehameha Highway just outside Wahiawa, but estimates nearly 45% more traffic or roughly 10,000 vehicles per day (vpd) on Wilikina Drive east Kamananui Drive.

2.3 Conclusions on Validation

The model was developed as a regional model, whereas the purpose of using the model for this project is to produce regional measures of effectiveness for purposes of comparing various roadway and transit improvements. Where the model is to be used for forecasting volumes on a specific roadway link or set of links, a more rigorous validation process would be required to ensure more accurate forecasts in that area.

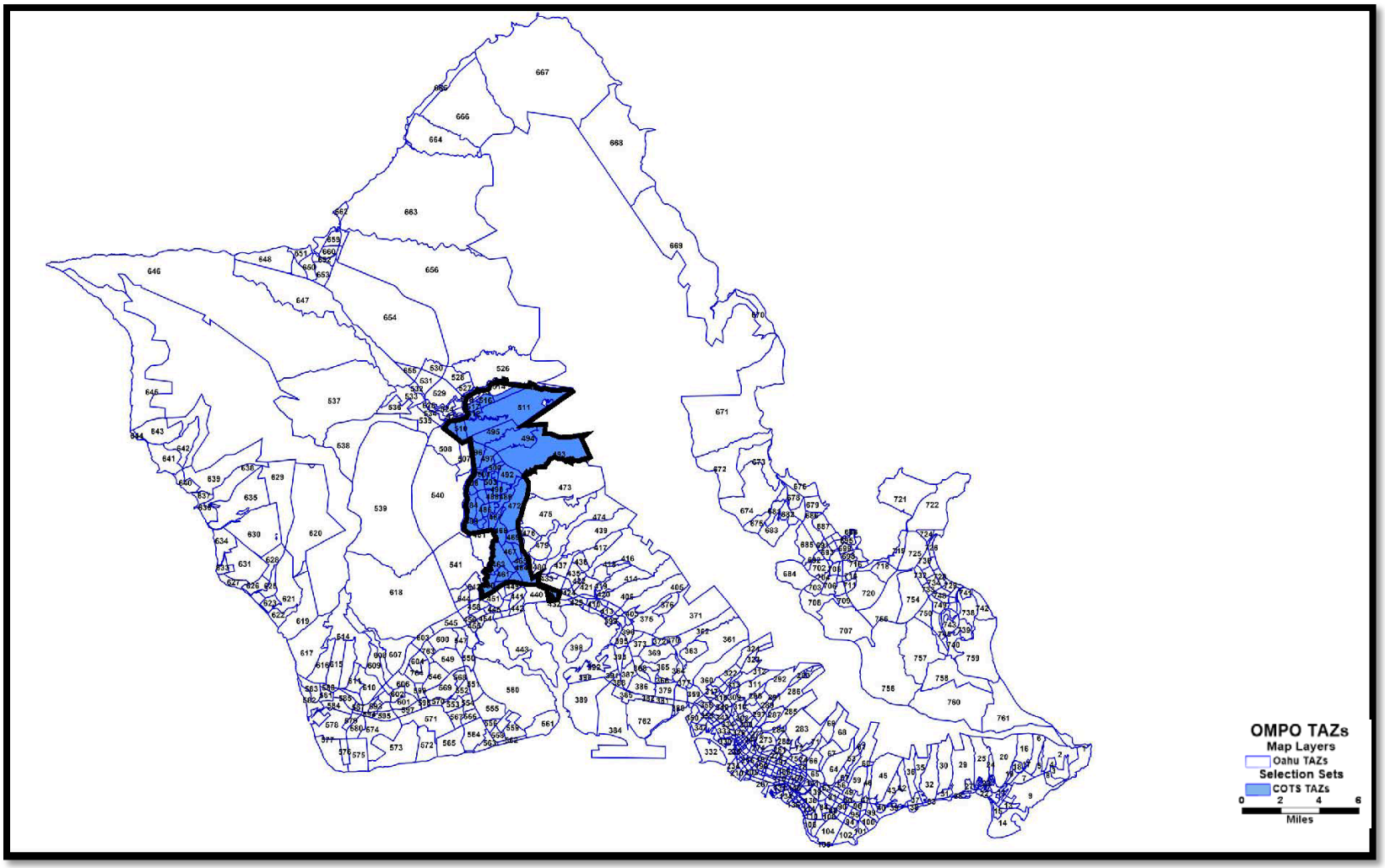
As noted in Section 2.2, the model is assigning more traffic to Kamehameha Highway than H-2. This is possibly due to some network inputs that make the arterial roadway more attractive, and that the model is not accurately reflecting the choice that drivers are making (i.e., that the freeway is perceived to result in lower travel times). To account for some of the more significant differences in trip assignment, some of the roadway network parameters will be adjusted such that the model produces closer forecasts to the HDOT traffic counts, which are included in **Appendix A**.

Given that the model-to-count ratio metric was satisfied at two the three screenlines and the model is essentially used for regional forecasting, the OahuMPO model is considered appropriate for use in this project. In addition, it is the best planning tool available for forecasting future regional and corridor demand.

2.4 Traffic Analysis Zones

The OahuMPO model works by assigning person trips between various geographic areas across the island of Oahu. These geographic areas are known as traffic analysis zones or TAZs. The model includes 764 TAZs, of which 44 comprise the Central Oahu study area. These are defined by geographic and man-made boundaries, or by including areas of similar land uses or points of access. Figure 2 illustrates the OahuMPO model TAZs for the island of Oahu, and highlights in blue the TAZs located in the Central Oahu study area. The trips are distributed among the zones in the form of an origin zone and a destination zone, and then the trips are assigned to the vehicle, transit networks, or to active mode trips (i.e., by bicycling or walking).

Figure 2. OahuMPO Model TAZ Map (COTS area highlighted in blue)



Source: OMPO Travel Demand Model, 2012

Trips made between zones in the model are calculated based on a variety of travel and socioeconomic data including, but not limited to, household surveys, traffic counts, and land use. These trip pairs are estimated using this information but do not necessarily reflect actual trips made by travelers. Section 3.0 describes how detailed existing trip information can be obtained.

3.0 FUTURE TRAFFIC FORECASTS IN CENTRAL OAHU

The OahuMPO model will be used to forecast various metrics used for the study including vehicle trips, vehicle miles traveled (VMT); vehicle hours traveled (VHT), average speed, and greenhouse gas (GHG) emissions.

3.1 Future Year (2040) Traffic Forecast Methodology

The OahuMPO model contains a Future Year 2040 scenario that includes the land use projections and programmed roadway improvements by 2040. The land use and roadway network assumptions developed by the OahuMPO and contained in the future year 2040 model are described below.

3.1.1 Future Land Use Assumptions

A review of the OahuMPO model Future Year 2040 Socioeconomic Data (SED) was performed to understand the projected growth in land use used in the model. A comparison between the Base Year (2012) and Future Year (2040) SED was performed for both island-wide and the Central Oahu study area. The comparison of the primary land use variables are summarized for Oahu and the Central Oahu study area in **Table 2** and **Table 3**, respectively.

Table 2. OahuMPO Model Socio-Economic Data Review – Oahu Island

SED Variable	Base Year 2012	Future Year 2040	Delta	% Difference
Population	948,239	1,149,452	201,213	21.2%
Total Employment	568,709	687,406	118,697	20.9%
Total Households	314,775	385,382	70,607	22.4%

Source: OahuMPO Travel Demand Model

Table 3. OahuMPO Model Socio-Economic Data Review – Central Oahu

SED Variable	Base Year 2012	Future Year 2040	Delta	% Difference
Population	79,803	87,060	7,257	9.1%
Total Employment	24,757	31,088	6,331	25.6%
Total Households	27,041	30,052	3,011	11.1%

Source: OahuMPO Travel Demand Model

As shown, the population, employment, and households are estimated to grow approximately 21 percent island-wide in the year 2040. In Central Oahu, the largest growth is anticipated to occur in employment at 26 percent, and the population and household will increase by approximately 10 percent.

The Base Year (2012) Population, Total Households, and Total Employment are shown on **Figures 3, 4, and 5**, respectively, for each traffic analysis zone (TAZ) in the model. Future Year (2040) Population, Total Households, and Total Employment are shown on **Figures 6, 7, and 8**, respectively. Lastly, the SED delta for each TAZ for Population, Total Households, and Total Employment are show in **Figures 9, 10, and 11**, respectively.

These figures generally indicate growth in the Kapolei and Ewa regions, portions of Central Oahu, Kakaʻako, and selected other areas including Turtle Bay/northern Koolauloa. Within the Central Oahu area, the following areas/TAZs showed the largest amount of growth:

- Waiawa/Koa Ridge (TAZ 468) – 1,345 employment increase
- Waiawa/Koa Ridge (TAZ 472) – 5,327 population increase; 571 employment increase; 1,997 household increase
- Mililani/Melemanu/Kipapa (TAZ 495) – 1,504 employment increase

Upon review, the projected growth in each of these categories seemed reasonable and was determined appropriate for use in this study.

3.1.2 Future Roadway Network Assumptions

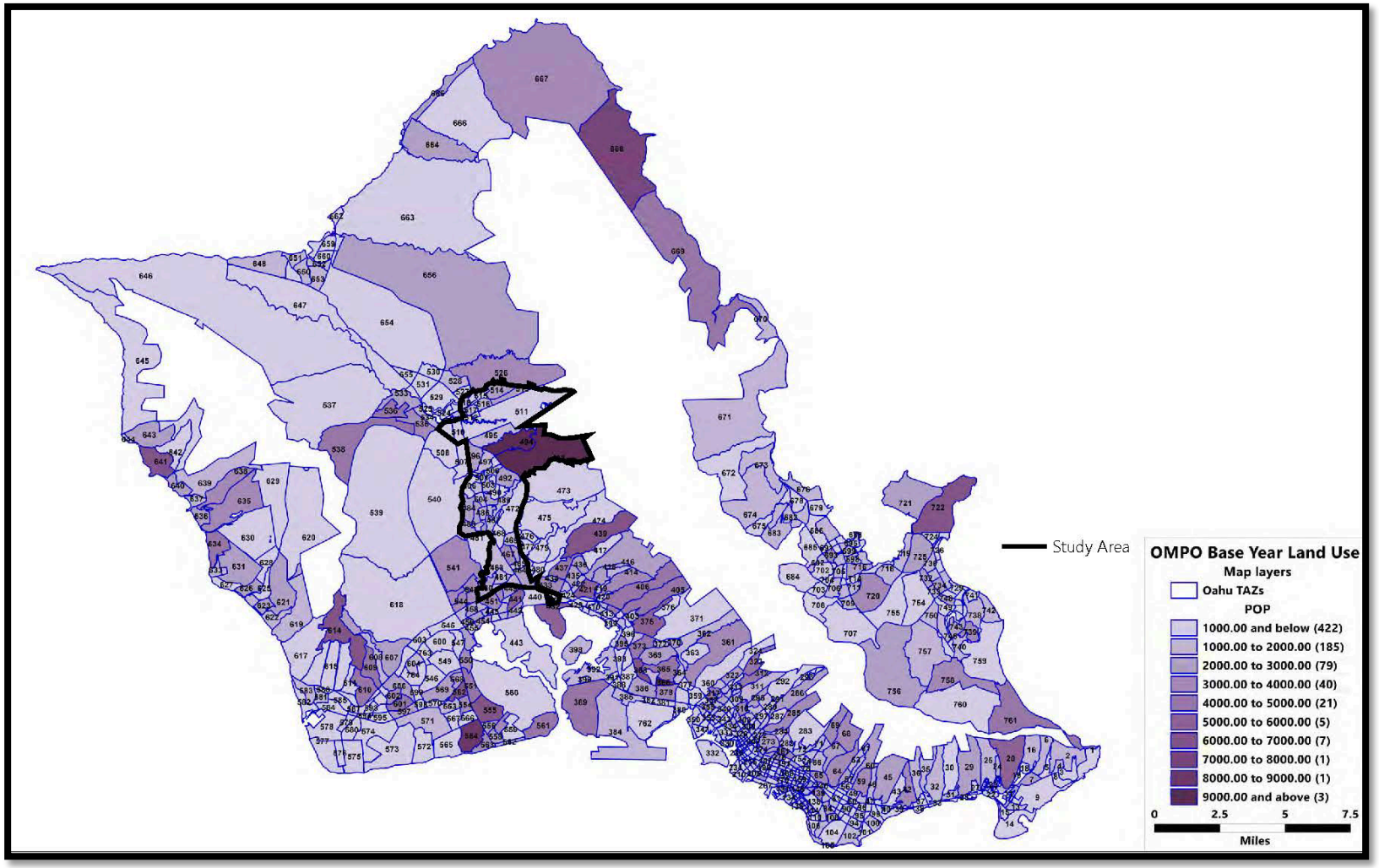
The Future Year 2040 Baseline scenario will be used as the baseline (No COTS Projects) for this study. The roadway network provided by OahuMPO was used to produce model results against which all proposed roadway improvement projects will be compared. The key projects included in the 2040 baseline scenario are detailed in the *ORTP 2040 Technical Report (OahuMPO, April 13, 2016)* and include: ITS improvements, the HART rail project currently under construction, and selected arterial roadway improvements across the islands. Specifically in Central Oahu, one project already included in the model network is the Kamehameha Highway widening from Ka Uka Boulevard to Lanikuhana Avenue. This project will be tested independently in the evaluation process.

3.1.3 Future Year (2040) Forecasts

The traffic volumes from the future year (2040) baseline are presented in **Table 4**. Volumes are presented on both a screenline basis and individual segment basis, similar to the locations used in the model validation analysis (Section 2.2).

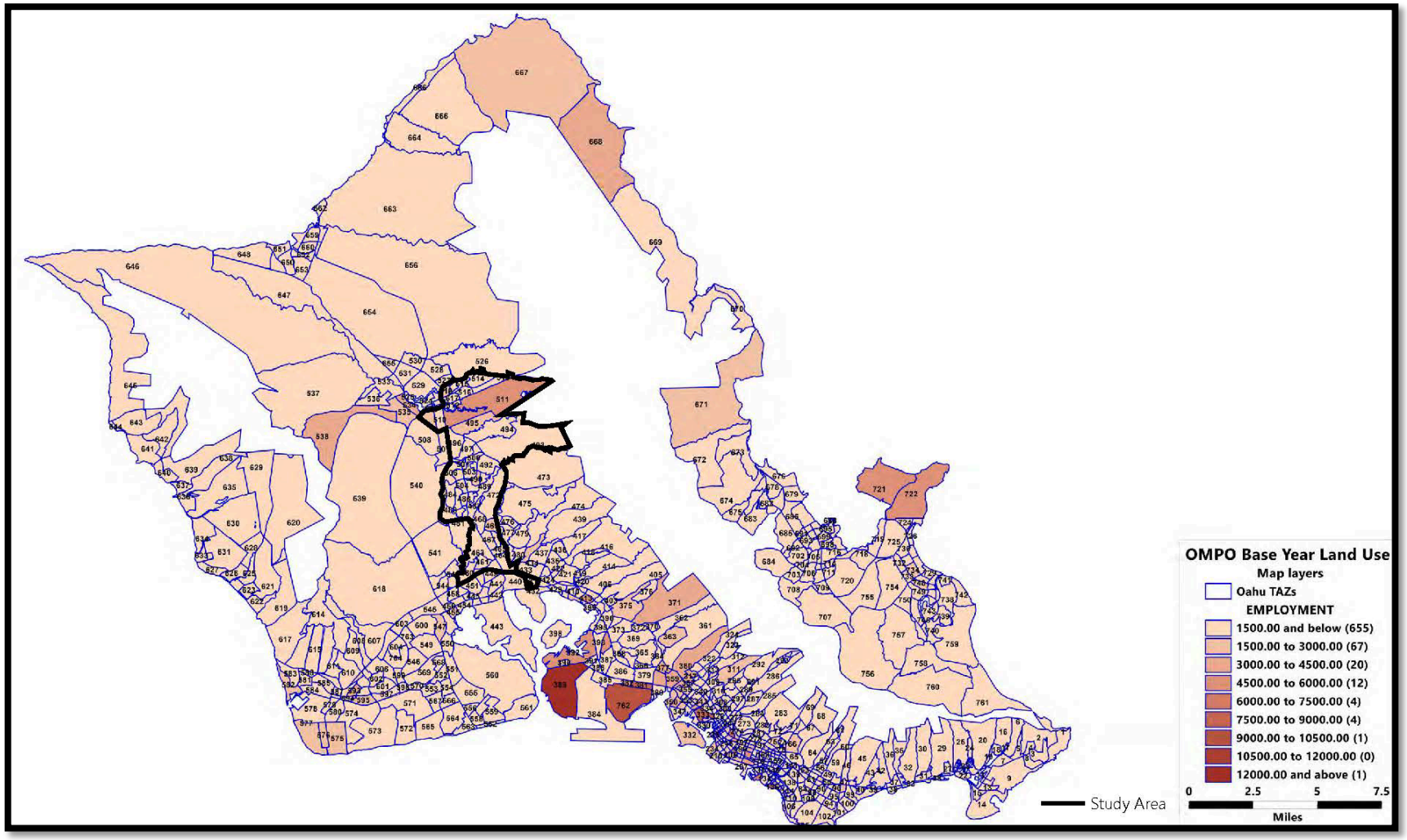
A review of the forecasts shows that in general the change in projected traffic between the base year (2012) and future year (2040) was reasonable across the three Central Oahu screenlines. In most cases, traffic is expected to increase relative to the change in population and employment over the 28-year period to 2040.

Figure 3. OahuMPO Base Year (2012) Model Population



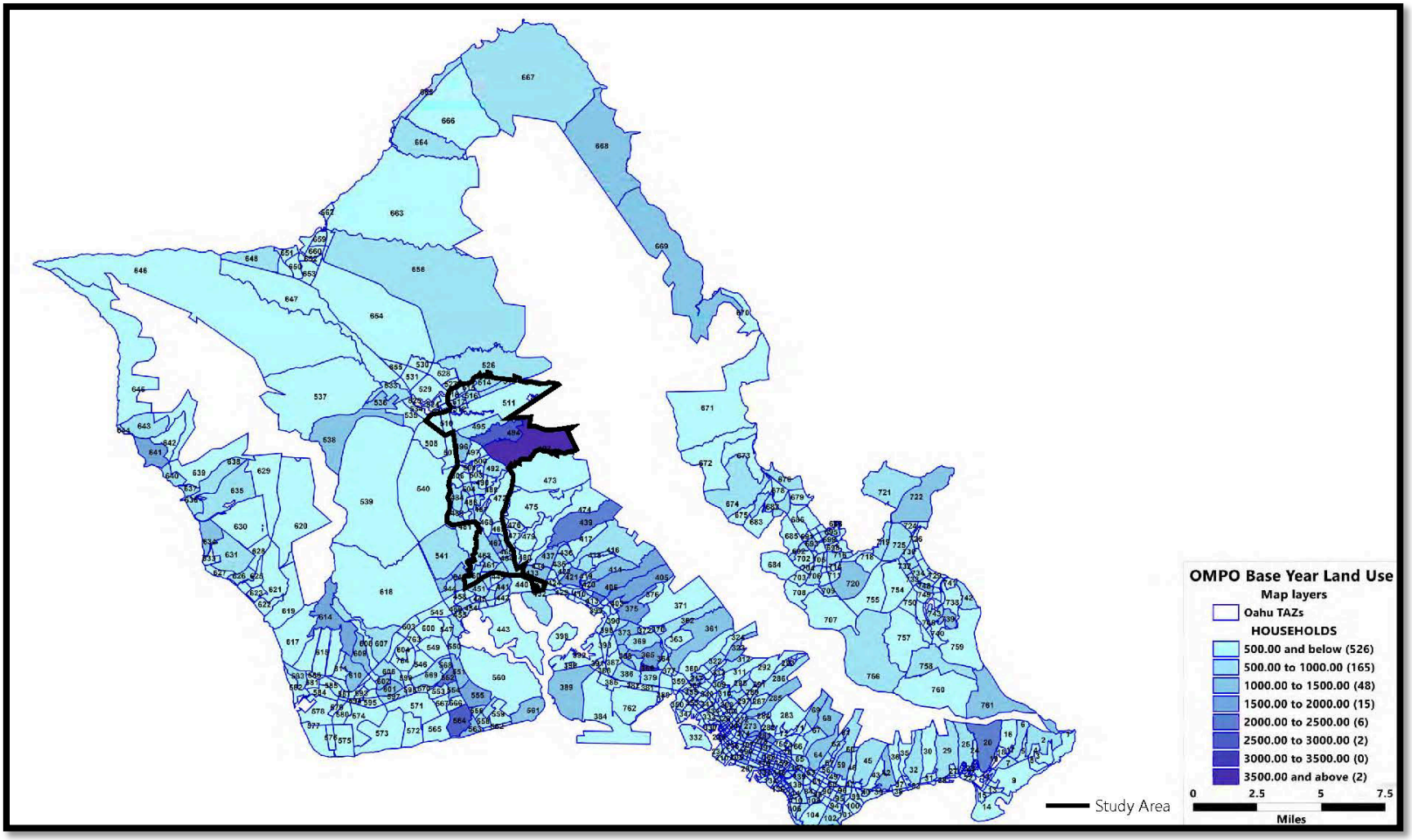
Source: OahuMPO Travel Demand Model, 2012

Figure 4. OahuMPO Base Year (2012) Model Total Employment



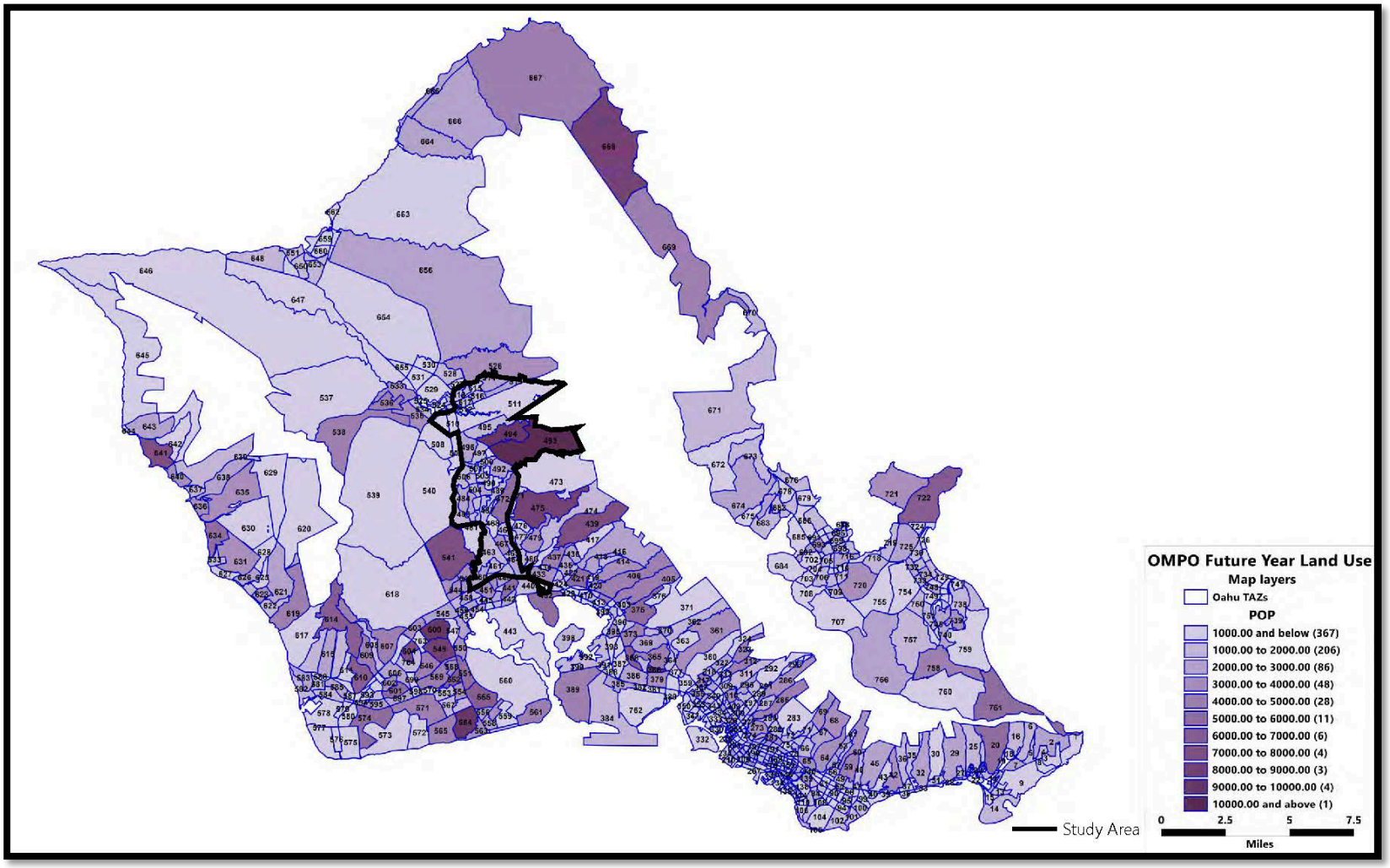
Source: OahuMPO Travel Demand Model, 2012

Figure 5. OahuMPO Base Year (2012) Model Total Households



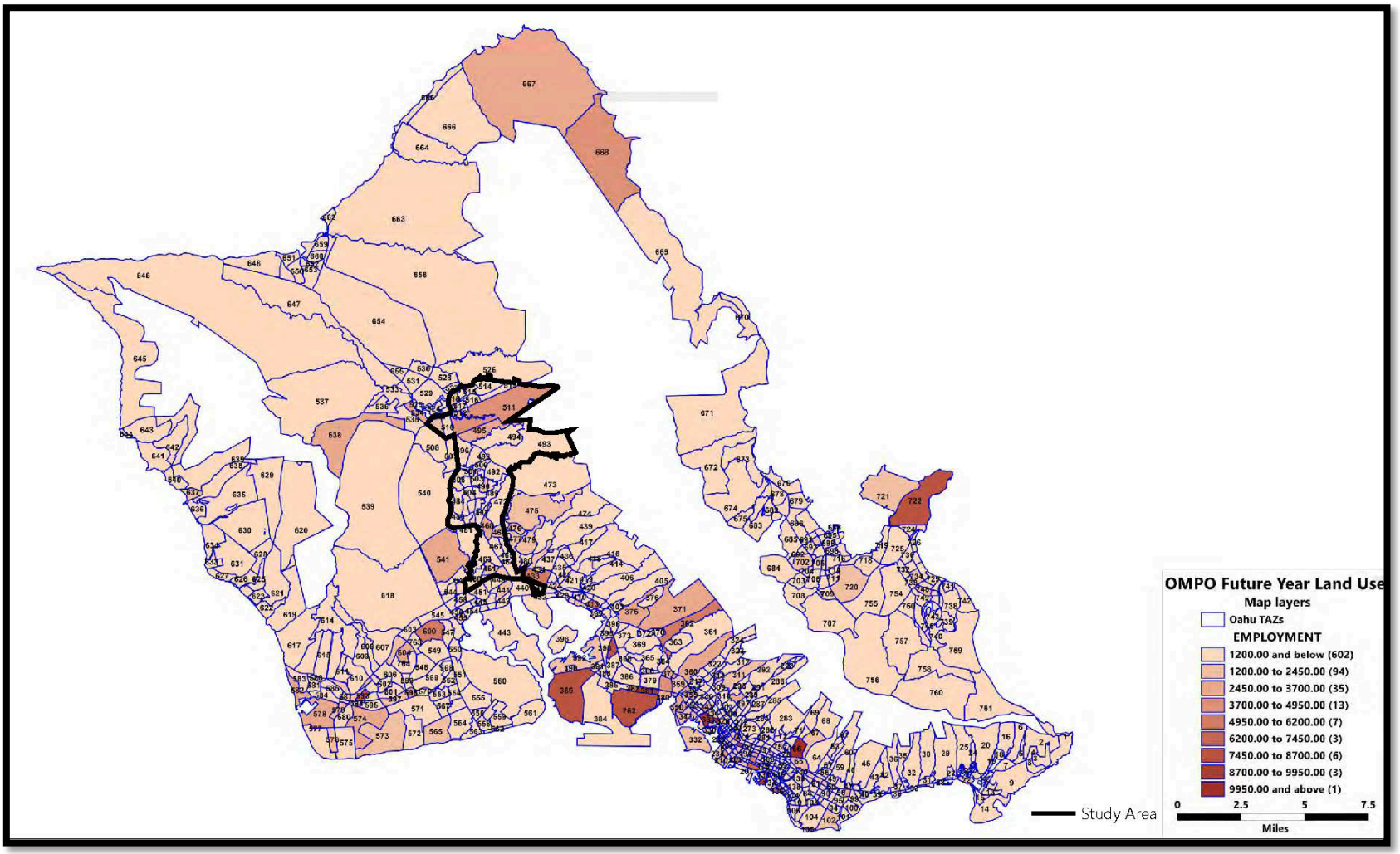
Source: OahuMPO Travel Demand Model, 2012

Figure 6. OahuMPO Future Year (2040) Model Population



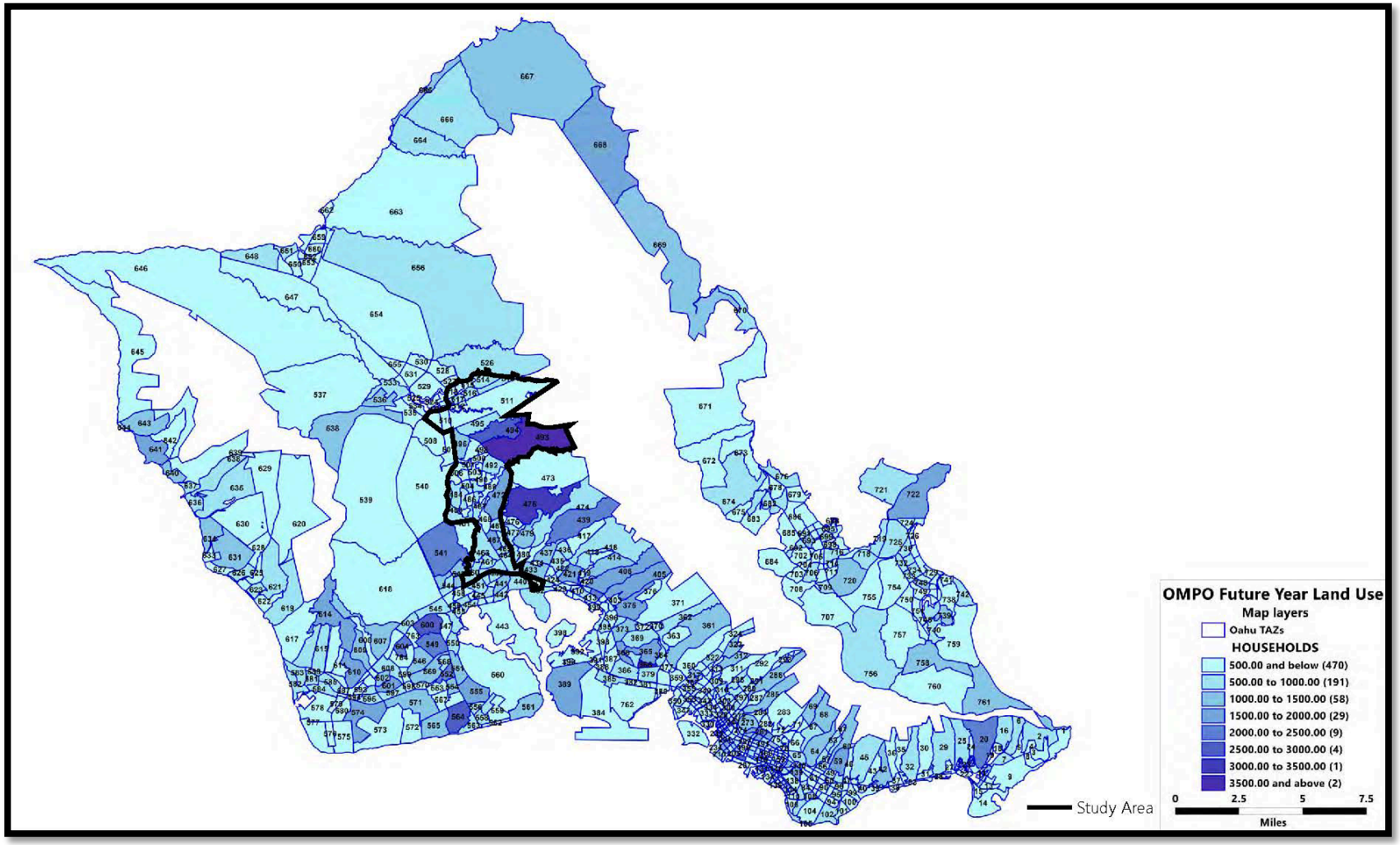
Source: OahuMPO Travel Demand Model, 2012

Figure 7. OahuMPO Future Year (2040) Model Total Employment



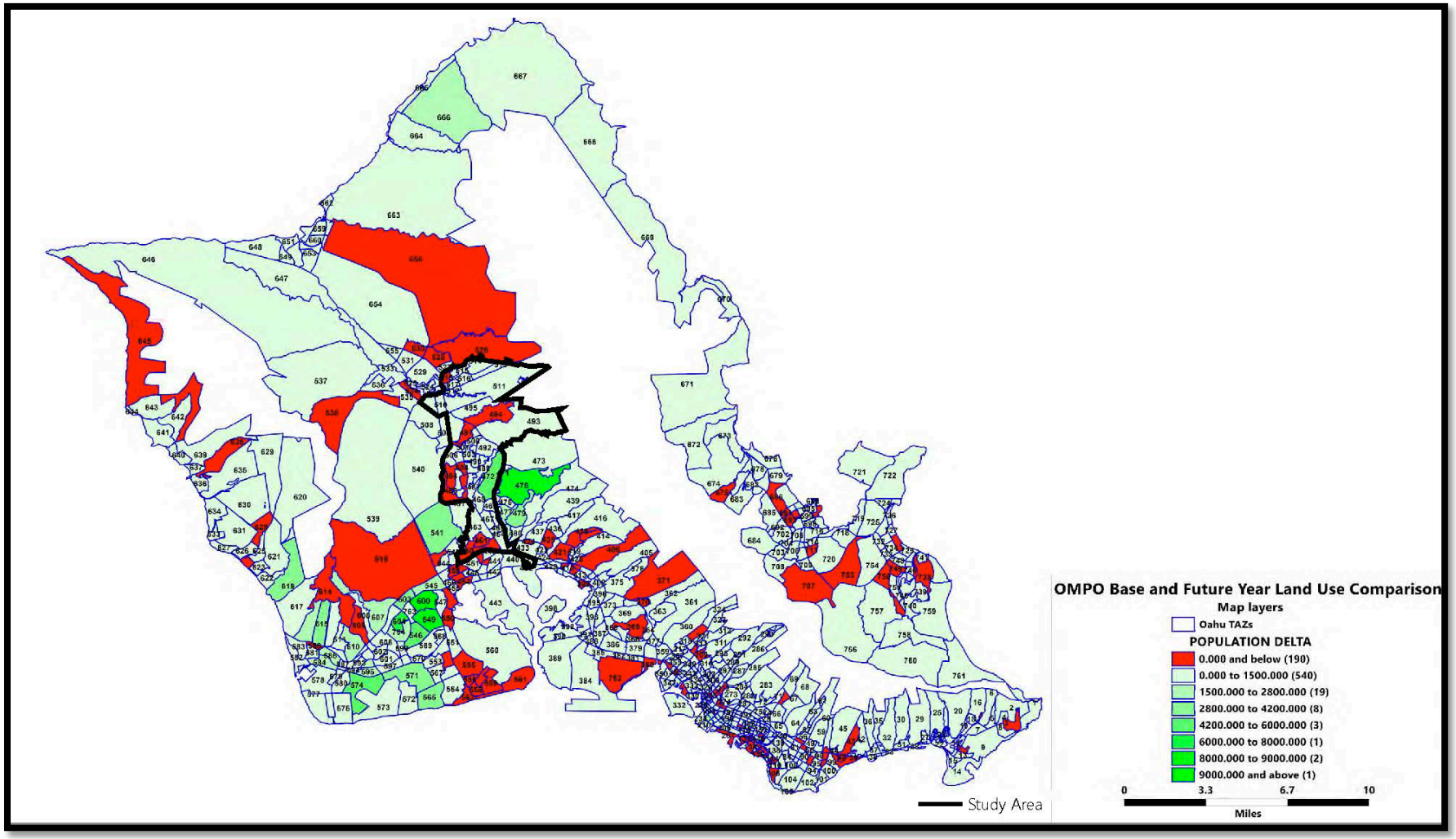
Source: OahuMPO Travel Demand Model, 2012

Figure 8. OahuMPO Future Year (2040) Model Total Households



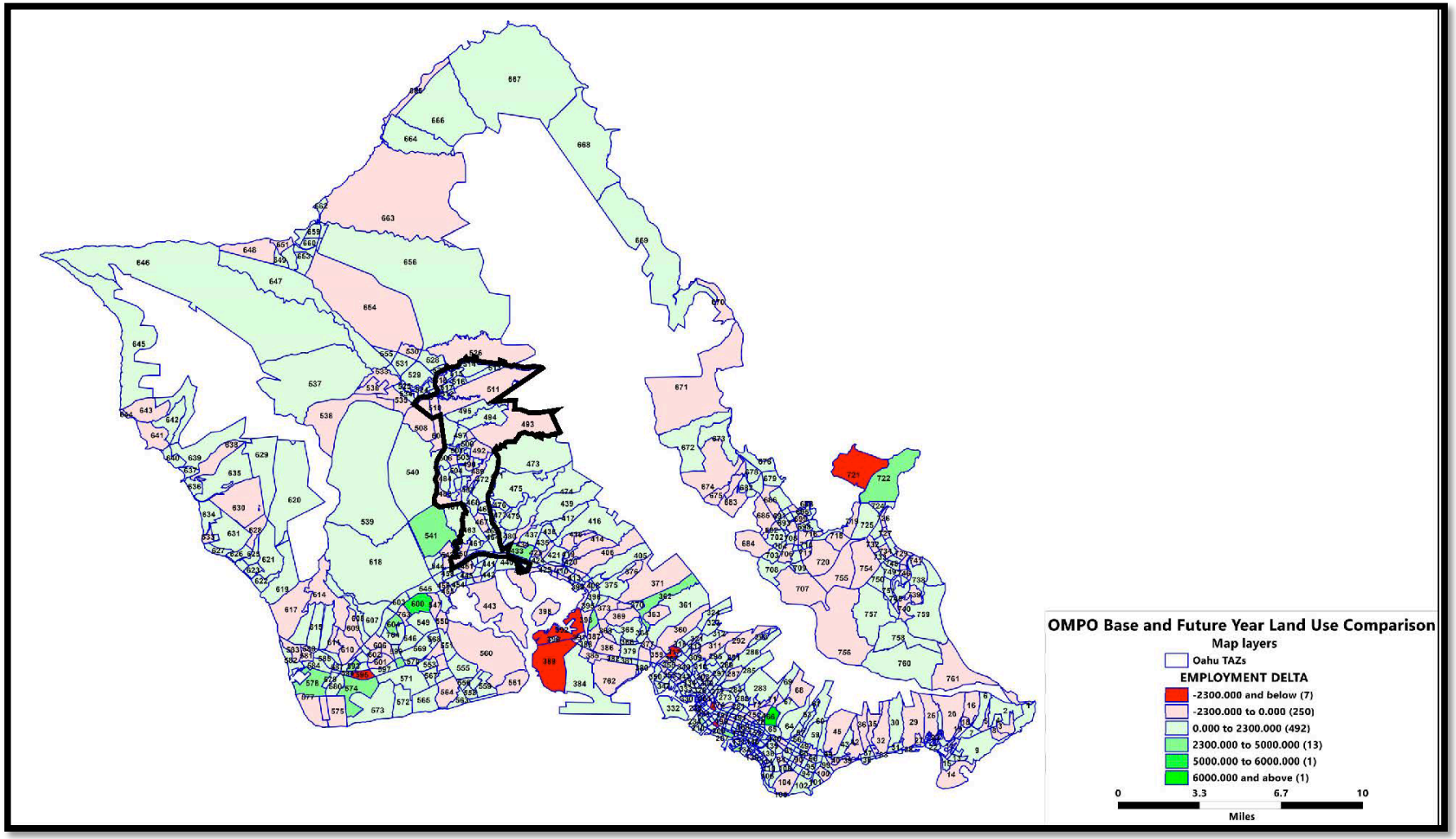
Source: OahuMPO Travel Demand Model, 2012

Figure 9. OahuMPO Model Base (2012) and Future (2040) Years Population Difference



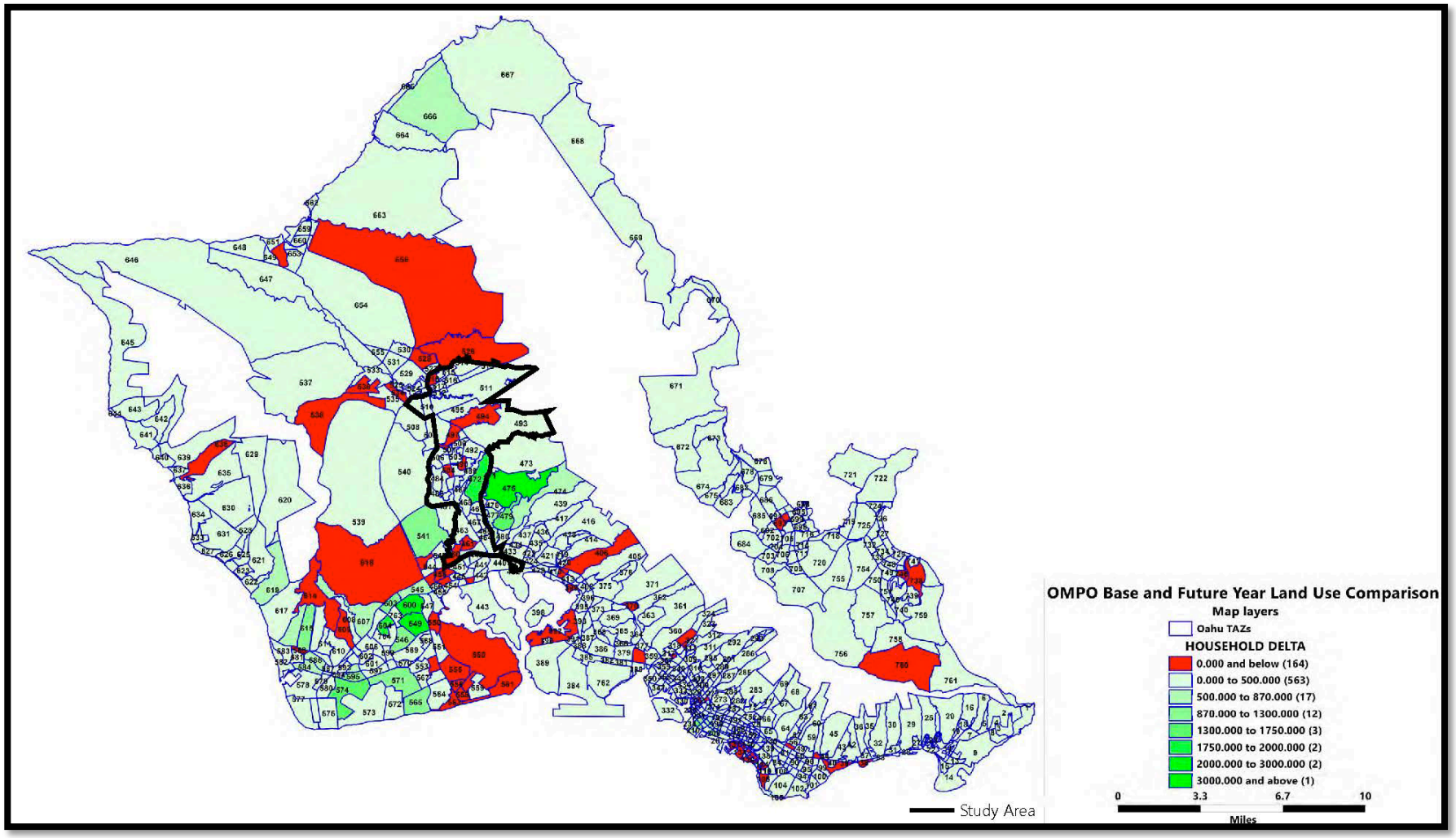
Source: OahuMPO Travel Demand Model, 2012

Figure 10. OahuMPO Model Base (2012) and Future (2040) Years Employment Difference



Source: OahuMPO Travel Demand Model, 2012

Figure 11. OahuMPO Model Base (2012) and Future (2040) Years Households Difference



Source: OahuMPO Travel Demand Model, 2012

Table 4. Model Future Average Daily Traffic Forecasts by Segment, Using Compounded Annual Growth Rates

Roadway		Base Year (2012)			Future Year (2040)			ADT Growth Rate
		4-Hour Vols.		ADT	4-Hour Vols.		ADT	
		AM	PM		AM	PM		
Northern Screenline	Wilikina Dr east of Kamananui Rd	7,510	9,192	32,088	8,392	9,822	34,491	0.3%
	Kamehameha Hwy east of Kamananui Rd	3,092	4,521	15,875	3,083	4,869	17,641	0.4%
	SCREENLINE TOTAL	**10,602**	**13,713**	**47,963**	**11,475**	**14,691**	**52,132**	**0.3%**
Center Screenline	H-2 south of Meheula Pkwy	21,767	27,820	87,608	20,919	27,741	92,558	0.2%
	Kamehameha Hwy south of Meheula Pkwy	4,888	6,754	32,065	8,523	11,657	47,543	1.4%
	SCREENLINE TOTAL	**26,655**	**34,574**	**119,673**	**29,442**	**39,398**	**140,101**	**0.6%**
Southern Screenline	H-2 south of Ka Uka Blvd	22,660	27,327	85,751	33,231	38,914	136,712	1.7%
	Kamehameha Hwy south of Waipio Uka St	12,201	16,495	66,049	16,574	23,981	91,401	1.2%
	SCREENLINE TOTAL	**34,861**	**43,822**	**151,800**	**49,805**	**62,895**	**228,113**	**1.5%**

Source: OMPO Travel Demand Model, 2012

The compound annual growth rate was also calculated for all three screenlines. According to the model, the northern and center screenlines are expected to have a moderate growth rates of 0.3 percent and 0.6 percent, respectively. The southern screenline shows more substantive growth of a 1.5 percent annual growth rate between the base year (2012) and year 2040 conditions. While the new approved and planned land uses anticipated in the Central Oahu area (e.g., Koa Ridge) will clearly increase traffic volumes over time, a sustained level of 1.5 percent annual growth over 28 years appears to be high given the likelihood of intermittent economic downturns that will inevitably occur. Historic growth patterns do show that level of growth over shorter periods (e.g., 5 to 7 years) but typically not for a duration of nearly 30 years. That said, the long-range forecasts do represent a conservative estimate of traffic for purposes of evaluating various COTS improvement projects.

4.0 CONCLUSIONS

This report has summarized the OahuMPO Planning Model review and validation for use in the future forecasting of the Central Oahu study area. The model has been validated against available data sources and a review of the future year forecasts revealed generally reasonable growth in the COTS area. Therefore, the OahuMPO Planning Model is acceptable to be applied in the Project Evaluations analysis. The model will be used to analyze several proposed transportation projects in the Central Oahu study area to calculate the effects of the proposed projects on vehicle travel.

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5.0 REFERENCES

OahuMPO. 2016. *Oahu Regional Transportation Plan 2040.* Approved by the Policy Board April 13, 2016.

OahuMPO. 2016. *User's Guide for the OahuMPO Planning Model in TransCAD 6.0*.

California Transportation Commission. 2017. *2017 Transportation Plan Guidelines for Metropolitan Planning Organizations.* Adopted by the California Transportation Commission on January 18, 2017. Available online at: http://www.dot.ca.gov/hq/tpp/offices/orip/rtp/docs/2017RTPGuidelinesforMPOs.pdf.

HDOT. 2012. 2012 Traffic Count Data Base.

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APPENDIX A

Existing 48-Hour Roadway Traffic Counts

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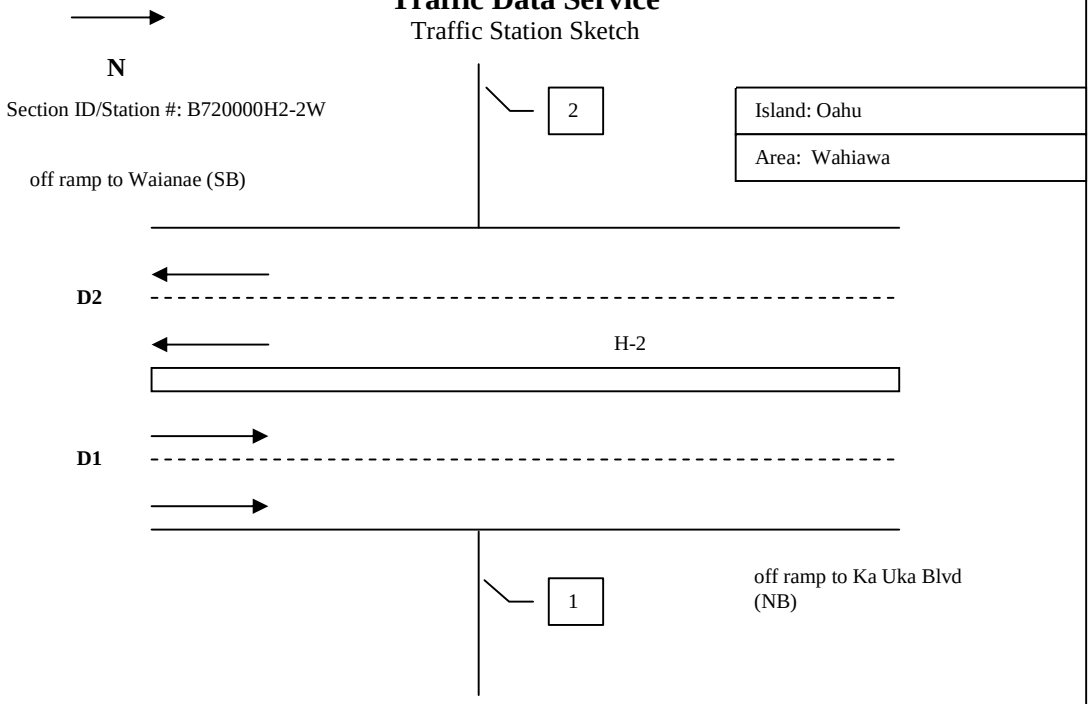
Traffic Data Service

Traffic Station Sketch



Meter #	File Name	GPS
1. wave	D1209001_B720000H2-2W	21.40845, -157.9894
2. wave	D1209002_B720000H2-2W	21.40845, -157.9894

Station Description: H-2: off ramp to Waianae (SB) to off ramp to Ka Uka Blvd (NB)					
Survey Beginning Date/Time: 12/9/13 @ 0000			Survey Ending Date/Time: 12/10/13 @ 2400		
Survey Method:			Data Type:	Volume	
Survey Crew:	LM			Wavetronix	
Sketch Updated:			By:	SR	
Remarks:	12				
FACILITY NAME	JURI	FUNC CLASS	AREA TYPE	ROUTE NO.	MILE
H-2		11		H-2	
D1= Direction to End D2= Direction to Begin	D1: off ramp to Ka Uka Blvd (NB) / Wilikina Drive D2: off ramp to Waianae (SB) / Waiawa Interchange				

Run Date: 2014/05/29

Hawaii Department of Transportation
Highways Division — Highways Planning Survey Section
2013 Program Count - Summary

Site ID: B720000H2-2W **Town:** Oahu **DIR 1:** +MP **DIR 2:** -MP **Final AADT:** 107200
Functional Class: URBAN:PRINCIPAL ARTERIAL - INTERSTATE **Count Type:** VOLUME **Counter Type:** Sensor **Route No:** H-2
Location: H-2 Fwy - offramp to Waianae (SB) to offramp to Ka Uka Blvd (NB)

TIME-AM	DIR 1	DIR 2	TOTAL	TIME-AM	DIR 1	DIR 2	TOTAL	TIME-PM	DIR 1	DIR 2	TOTAL	TIME-PM	DIR 1	DIR 2	TOTAL
DATE : 12/09/2013															
12:00-12:15	126	102	228	06:00-06:15	473	1283	1756	12:00-12:15	683	702	1385	06:00-06:15	1029	801	1830
12:15-12:30	114	45	159	06:15-06:30	460	1388	1848	12:15-12:30	753	754	1507	06:15-06:30	984	714	1698
12:30-12:45	94	60	154	06:30-06:45	547	1404	1951	12:30-12:45	762	735	1497	06:30-06:45	980	705	1685
12:45-01:00	73	37	110	06:45-07:00	622	1210	1832	12:45-01:00	722	710	1432	06:45-07:00	954	627	1581
01:00-01:15	67	37	104	07:00-07:15	632	1181	1813	01:00-01:15	736	633	1369	07:00-07:15	912	524	1436
01:15-01:30	64	40	104	07:15-07:30	658	1162	1820	01:15-01:30	754	757	1511	07:15-07:30	928	499	1427
01:30-01:45	52	22	74	07:30-07:45	735	1160	1895	01:30-01:45	827	804	1631	07:30-07:45	901	357	1258
01:45-02:00	45	36	81	07:45-08:00	739	1130	1869	01:45-02:00	800	733	1533	07:45-08:00	769	376	1145
02:00-02:15	54	35	89	08:00-08:15	741	1082	1823	02:00-02:15	796	664	1460	08:00-08:15	595	314	909
02:15-02:30	45	41	86	08:15-08:30	641	1076	1717	02:15-02:30	765	712	1477	08:15-08:30	545	369	914
02:30-02:45	46	41	87	08:30-08:45	700	1085	1785	02:30-02:45	803	738	1541	08:30-08:45	560	378	938
02:45-03:00	35	52	87	08:45-09:00	676	979	1655	02:45-03:00	816	807	1623	08:45-09:00	457	319	776
03:00-03:15	46	49	95	09:00-09:15	648	812	1460	03:00-03:15	834	756	1590	09:00-09:15	401	323	724
03:15-03:30	35	59	94	09:15-09:30	586	749	1335	03:15-03:30	1055	789	1844	09:15-09:30	486	304	790
03:30-03:45	61	95	156	09:30-09:45	605	818	1423	03:30-03:45	1105	794	1899	09:30-09:45	485	237	722
03:45-04:00	61	109	170	09:45-10:00	664	872	1536	03:45-04:00	1113	798	1911	09:45-10:00	374	192	566
04:00-04:15	92	139	231	10:00-10:15	633	791	1424	04:00-04:15	1246	854	2100	10:00-10:15	365	208	573
04:15-04:30	87	142	229	10:15-10:30	581	830	1411	04:15-04:30	1230	975	2205	10:15-10:30	353	204	557
04:30-04:45	136	232	368	10:30-10:45	625	787	1412	04:30-04:45	1171	870	2041	10:30-10:45	291	154	445
04:45-05:00	204	405	609	10:45-11:00	580	829	1409	04:45-05:00	1187	918	2105	10:45-11:00	270	158	428
05:00-05:15	269	477	746	11:00-11:15	596	787	1383	05:00-05:15	1071	845	1916	11:00-11:15	237	135	372
05:15-05:30	350	713	1063	11:15-11:30	634	708	1342	05:15-05:30	1032	891	1923	11:15-11:30	193	105	298
05:30-05:45	392	963	1355	11:30-11:45	697	762	1459	05:30-05:45	1007	871	1878	11:30-11:45	158	117	275
05:45-06:00	470	1176	1646	11:45-12:00	630	768	1398	05:45-06:00	1014	823	1837	11:45-12:00	167	93	260

AM COMMUTER PERIOD (05:00-09:00)	DIR 1	DIR 2	
TWO DIRECTIONAL PEAK			
AM - PEAK HR TIME	06:15 AM to 07:15 AM		
AM - PEAK HR VOLUME	2261	5183	7444
AM - K FACTOR (%)			6.79
AM - D (%)	30.37	69.63	100.00
DIRECTIONAL PEAK			
AM - PEAK HR TIME	07:15 AM to 08:15 AM	06:00 AM to 07:00 AM	
AM - PEAK HR VOLUME	2873	5285	

PM COMMUTER PERIOD (15:00-19:00)	DIR 1	DIR 2	
TWO DIRECTIONAL PEAK			
PM - PEAK HR TIME	04:00 PM to 05:00 PM		
PM - PEAK HR VOLUME	4834	3617	8451
PM - K FACTOR (%)			7.70
PM - D (%)	57.20	42.80	100.00
DIRECTIONAL PEAK			
PM - PEAK HR TIME	04:00 PM to 05:00 PM	04:00 PM to 05:00 PM	
PM - PEAK HR VOLUME	4834	3617	

AM PERIOD (00:00-12:00)			
TWO DIRECTIONAL PEAK			
AM - PEAK HR TIME	06:15 AM to 07:15 AM		
AM - PEAK HR VOLUME	2261	5183	7444
AM - K FACTOR (%)			6.79
AM - D (%)	30.37	69.63	100.00

PM PERIOD (12:00-24:00)			
TWO DIRECTIONAL PEAK			
PM - PEAK HR TIME	04:00 PM to 05:00 PM		
PM - PEAK HR VOLUME	4834	3617	8451
PM - K FACTOR (%)			7.70
PM - D (%)	57.20	42.80	100.00

NON-COMMUTER PERIOD (09:00-15:00)	DIR 1	DIR 2	
TWO DIRECTIONAL PEAK			
PEAK HR TIME	01:15 PM to 02:15 PM		
PEAK HR VOLUME	3177	2958	6135
DIRECTIONAL PEAK			
PEAK HR TIME	01:30 PM to 02:30 PM	09:30 AM to 10:30 AM	
PEAK HR VOLUME	3188	3311	

6-HR, 12-HR, 24-HR PERIODS	DIR 1	DIR 2	Total
AM 6-HR PERIOD (06:00-12:00)	15,103	23,653	38,756
AM 12-HR PERIOD (00:00-12:00)	18,121	28,760	46,881
PM 6-HR PERIOD (12:00-18:00)	22,282	18,933	41,215
PM 12-HR PERIOD (12:00-24:00)	35,676	27,146	62,822
24 HOUR PERIOD	53,797	55,906	109,703
D (%)	49.04	50.96	100.00

Run Date: 2014/05/29

Hawaii Department of Transportation
Highways Division — Highways Planning Survey Section
2013 Program Count - Summary

Site ID: B720000H2-2W **Town:** Oahu **DIR 1:** +MP **DIR 2:** -MP **Final AADT:** 107200
Functional Class: URBAN:PRINCIPAL ARTERIAL - INTERSTATE **Count Type:** VOLUME **Counter Type:** Sensor **Route No:** H-2
Location: H-2 Fwy - offramp to Waianae (SB) to offramp to Ka Uka Blvd (NB)

TIME-AM	DIR 1	DIR 2	TOTAL	TIME-AM	DIR 1	DIR 2	TOTAL	TIME-PM	DIR 1	DIR 2	TOTAL	TIME-PM	DIR 1	DIR 2	TOTAL
DATE : 12/10/2013															
12:00-12:15	129	67	196	06:00-06:15	489	1249	1738	12:00-12:15	735	738	1473	06:00-06:15	991	795	1786
12:15-12:30	122	76	198	06:15-06:30	470	1430	1900	12:15-12:30	778	745	1523	06:15-06:30	998	784	1782
12:30-12:45	104	52	156	06:30-06:45	477	1449	1926	12:30-12:45	785	686	1471	06:30-06:45	963	647	1610
12:45-01:00	71	49	120	06:45-07:00	534	1173	1707	12:45-01:00	784	746	1530	06:45-07:00	944	655	1599
01:00-01:15	77	32	109	07:00-07:15	641	1228	1869	01:00-01:15	801	657	1458	07:00-07:15	885	565	1450
01:15-01:30	75	35	110	07:15-07:30	587	1194	1781	01:15-01:30	775	664	1439	07:15-07:30	900	455	1355
01:30-01:45	74	28	102	07:30-07:45	622	1148	1770	01:30-01:45	876	714	1590	07:30-07:45	867	468	1335
01:45-02:00	47	38	85	07:45-08:00	651	1154	1805	01:45-02:00	780	745	1525	07:45-08:00	807	408	1215
02:00-02:15	64	35	99	08:00-08:15	681	1125	1806	02:00-02:15	803	709	1512	08:00-08:15	404	370	774
02:15-02:30	54	34	88	08:15-08:30	720	1184	1904	02:15-02:30	861	709	1570	08:15-08:30	509	371	880
02:30-02:45	44	36	80	08:30-08:45	618	1087	1705	02:30-02:45	884	750	1634	08:30-08:45	469	391	860
02:45-03:00	52	51	103	08:45-09:00	686	932	1618	02:45-03:00	964	812	1776	08:45-09:00	447	277	724
03:00-03:15	32	37	69	09:00-09:15	537	868	1405	03:00-03:15	997	779	1776	09:00-09:15	471	268	739
03:15-03:30	44	71	115	09:15-09:30	691	825	1516	03:15-03:30	1058	851	1909	09:15-09:30	516	300	816
03:30-03:45	44	82	126	09:30-09:45	736	800	1536	03:30-03:45	1148	875	2023	09:30-09:45	453	296	749
03:45-04:00	67	150	217	09:45-10:00	690	839	1529	03:45-04:00	1139	912	2051	09:45-10:00	458	242	700
04:00-04:15	88	120	208	10:00-10:15	692	774	1466	04:00-04:15	1163	913	2076	10:00-10:15	413	218	631
04:15-04:30	78	181	259	10:15-10:30	640	743	1383	04:15-04:30	1140	959	2099	10:15-10:30	388	222	610
04:30-04:45	128	228	356	10:30-10:45	644	828	1472	04:30-04:45	1138	999	2137	10:30-10:45	363	171	534
04:45-05:00	184	425	609	10:45-11:00	676	762	1438	04:45-05:00	1129	948	2077	10:45-11:00	331	139	470
05:00-05:15	249	516	765	11:00-11:15	700	726	1426	05:00-05:15	1114	860	1974	11:00-11:15	303	122	425
05:15-05:30	345	732	1077	11:15-11:30	677	742	1419	05:15-05:30	1081	991	2072	11:15-11:30	237	111	348
05:30-05:45	377	1026	1403	11:30-11:45	689	686	1375	05:30-05:45	1090	957	2047	11:30-11:45	192	100	292
05:45-06:00	461	1144	1605	11:45-12:00	745	757	1502	05:45-06:00	1050	928	1978	11:45-12:00	192	78	270

AM COMMUTER PERIOD (05:00-09:00)	DIR 1	DIR 2	
TWO DIRECTIONAL PEAK			
AM - PEAK HR TIME	06:15 AM to 07:15 AM		
AM - PEAK HR VOLUME	2122	5280	7402
AM - K FACTOR (%)			6.61
AM - D (%)	28.67	71.33	100.00
DIRECTIONAL PEAK			
AM - PEAK HR TIME	08:00 AM to 09:00 AM	06:00 AM to 07:00 AM	
AM - PEAK HR VOLUME	2705	5301	

PM COMMUTER PERIOD (15:00-19:00)	DIR 1	DIR 2	
TWO DIRECTIONAL PEAK			
PM - PEAK HR TIME	04:00 PM to 05:00 PM		
PM - PEAK HR VOLUME	4570	3819	8389
PM - K FACTOR (%)			7.50
PM - D (%)	54.48	45.52	100.00
DIRECTIONAL PEAK			
PM - PEAK HR TIME	03:30 PM to 04:30 PM	04:00 PM to 05:00 PM	
PM - PEAK HR VOLUME	4590	3819	

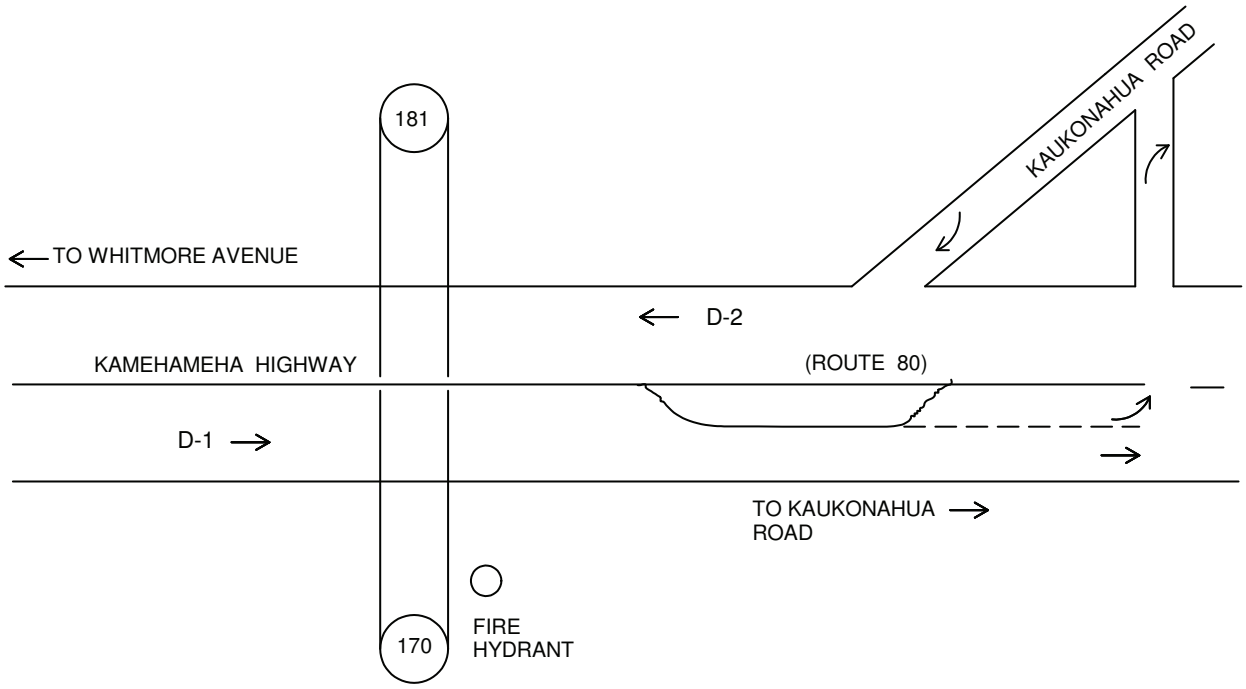
AM PERIOD (00:00-12:00)			
TWO DIRECTIONAL PEAK			
AM - PEAK HR TIME	06:15 AM to 07:15 AM		
AM - PEAK HR VOLUME	2122	5280	7402
AM - K FACTOR (%)			6.61
AM - D (%)	28.67	71.33	100.00

PM PERIOD (12:00-24:00)			
TWO DIRECTIONAL PEAK			
PM - PEAK HR TIME	04:00 PM to 05:00 PM		
PM - PEAK HR VOLUME	4570	3819	8389
PM - K FACTOR (%)			7.50
PM - D (%)	54.48	45.52	100.00

NON-COMMUTER PERIOD (09:00-15:00)	DIR 1	DIR 2	
TWO DIRECTIONAL PEAK			
PEAK HR TIME	02:00 PM to 03:00 PM		
PEAK HR VOLUME	3512	2980	6492
DIRECTIONAL PEAK			
PEAK HR TIME	02:00 PM to 03:00 PM	09:00 AM to 10:00 AM	
PEAK HR VOLUME	3512	3332	

6-HR, 12-HR, 24-HR PERIODS	DIR 1	DIR 2	Total
AM 6-HR PERIOD (06:00-12:00)	15,293	23,703	38,996
AM 12-HR PERIOD (00:00-12:00)	18,303	28,948	47,251
PM 6-HR PERIOD (12:00-18:00)	23,073	19,647	42,720
PM 12-HR PERIOD (12:00-24:00)	36,574	28,100	64,674
24 HOUR PERIOD	54,877	57,048	111,925
D (%)	49.03	50.97	100.00

ISLAND: OAHU
AREA: POAMOHO CAMP



Station No:	B72 0080 00110

Station Location:			
Kamehameha Highway between Whitmore Avenue and Kaukonahua Road at fire hydrant on the right side of roadway			
Station Mileage:	1.44	GPS Coord (Latitude):	21.50889 N
		GPS Coord (Longitude):	158.03728 W
Begin Survey (Date/Time):	2-8-12 0000	End Survey (Date/Time):	2-10-12 0000
Survey Method: LOOP **HOSE** OTHER		Survey Type: VOL **CLASS** SPEED OTHER	
Survey Crew:	CA, EP, LT, RG	Module No.:	

HPMS DATA

Segment Description:

KAMEHAMEHA HIGHWAY - WHITMORE AVENUE TO KAMANAUI ROAD

Segment Begin LRS	1.10	Segment End LRS	1.88	Length	0.78

Facility Name	Juris	Func Class	Area Type	Route No.	Route Mile		D-1 = Direction to End of Route D-2 = Direction to Beginning of Route
KAMEHAMEHA HIGHWAY	S	14	4	80	1.44	D-1	TO KAMANANUI ROAD
						D-2	TO WILSON BRIDGE

Sketch By: EPJ Date: 1/10/2012 SLD: 2009

Run Date: 2013/03/05

Hawaii Department of Transportation
Highways Division — Highways Planning Survey Section
2012 Program Count - Summary

Site ID: B72008000110 **Town:** Oahu **DIR 1:** +MP **DIR 2:** -MP **Final AADT:** 13800
Functional Class: URBAN:PRINCIPAL ARTERIAL - OTHER **Count Type:** CLASS **Counter Type:** Tube **Route No:** 80
Location: KAMEHAMEHA Hwy - WHITMORE Ave TO BEGI

TIME-AM	DIR 1	DIR 2	TOTAL	TIME-AM	DIR 1	DIR 2	TOTAL	TIME-PM	DIR 1	DIR 2	TOTAL	TIME-PM	DIR 1	DIR 2	TOTAL
DATE : 02/08/2012															
12:00-12:15	14	6	20	06:00-06:15	79	130	209	12:00-12:15	117	123	240	06:00-06:15	98	152	250
12:15-12:30	13	11	24	06:15-06:30	99	107	206	12:15-12:30	134	154	288	06:15-06:30	105	145	250
12:30-12:45	15	7	22	06:30-06:45	100	106	206	12:30-12:45	127	117	244	06:30-06:45	85	125	210
12:45-01:00	10	5	15	06:45-07:00	84	125	209	12:45-01:00	155	127	282	06:45-07:00	86	115	201
01:00-01:15	6	5	11	07:00-07:15	111	122	233	01:00-01:15	140	140	280	07:00-07:15	99	102	201
01:15-01:30	8	4	12	07:15-07:30	120	160	280	01:15-01:30	121	153	274	07:15-07:30	99	86	185
01:30-01:45	3	4	7	07:30-07:45	108	182	290	01:30-01:45	129	136	265	07:30-07:45	90	73	163
01:45-02:00	5	8	13	07:45-08:00	126	166	292	01:45-02:00	128	129	257	07:45-08:00	80	63	143
02:00-02:15	9	1	10	08:00-08:15	98	157	255	02:00-02:15	134	132	266	08:00-08:15	99	66	165
02:15-02:30	1	4	5	08:15-08:30	113	132	245	02:15-02:30	148	119	267	08:15-08:30	89	53	142
02:30-02:45	6	4	10	08:30-08:45	133	111	244	02:30-02:45	159	111	270	08:30-08:45	71	36	107
02:45-03:00	5	4	9	08:45-09:00	95	116	211	02:45-03:00	146	125	271	08:45-09:00	69	42	111
03:00-03:15	5	6	11	09:00-09:15	123	115	238	03:00-03:15	148	136	284	09:00-09:15	57	34	91
03:15-03:30	11	8	19	09:15-09:30	111	104	215	03:15-03:30	138	148	286	09:15-09:30	51	38	89
03:30-03:45	2	8	10	09:30-09:45	112	108	220	03:30-03:45	172	154	326	09:30-09:45	60	35	95
03:45-04:00	7	9	16	09:45-10:00	87	107	194	03:45-04:00	131	160	291	09:45-10:00	54	33	87
04:00-04:15	12	19	31	10:00-10:15	124	98	222	04:00-04:15	131	146	277	10:00-10:15	37	25	62
04:15-04:30	13	14	27	10:15-10:30	114	114	228	04:15-04:30	124	137	261	10:15-10:30	47	24	71
04:30-04:45	14	30	44	10:30-10:45	128	118	246	04:30-04:45	104	128	232	10:30-10:45	37	21	58
04:45-05:00	19	37	56	10:45-11:00	148	104	252	04:45-05:00	115	142	257	10:45-11:00	18	12	30
05:00-05:15	29	47	76	11:00-11:15	110	113	223	05:00-05:15	125	153	278	11:00-11:15	31	16	47
05:15-05:30	46	81	127	11:15-11:30	133	132	265	05:15-05:30	112	159	271	11:15-11:30	34	11	45
05:30-05:45	72	106	178	11:30-11:45	127	126	253	05:30-05:45	109	157	266	11:30-11:45	26	12	38
05:45-06:00	95	137	232	11:45-12:00	120	143	263	05:45-06:00	101	147	248	11:45-12:00	26	10	36

AM COMMUTER PERIOD (05:00-09:00)	DIR 1	DIR 2	
TWO DIRECTIONAL PEAK			
AM - PEAK HR TIME	07:15 AM to 08:15 AM		
AM - PEAK HR VOLUME	452	665	1117
AM - K FACTOR (%)			6.96
AM - D (%)	40.47	59.53	100.00
DIRECTIONAL PEAK			
AM - PEAK HR TIME	07:45 AM to 08:45 AM	07:15 AM to 08:15 AM	
AM - PEAK HR VOLUME	470	665	

PM COMMUTER PERIOD (15:00-19:00)	DIR 1	DIR 2	
TWO DIRECTIONAL PEAK			
PM - PEAK HR TIME	03:00 PM to 04:00 PM		
PM - PEAK HR VOLUME	589	598	1187
PM - K FACTOR (%)			7.40
PM - D (%)	49.62	50.38	100.00
DIRECTIONAL PEAK			
PM - PEAK HR TIME	03:00 PM to 04:00 PM	05:00 PM to 06:00 PM	
PM - PEAK HR VOLUME	589	616	

AM PERIOD (00:00-12:00)	DIR 1	DIR 2	
TWO DIRECTIONAL PEAK			
AM - PEAK HR TIME	07:15 AM to 08:15 AM		
AM - PEAK HR VOLUME	452	665	1117
AM - K FACTOR (%)			6.96
AM - D (%)	40.47	59.53	100.00

PM PERIOD (12:00-24:00)	DIR 1	DIR 2	
TWO DIRECTIONAL PEAK			
PM - PEAK HR TIME	03:00 PM to 04:00 PM		
PM - PEAK HR VOLUME	589	598	1187
PM - K FACTOR (%)			7.40
PM - D (%)	49.62	50.38	100.00

NON-COMMUTER PERIOD (09:00-15:00)	DIR 1	DIR 2	
TWO DIRECTIONAL PEAK			
PEAK HR TIME	12:45 PM to 01:45 PM		
PEAK HR VOLUME	545	556	1101
DIRECTIONAL PEAK			
PEAK HR TIME	02:00 PM to 03:00 PM	01:00 PM to 02:00 PM	
PEAK HR VOLUME	587	558	

6-HR, 12-HR, 24-HR PERIODS	DIR 1	DIR 2	Total
AM 6-HR PERIOD (06:00-12:00)	2,703	2,996	5,699
AM 12-HR PERIOD (00:00-12:00)	3,123	3,561	6,684
PM 6-HR PERIOD (12:00-18:00)	3,148	3,333	6,481
PM 12-HR PERIOD (12:00-24:00)	4,696	4,662	9,358
24 HOUR PERIOD	7,819	8,223	16,042
D (%)	48.74	51.26	100.00

Run Date: 2013/03/05

Hawaii Department of Transportation
Highways Division — Highways Planning Survey Section
2012 Program Count - Summary

Site ID: B72008000110 **Town:** Oahu **DIR 1:** +MP **DIR 2:** -MP **Final AADT:** 13800
Functional Class: URBAN:PRINCIPAL ARTERIAL - OTHER **Count Type:** CLASS **Counter Type:** Tube **Route No:** 80
Location: KAMEHAMEHA Hwy - WHITMORE Ave TO BEGI

TIME-AM	DIR 1	DIR 2	TOTAL	TIME-AM	DIR 1	DIR 2	TOTAL	TIME-PM	DIR 1	DIR 2	TOTAL	TIME-PM	DIR 1	DIR 2	TOTAL
DATE : 02/09/2012															
12:00-12:15	14	8	22	06:00-06:15	91	117	208	12:00-12:15	118	141	259	06:00-06:15	122	103	225
12:15-12:30	21	14	35	06:15-06:30	82	114	196	12:15-12:30	136	111	247	06:15-06:30	97	126	223
12:30-12:45	5	8	13	06:30-06:45	104	125	229	12:30-12:45	116	108	224	06:30-06:45	93	111	204
12:45-01:00	13	3	16	06:45-07:00	98	116	214	12:45-01:00	104	110	214	06:45-07:00	75	135	210
01:00-01:15	13	1	14	07:00-07:15	121	128	249	01:00-01:15	118	104	222	07:00-07:15	97	90	187
01:15-01:30	8	8	16	07:15-07:30	113	165	278	01:15-01:30	115	106	221	07:15-07:30	98	95	193
01:30-01:45	6	4	10	07:30-07:45	114	183	297	01:30-01:45	106	134	240	07:30-07:45	85	62	147
01:45-02:00	5	9	14	07:45-08:00	141	178	319	01:45-02:00	115	139	254	07:45-08:00	79	68	147
02:00-02:15	2	7	9	08:00-08:15	96	140	236	02:00-02:15	117	116	233	08:00-08:15	84	64	148
02:15-02:30	6	4	10	08:15-08:30	105	117	222	02:15-02:30	113	154	267	08:15-08:30	71	47	118
02:30-02:45	5	8	13	08:30-08:45	109	125	234	02:30-02:45	164	149	313	08:30-08:45	61	36	97
02:45-03:00	3	3	6	08:45-09:00	86	112	198	02:45-03:00	138	144	282	08:45-09:00	57	37	94
03:00-03:15	5	4	9	09:00-09:15	101	104	205	03:00-03:15	125	157	282	09:00-09:15	79	40	119
03:15-03:30	13	10	23	09:15-09:30	119	104	223	03:15-03:30	142	155	297	09:15-09:30	82	50	132
03:30-03:45	8	10	18	09:30-09:45	105	96	201	03:30-03:45	188	196	384	09:30-09:45	57	34	91
03:45-04:00	6	5	11	09:45-10:00	112	109	221	03:45-04:00	135	167	302	09:45-10:00	50	36	86
04:00-04:15	6	14	20	10:00-10:15	113	93	206	04:00-04:15	149	168	317	10:00-10:15	50	30	80
04:15-04:30	10	19	29	10:15-10:30	110	104	214	04:15-04:30	126	168	294	10:15-10:30	43	31	74
04:30-04:45	22	24	46	10:30-10:45	122	120	242	04:30-04:45	129	167	296	10:30-10:45	23	26	49
04:45-05:00	26	32	58	10:45-11:00	107	108	215	04:45-05:00	100	153	253	10:45-11:00	31	16	47
05:00-05:15	24	48	72	11:00-11:15	117	125	242	05:00-05:15	105	156	261	11:00-11:15	31	15	46
05:15-05:30	42	74	116	11:15-11:30	146	103	249	05:15-05:30	135	153	288	11:15-11:30	38	10	48
05:30-05:45	55	85	140	11:30-11:45	110	130	240	05:30-05:45	133	143	276	11:30-11:45	23	17	40
05:45-06:00	94	151	245	11:45-12:00	150	96	246	05:45-06:00	110	139	249	11:45-12:00	23	20	43

AM COMMUTER PERIOD (05:00-09:00)	DIR 1	DIR 2	
TWO DIRECTIONAL PEAK			
AM - PEAK HR TIME	07:00 AM to 08:00 AM		
AM - PEAK HR VOLUME	489	654	1143
AM - K FACTOR (%)			7.20
AM - D (%)	42.78	57.22	100.00
DIRECTIONAL PEAK			
AM - PEAK HR TIME	07:00 AM to 08:00 AM	07:15 AM to 08:15 AM	
AM - PEAK HR VOLUME	489	666	

PM COMMUTER PERIOD (15:00-19:00)	DIR 1	DIR 2	
TWO DIRECTIONAL PEAK			
PM - PEAK HR TIME	03:15 PM to 04:15 PM		
PM - PEAK HR VOLUME	614	686	1300
PM - K FACTOR (%)			8.19
PM - D (%)	47.23	52.77	100.00
DIRECTIONAL PEAK			
PM - PEAK HR TIME	03:15 PM to 04:15 PM	03:30 PM to 04:30 PM	
PM - PEAK HR VOLUME	614	699	

AM PERIOD (00:00-12:00)			
TWO DIRECTIONAL PEAK			
AM - PEAK HR TIME	07:00 AM to 08:00 AM		
AM - PEAK HR VOLUME	489	654	1143
AM - K FACTOR (%)			7.20
AM - D (%)	42.78	57.22	100.00

PM PERIOD (12:00-24:00)			
TWO DIRECTIONAL PEAK			
PM - PEAK HR TIME	03:15 PM to 04:15 PM		
PM - PEAK HR VOLUME	614	686	1300
PM - K FACTOR (%)			8.19
PM - D (%)	47.23	52.77	100.00

NON-COMMUTER PERIOD (09:00-15:00)			
TWO DIRECTIONAL PEAK			
PEAK HR TIME	02:00 PM to 03:00 PM		
PEAK HR VOLUME	532	563	1095
DIRECTIONAL PEAK			
PEAK HR TIME	02:00 PM to 03:00 PM	02:00 PM to 03:00 PM	
PEAK HR VOLUME	532	563	

6-HR, 12-HR, 24-HR PERIODS	DIR 1	DIR 2	Total
AM 6-HR PERIOD (06:00-12:00)	2,672	2,912	5,584
AM 12-HR PERIOD (00:00-12:00)	3,084	3,465	6,549
PM 6-HR PERIOD (12:00-18:00)	3,037	3,438	6,475
PM 12-HR PERIOD (12:00-24:00)	4,586	4,737	9,323
24 HOUR PERIOD	7,670	8,202	15,872
D (%)	48.32	51.68	100.00

Run Date: 2013/03/05

Hawaii Department of Transportation
Highways Division
Highways Planning Survey Section

Vehicle Classification Data Summary
2012

Site ID:	**B72008000110**	**Route No:**	**80**	**Date From:**	2012/02/08 0:00
Town:	**Oahu**	**Direction:**	+MP	**Date To:**	2012/02/09 23:45
Location:	**KAMEHAMEHA Hwy - WHITMORE Ave TO BEGI**				

Functional Classification: 14 URBAN:PRINCIPAL ARTERIAL - OTHER

REPORT TOTALS - 48 HOURS RECORDED

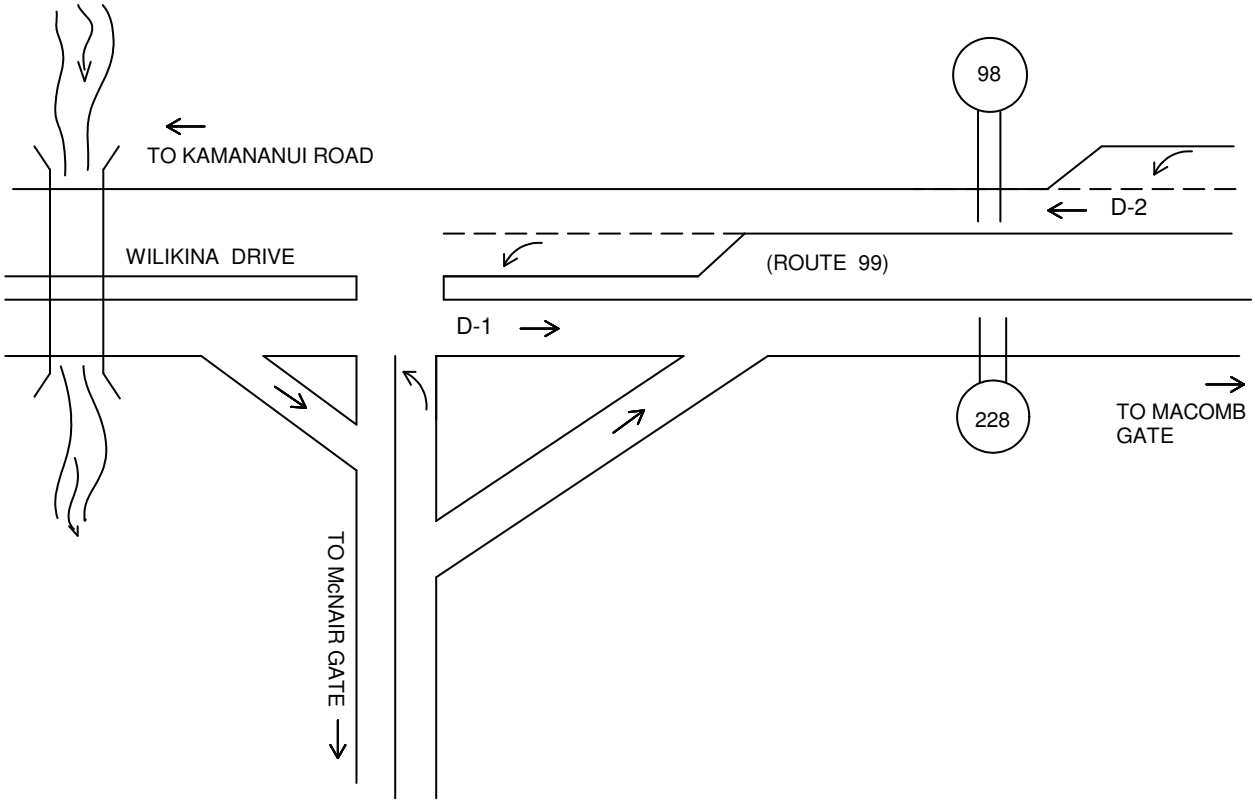
	VOLUME	%	NUMBER OF AXLES
Cycles	115	0.36%	230
PC	23018	72.12%	46036
2A-4T	6586	20.64%	13172
LIGHT VEHICLE TOTALS	29719	93.12%	59438
	HEAVY VEHICLES		
Bus	975	3.06%	2438
SINGLE UNIT TRUCK			
2A-6T	995	3.12%	1990
3A-SU	90	0.28%	270
4A-SU	4	0.01%	16
SINGLE-TRAILER TRUCKS			
4A-ST	51	0.16%	204
5A-ST	52	0.16%	260
6A-ST	25	0.08%	150
MULTI-TRAILER TRUCKS			
5A-MT	0	0.00%	0
6A-MT	0	0.00%	0
7A-MT	3	0.01%	21
HEAVY VEHICLE TOTALS	2196	6.88%	5349
CLASSIFIED VEHICLES TOTALS	31915 (A)	100.00%	64787 (B)
UNCLASSIFIED VEHICLES TOTALS	-1	-0.00%	

AXLE CORRECTION FACTOR (A/C) = 0.985

ROADTUBE EQUIVALENT(B/2) = 32393 (C)

PEAK HOUR VOLUME : 1265 2012/02/09 15:00	**PEAK HOUR TRUCK VOLUME**	**% TOTAL PEAK HOUR VOLUME**	**24 HOUR TRUCK VOLUME**	**AADT**	**% OF AADT**	**HPMS K-FACTOR (PEAK/AADT) (ITEM 66)**
SINGLE UNIT TRUCKS (TYPE 4-7)	**112**	**(65A-1) 9.13%**	**1004**	**13800**	**(65A-2) 7.28%**	**9.17%**
COMBINATION (TYPE 8-13)	**1**	**(65B-1) 0.08%**	**64**		**(65B-2) 0.46%**	**9.17%**

ISLAND: OAHU
AREA: SCHOFIELD



Station No:	B72 0099 00770

Station Location:			
Wilikina Drive between McNair Gate and Macomb Gate at one lane each direction			
Station Mileage:	8.04	GPS Coord (Latitude):	21.49712 N
		GPS Coord (Longitude):	158.05117 W
Begin Survey (Date/Time):	2-15-12 0000	End Survey (Date/Time):	2-17-12 0000
Survey Method: LOOP **HOSE** OTHER		Survey Type: VOL **CLASS** SPEED OTHER	
Survey Crew:	CA, EP, CO, RG LT	Module No.:	

HPMS DATA

Segment Description:

WILIKINA DRIVE TO MCCOMB RD GATE

Segment Begin LRS	7.70	Segment End LRS	8.36	Length	0.66

Facility Name	Juris	Func Class	Area Type	Route No.	Route Mile		D-1 = Direction to End of Route D-2 = Direction to Beginning of Route
WILIKINA DRIVE	S	2	1	99	8.04	D-1	TO PEARL HARBOR I. C.
						D-2	TO JOSEPH P. LEONG HWY

Sketch By: COII Date: 1/25/2012 SLD: 2003

Run Date: 2013/03/08

Hawaii Department of Transportation
Highways Division — Highways Planning Survey Section
2012 Program Count - Summary

Site ID: B72009900770 **Town:** Oahu **DIR 1:** +MP **DIR 2:** -MP **Final AADT:** 20600
Functional Class: RURAL:PRINCIPAL ARTERIAL - OTHER **Count Type:** CLASS **Counter Type:** Tube **Route No:** 99
Location: WILIKINA DRIVE - KAMANANUI ROAD TO begin

TIME-AM	DIR 1	DIR 2	TOTAL	TIME-AM	DIR 1	DIR 2	TOTAL	TIME-PM	DIR 1	DIR 2	TOTAL	TIME-PM	DIR 1	DIR 2	TOTAL
DATE : 02/15/2012															
12:00-12:15	6	18	24	06:00-06:15	125	88	213	12:00-12:15	200	206	406	06:00-06:15	193	168	361
12:15-12:30	13	15	28	06:15-06:30	139	99	238	12:15-12:30	206	177	383	06:15-06:30	176	164	340
12:30-12:45	2	8	10	06:30-06:45	144	130	274	12:30-12:45	228	203	431	06:30-06:45	159	175	334
12:45-01:00	4	11	15	06:45-07:00	148	160	308	12:45-01:00	195	177	372	06:45-07:00	124	154	278
01:00-01:15	5	10	15	07:00-07:15	170	165	335	01:00-01:15	212	204	416	07:00-07:15	146	131	277
01:15-01:30	6	12	18	07:15-07:30	148	173	321	01:15-01:30	276	161	437	07:15-07:30	102	123	225
01:30-01:45	6	4	10	07:30-07:45	202	164	366	01:30-01:45	218	168	386	07:30-07:45	78	99	177
01:45-02:00	2	4	6	07:45-08:00	180	124	304	01:45-02:00	208	173	381	07:45-08:00	57	71	128
02:00-02:15	5	5	10	08:00-08:15	178	158	336	02:00-02:15	230	167	397	08:00-08:15	59	79	138
02:15-02:30	9	5	14	08:15-08:30	164	170	334	02:15-02:30	232	184	416	08:15-08:30	46	73	119
02:30-02:45	8	10	18	08:30-08:45	153	154	307	02:30-02:45	227	147	374	08:30-08:45	47	55	102
02:45-03:00	6	5	11	08:45-09:00	156	168	324	02:45-03:00	225	175	400	08:45-09:00	30	43	73
03:00-03:15	8	6	14	09:00-09:15	150	144	294	03:00-03:15	248	178	426	09:00-09:15	31	58	89
03:15-03:30	11	3	14	09:15-09:30	165	157	322	03:15-03:30	231	202	433	09:15-09:30	45	59	104
03:30-03:45	16	4	20	09:30-09:45	147	137	284	03:30-03:45	209	187	396	09:30-09:45	25	60	85
03:45-04:00	23	2	25	09:45-10:00	161	147	308	03:45-04:00	235	206	441	09:45-10:00	45	52	97
04:00-04:15	15	4	19	10:00-10:15	128	132	260	04:00-04:15	276	201	477	10:00-10:15	25	42	67
04:15-04:30	23	6	29	10:15-10:30	147	159	306	04:15-04:30	256	193	449	10:15-10:30	41	43	84
04:30-04:45	45	11	56	10:30-10:45	150	165	315	04:30-04:45	252	188	440	10:30-10:45	14	41	55
04:45-05:00	58	12	70	10:45-11:00	149	146	295	04:45-05:00	263	211	474	10:45-11:00	10	24	34
05:00-05:15	100	34	134	11:00-11:15	137	161	298	05:00-05:15	260	194	454	11:00-11:15	14	27	41
05:15-05:30	166	74	240	11:15-11:30	157	147	304	05:15-05:30	276	199	475	11:15-11:30	14	27	41
05:30-05:45	149	121	270	11:30-11:45	208	185	393	05:30-05:45	251	178	429	11:30-11:45	11	21	32
05:45-06:00	115	93	208	11:45-12:00	187	179	366	05:45-06:00	210	168	378	11:45-12:00	12	20	32

AM COMMUTER PERIOD (05:00-09:00)	DIR 1	DIR 2	
TWO DIRECTIONAL PEAK			
AM - PEAK HR TIME	07:30 AM to 08:30 AM		
AM - PEAK HR VOLUME	724	616	1340
AM - K FACTOR (%)			6.07
AM - D (%)	54.03	45.97	100.00
DIRECTIONAL PEAK			
AM - PEAK HR TIME	07:30 AM to 08:30 AM	06:45 AM to 07:45 AM	
AM - PEAK HR VOLUME	724	662	

PM COMMUTER PERIOD (15:00-19:00)	DIR 1	DIR 2	
TWO DIRECTIONAL PEAK			
PM - PEAK HR TIME	04:30 PM to 05:30 PM		
PM - PEAK HR VOLUME	1051	792	1843
PM - K FACTOR (%)			8.35
PM - D (%)	57.03	42.97	100.00
DIRECTIONAL PEAK			
PM - PEAK HR TIME	04:30 PM to 05:30 PM	03:15 PM to 04:15 PM	
PM - PEAK HR VOLUME	1051	796	

AM PERIOD (00:00-12:00)			
TWO DIRECTIONAL PEAK			
AM - PEAK HR TIME	11:00 AM to 12:00 PM		
AM - PEAK HR VOLUME	689	672	1361
AM - K FACTOR (%)			6.17
AM - D (%)	50.62	49.38	100.00

PM PERIOD (12:00-24:00)			
TWO DIRECTIONAL PEAK			
PM - PEAK HR TIME	04:30 PM to 05:30 PM		
PM - PEAK HR VOLUME	1051	792	1843
PM - K FACTOR (%)			8.35
PM - D (%)	57.03	42.97	100.00

NON-COMMUTER PERIOD (09:00-15:00)			
TWO DIRECTIONAL PEAK			
PEAK HR TIME	12:30 PM to 01:30 PM		
PEAK HR VOLUME	911	745	1656
DIRECTIONAL PEAK			
PEAK HR TIME	01:15 PM to 02:15 PM	11:45 AM to 12:45 PM	
PEAK HR VOLUME	932	765	

6-HR, 12-HR, 24-HR PERIODS	DIR 1	DIR 2	Total
AM 6-HR PERIOD (06:00-12:00)	3,793	3,612	7,405
AM 12-HR PERIOD (00:00-12:00)	4,594	4,089	8,683
PM 6-HR PERIOD (12:00-18:00)	5,624	4,447	10,071
PM 12-HR PERIOD (12:00-24:00)	7,128	6,256	13,384
24 HOUR PERIOD	11,722	10,345	22,067
D (%)	53.12	46.88	100.00

Run Date: 2013/03/08

Hawaii Department of Transportation
Highways Division — Highways Planning Survey Section
2012 Program Count - Summary

Site ID: B72009900770 **Town:** Oahu **DIR 1:** +MP **DIR 2:** -MP **Final AADT:** 20600
Functional Class: RURAL:PRINCIPAL ARTERIAL - OTHER **Count Type:** CLASS **Counter Type:** Tube **Route No:** 99
Location: WILIKINA DRIVE - KAMANANUI ROAD TO begin

TIME-AM	DIR 1	DIR 2	TOTAL	TIME-AM	DIR 1	DIR 2	TOTAL	TIME-PM	DIR 1	DIR 2	TOTAL	TIME-PM	DIR 1	DIR 2	TOTAL
DATE : 02/16/2012															
12:00-12:15	7	20	27	06:00-06:15	134	107	241	12:00-12:15	231	182	413	06:00-06:15	163	169	332
12:15-12:30	9	12	21	06:15-06:30	106	126	232	12:15-12:30	232	201	433	06:15-06:30	149	179	328
12:30-12:45	10	14	24	06:30-06:45	140	147	287	12:30-12:45	191	198	389	06:30-06:45	154	156	310
12:45-01:00	8	7	15	06:45-07:00	118	165	283	12:45-01:00	204	93	297	06:45-07:00	133	124	257
01:00-01:15	2	2	4	07:00-07:15	163	167	330	01:00-01:15	210	152	362	07:00-07:15	133	99	232
01:15-01:30	3	7	10	07:15-07:30	165	196	361	01:15-01:30	186	171	357	07:15-07:30	108	107	215
01:30-01:45	5	7	12	07:30-07:45	157	202	359	01:30-01:45	168	174	342	07:30-07:45	74	88	162
01:45-02:00	4	3	7	07:45-08:00	159	173	332	01:45-02:00	178	174	352	07:45-08:00	82	82	164
02:00-02:15	2	2	4	08:00-08:15	174	189	363	02:00-02:15	170	162	332	08:00-08:15	53	86	139
02:15-02:30	5	5	10	08:15-08:30	165	167	332	02:15-02:30	215	165	380	08:15-08:30	63	77	140
02:30-02:45	6	6	12	08:30-08:45	162	145	307	02:30-02:45	264	174	438	08:30-08:45	38	74	112
02:45-03:00	6	2	8	08:45-09:00	150	138	288	02:45-03:00	256	205	461	08:45-09:00	34	58	92
03:00-03:15	4	1	5	09:00-09:15	132	143	275	03:00-03:15	291	212	503	09:00-09:15	32	89	121
03:15-03:30	5	3	8	09:15-09:30	154	153	307	03:15-03:30	267	203	470	09:15-09:30	45	61	106
03:30-03:45	12	5	17	09:30-09:45	154	149	303	03:30-03:45	254	178	432	09:30-09:45	37	51	88
03:45-04:00	12	2	14	09:45-10:00	148	151	299	03:45-04:00	286	216	502	09:45-10:00	37	58	95
04:00-04:15	22	3	25	10:00-10:15	169	143	312	04:00-04:15	273	163	436	10:00-10:15	42	60	102
04:15-04:30	27	13	40	10:15-10:30	154	141	295	04:15-04:30	304	181	485	10:15-10:30	25	42	67
04:30-04:45	56	17	73	10:30-10:45	189	165	354	04:30-04:45	284	220	504	10:30-10:45	23	36	59
04:45-05:00	76	13	89	10:45-11:00	178	162	340	04:45-05:00	274	226	500	10:45-11:00	11	46	57
05:00-05:15	89	37	126	11:00-11:15	179	164	343	05:00-05:15	237	203	440	11:00-11:15	10	31	41
05:15-05:30	140	69	209	11:15-11:30	188	160	348	05:15-05:30	169	196	365	11:15-11:30	14	27	41
05:30-05:45	139	106	245	11:30-11:45	237	165	402	05:30-05:45	179	181	360	11:30-11:45	18	23	41
05:45-06:00	131	126	257	11:45-12:00	225	186	411	05:45-06:00	181	176	357	11:45-12:00	9	24	33

AM COMMUTER PERIOD (05:00-09:00)	DIR 1	DIR 2	
TWO DIRECTIONAL PEAK			
AM - PEAK HR TIME	07:15 AM to 08:15 AM		
AM - PEAK HR VOLUME	655	760	1415
AM - K FACTOR (%)			6.37
AM - D (%)	46.29	53.71	100.00
DIRECTIONAL PEAK			
AM - PEAK HR TIME	07:45 AM to 08:45 AM	07:15 AM to 08:15 AM	
AM - PEAK HR VOLUME	660	760	

PM COMMUTER PERIOD (15:00-19:00)	DIR 1	DIR 2	
TWO DIRECTIONAL PEAK			
PM - PEAK HR TIME	04:15 PM to 05:15 PM		
PM - PEAK HR VOLUME	1099	830	1929
PM - K FACTOR (%)			8.69
PM - D (%)	56.97	43.03	100.00
DIRECTIONAL PEAK			
PM - PEAK HR TIME	03:45 PM to 04:45 PM	04:30 PM to 05:30 PM	
PM - PEAK HR VOLUME	1147	845	

AM PERIOD (00:00-12:00)			
TWO DIRECTIONAL PEAK			
AM - PEAK HR TIME	11:00 AM to 12:00 PM		
AM - PEAK HR VOLUME	829	675	1504
AM - K FACTOR (%)			6.77
AM - D (%)	55.12	44.88	100.00

PM PERIOD (12:00-24:00)			
TWO DIRECTIONAL PEAK			
PM - PEAK HR TIME	04:15 PM to 05:15 PM		
PM - PEAK HR VOLUME	1099	830	1929
PM - K FACTOR (%)			8.69
PM - D (%)	56.97	43.03	100.00

NON-COMMUTER PERIOD (09:00-15:00)			
TWO DIRECTIONAL PEAK			
PEAK HR TIME	11:30 AM to 12:30 PM		
PEAK HR VOLUME	925	734	1659
DIRECTIONAL PEAK			
PEAK HR TIME	11:30 AM to 12:30 PM	11:45 AM to 12:45 PM	
PEAK HR VOLUME	925	767	

6-HR, 12-HR, 24-HR PERIODS	DIR 1	DIR 2	Total
AM 6-HR PERIOD (06:00-12:00)	3,900	3,804	7,704
AM 12-HR PERIOD (00:00-12:00)	4,680	4,286	8,966
PM 6-HR PERIOD (12:00-18:00)	5,504	4,406	9,910
PM 12-HR PERIOD (12:00-24:00)	6,991	6,253	13,244
24 HOUR PERIOD	11,671	10,539	22,210
D (%)	52.55	47.45	100.00

Run Date: 2013/03/08

Hawaii Department of Transportation
Highways Division
Highways Planning Survey Section

Vehicle Classification Data Summary
2012

Site ID:	**B72009900770**	**Route No:**	**99**	**Date From:**	2012/02/15 0:00
Town:	**Oahu**	**Direction:**	+MP	**Date To:**	2012/02/16 23:45
Location:	**WILIKINA DRIVE - KAMANANUI ROAD TO begin**				

Functional Classification: 2 RURAL:PRINCIPAL ARTERIAL - OTHER

REPORT TOTALS - 48 HOURS RECORDED

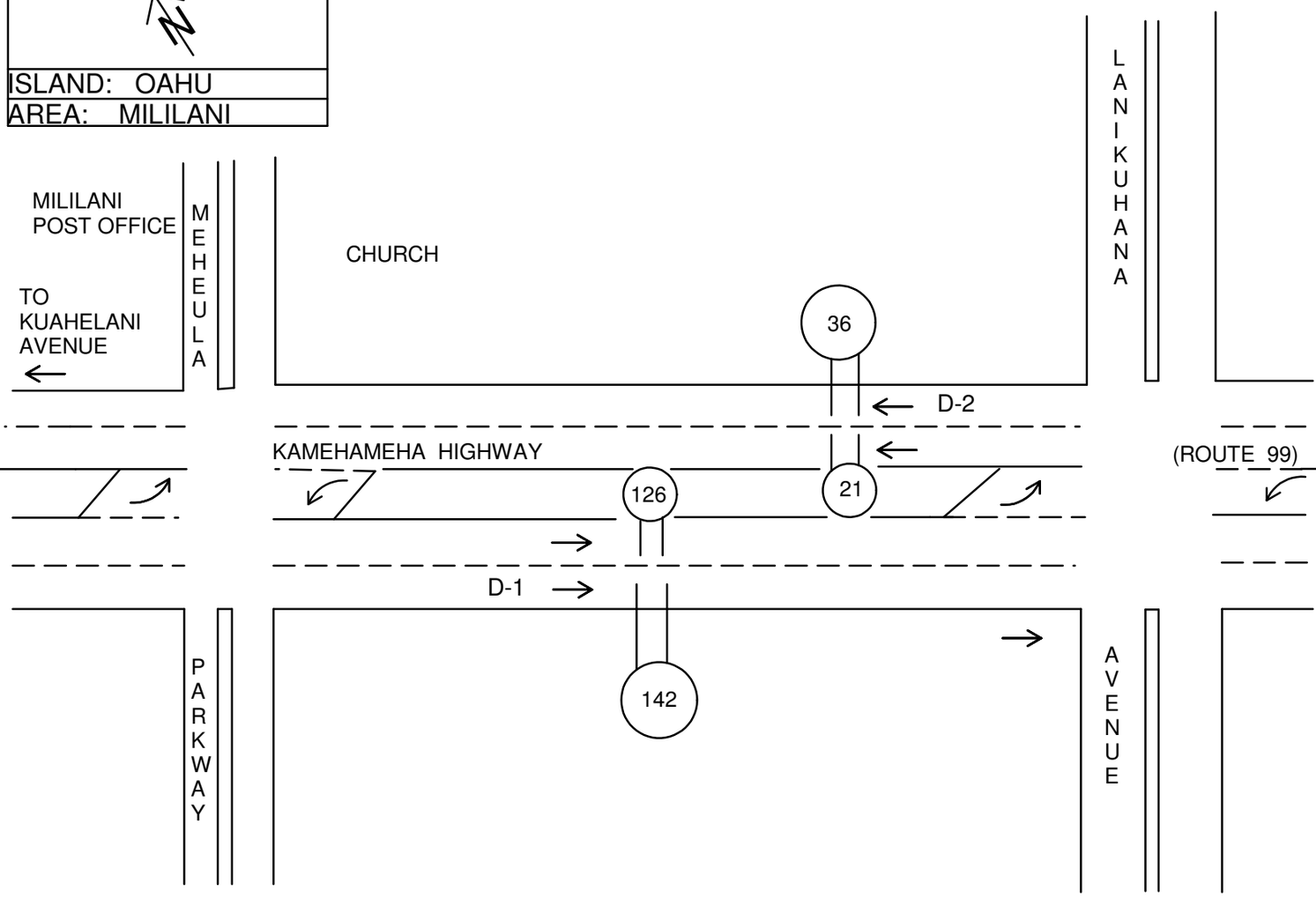
	VOLUME	%	NUMBER OF AXLES
Cycles	1041	2.35%	2081
PC	41420	93.55%	82839
2A-4T	810	1.83%	1621
LIGHT VEHICLE TOTALS	43270	97.73%	86541
	HEAVY VEHICLES		
Bus	19	0.04%	46
SINGLE UNIT TRUCK			
2A-6T	223	0.50%	446
3A-SU	226	0.51%	678
4A-SU	26	0.06%	104
SINGLE-TRAILER TRUCKS			
4A-ST	181	0.41%	724
5A-ST	221	0.50%	1105
6A-ST	47	0.11%	282
MULTI-TRAILER TRUCKS			
5A-MT	1	0.00%	5
6A-MT	0	0.00%	0
7A-MT	63	0.14%	441
HEAVY VEHICLE TOTALS	1006	2.27%	3831
CLASSIFIED VEHICLES TOTALS	44277 (A)	100.00%	90372 (B)
UNCLASSIFIED VEHICLES TOTALS	0	0.00%	

AXLE CORRECTION FACTOR (A/C) = 0.980

ROADTUBE EQUIVALENT(B/2) = 45186 (C)

PEAK HOUR VOLUME : 1925 2012/02/16 16:00	**PEAK HOUR TRUCK VOLUME**	**% TOTAL PEAK HOUR VOLUME**	**24 HOUR TRUCK VOLUME**	**AADT**	**% OF AADT**	**HPMS K-FACTOR (PEAK/AADT) (ITEM 66)**
SINGLE UNIT TRUCKS (TYPE 4-7)	**13**	**(65A-1) 0.69%**	**239**	**20600**	**(65A-2) 1.16%**	**9.34%**
COMBINATION (TYPE 8-13)	**14**	**(65B-1) 0.74%**	**248**		**(65B-2) 1.20%**	**9.34%**

ISLAND: OAHU
AREA: MILILANI



Station No:	B72 0099 01271

Station Location:			
Kamehameha Highway between Meheula Parkway and Lanikuhana Avenue			
Station Mileage:	12.97	GPS Coord (Latitude):	21.44749 N
		GPS Coord (Longitude):	158.01467 W
Begin Survey (Date/Time):	2-28-12 0000	End Survey (Date/Time):	3-1-12 0000
Survey Method:	LOOP **HOSE** OTHER	Survey Type:	VOL **CLASS** SPEED OTHER
Survey Crew:	CO, LT, RG	Module No.:	

HPMS DATA

Segment Description:

KAMEHAMEHA HIGHWAY - MEHEULA PARKWAY TO LANIKUHANA AVENUE (ADT CHANGE)

Segment Begin LRS	12.71	Segment End LRS	13.23	Length	0.52

Facility Name	Juris	Func Class	Area Type	Route No.	Route Mile		D-1 = Direction to End of Route D-2 = Direction to Beginning of Route
KAMEHAMEHA HIGHWAY	S	12	4	99	12.97	D-1	TO PEARL HARBOR I. C.
						D-2	TO JOSEPH P. LEONG HWY

Sketch By: COII Date: 1/25/2012 SLD: 2003

Run Date: 2013/03/11

Hawaii Department of Transportation
Highways Division — Highways Planning Survey Section
2012 Program Count - Summary

Site ID: B72009901271 **Town:** Oahu **DIR 1:** +MP **DIR 2:** -MP **Final AADT:** 12300
Functional Class: URBAN:PRINCIPAL ARTERIAL - O.F.E. **Count Type:** CLASS **Counter Type:** Tube **Route No:** 99
Location: KAM Hwy - MEHEULA PARKWAY TO LANIKUHANA

TIME-AM	DIR 1	DIR 2	TOTAL	TIME-AM	DIR 1	DIR 2	TOTAL	TIME-PM	DIR 1	DIR 2	TOTAL	TIME-PM	DIR 1	DIR 2	TOTAL
DATE : 02/28/2012															
12:00-12:15	12	8	20	06:00-06:15	66	58	124	12:00-12:15	100	102	202	06:00-06:15	90	140	230
12:15-12:30	11	6	17	06:15-06:30	51	56	107	12:15-12:30	82	89	171	06:15-06:30	94	114	208
12:30-12:45	2	7	9	06:30-06:45	59	76	135	12:30-12:45	101	103	204	06:30-06:45	73	101	174
12:45-01:00	7	8	15	06:45-07:00	72	98	170	12:45-01:00	95	99	194	06:45-07:00	72	106	178
01:00-01:15	12	13	25	07:00-07:15	84	114	198	01:00-01:15	67	93	160	07:00-07:15	74	105	179
01:15-01:30	10	4	14	07:15-07:30	116	117	233	01:15-01:30	67	107	174	07:15-07:30	66	91	157
01:30-01:45	5	6	11	07:30-07:45	94	133	227	01:30-01:45	94	119	213	07:30-07:45	62	89	151
01:45-02:00	2	4	6	07:45-08:00	100	158	258	01:45-02:00	72	103	175	07:45-08:00	60	94	154
02:00-02:15	3	8	11	08:00-08:15	98	82	180	02:00-02:15	114	103	217	08:00-08:15	51	89	140
02:15-02:30	1	2	3	08:15-08:30	71	77	148	02:15-02:30	119	119	238	08:15-08:30	51	57	108
02:30-02:45	4	4	8	08:30-08:45	76	84	160	02:30-02:45	125	123	248	08:30-08:45	31	51	82
02:45-03:00	2	7	9	08:45-09:00	64	96	160	02:45-03:00	125	146	271	08:45-09:00	41	66	107
03:00-03:15	4	3	7	09:00-09:15	58	75	133	03:00-03:15	96	132	228	09:00-09:15	47	54	101
03:15-03:30	10	4	14	09:15-09:30	61	77	138	03:15-03:30	112	123	235	09:15-09:30	41	43	84
03:30-03:45	1	6	7	09:30-09:45	92	73	165	03:30-03:45	124	136	260	09:30-09:45	46	39	85
03:45-04:00	5	6	11	09:45-10:00	78	67	145	03:45-04:00	111	142	253	09:45-10:00	27	39	66
04:00-04:15	10	7	17	10:00-10:15	79	81	160	04:00-04:15	114	119	233	10:00-10:15	25	41	66
04:15-04:30	9	14	23	10:15-10:30	95	74	169	04:15-04:30	127	150	277	10:15-10:30	18	31	49
04:30-04:45	12	14	26	10:30-10:45	106	103	209	04:30-04:45	96	167	263	10:30-10:45	24	22	46
04:45-05:00	22	18	40	10:45-11:00	88	70	158	04:45-05:00	113	169	282	10:45-11:00	15	29	44
05:00-05:15	39	23	62	11:00-11:15	86	93	179	05:00-05:15	118	146	264	11:00-11:15	16	20	36
05:15-05:30	35	33	68	11:15-11:30	110	78	188	05:15-05:30	117	155	272	11:15-11:30	15	23	38
05:30-05:45	58	41	99	11:30-11:45	95	81	176	05:30-05:45	108	125	233	11:30-11:45	11	19	30
05:45-06:00	44	40	84	11:45-12:00	98	92	190	05:45-06:00	106	133	239	11:45-12:00	9	16	25

AM COMMUTER PERIOD (05:00-09:00)	DIR 1	DIR 2	
TWO DIRECTIONAL PEAK			
AM - PEAK HR TIME	07:00 AM to 08:00 AM		
AM - PEAK HR VOLUME	394	522	916
AM - K FACTOR (%)			7.18
AM - D (%)	43.01	56.99	100.00
DIRECTIONAL PEAK			
AM - PEAK HR TIME	07:15 AM to 08:15 AM	07:00 AM to 08:00 AM	
AM - PEAK HR VOLUME	408	522	

PM COMMUTER PERIOD (15:00-19:00)	DIR 1	DIR 2	
TWO DIRECTIONAL PEAK			
PM - PEAK HR TIME	04:15 PM to 05:15 PM		
PM - PEAK HR VOLUME	454	632	1086
PM - K FACTOR (%)			8.51
PM - D (%)	41.80	58.20	100.00
DIRECTIONAL PEAK			
PM - PEAK HR TIME	03:30 PM to 04:30 PM	04:30 PM to 05:30 PM	
PM - PEAK HR VOLUME	476	637	

AM PERIOD (00:00-12:00)			
TWO DIRECTIONAL PEAK			
AM - PEAK HR TIME	07:00 AM to 08:00 AM		
AM - PEAK HR VOLUME	394	522	916
AM - K FACTOR (%)			7.18
AM - D (%)	43.01	56.99	100.00

PM PERIOD (12:00-24:00)			
TWO DIRECTIONAL PEAK			
PM - PEAK HR TIME	04:15 PM to 05:15 PM		
PM - PEAK HR VOLUME	454	632	1086
PM - K FACTOR (%)			8.51
PM - D (%)	41.80	58.20	100.00

NON-COMMUTER PERIOD (09:00-15:00)			
TWO DIRECTIONAL PEAK			
PEAK HR TIME	02:00 PM to 03:00 PM		
PEAK HR VOLUME	483	491	974
DIRECTIONAL PEAK			
PEAK HR TIME	02:00 PM to 03:00 PM	02:00 PM to 03:00 PM	
PEAK HR VOLUME	483	491	

6-HR, 12-HR, 24-HR PERIODS	DIR 1	DIR 2	Total
AM 6-HR PERIOD (06:00-12:00)	1,997	2,113	4,110
AM 12-HR PERIOD (00:00-12:00)	2,317	2,399	4,716
PM 6-HR PERIOD (12:00-18:00)	2,503	3,003	5,506
PM 12-HR PERIOD (12:00-24:00)	3,562	4,482	8,044
24 HOUR PERIOD	5,879	6,881	12,760
D (%)	46.07	53.93	100.00

Run Date: 2013/03/11

Hawaii Department of Transportation
Highways Division — Highways Planning Survey Section
2012 Program Count - Summary

Site ID: B72009901271 **Town:** Oahu **DIR 1:** +MP **DIR 2:** -MP **Final AADT:** 12300
Functional Class: URBAN:PRINCIPAL ARTERIAL - O.F.E. **Count Type:** CLASS **Counter Type:** Tube **Route No:** 99
Location: KAM Hwy - MEHEULA PARKWAY TO LANIKUHANA

TIME-AM	DIR 1	DIR 2	TOTAL	TIME-AM	DIR 1	DIR 2	TOTAL	TIME-PM	DIR 1	DIR 2	TOTAL	TIME-PM	DIR 1	DIR 2	TOTAL
DATE : 02/29/2012															
12:00-12:15	9	10	19	06:00-06:15	74	47	121	12:00-12:15	81	96	177	06:00-06:15	84	128	212
12:15-12:30	10	9	19	06:15-06:30	64	63	127	12:15-12:30	90	108	198	06:15-06:30	110	145	255
12:30-12:45	9	11	20	06:30-06:45	63	73	136	12:30-12:45	89	142	231	06:30-06:45	89	129	218
12:45-01:00	4	4	8	06:45-07:00	57	91	148	12:45-01:00	113	125	238	06:45-07:00	93	116	209
01:00-01:15	7	6	13	07:00-07:15	73	98	171	01:00-01:15	118	118	236	07:00-07:15	78	111	189
01:15-01:30	9	9	18	07:15-07:30	110	110	220	01:15-01:30	101	97	198	07:15-07:30	67	89	156
01:30-01:45	3	14	17	07:30-07:45	91	143	234	01:30-01:45	102	95	197	07:30-07:45	61	79	140
01:45-02:00	0	5	5	07:45-08:00	101	163	264	01:45-02:00	102	107	209	07:45-08:00	53	65	118
02:00-02:15	6	5	11	08:00-08:15	92	109	201	02:00-02:15	84	112	196	08:00-08:15	58	75	133
02:15-02:30	6	7	13	08:15-08:30	76	89	165	02:15-02:30	89	102	191	08:15-08:30	62	87	149
02:30-02:45	5	4	9	08:30-08:45	64	81	145	02:30-02:45	103	140	243	08:30-08:45	67	79	146
02:45-03:00	3	5	8	08:45-09:00	70	74	144	02:45-03:00	101	134	235	08:45-09:00	40	57	97
03:00-03:15	3	3	6	09:00-09:15	71	76	147	03:00-03:15	108	144	252	09:00-09:15	43	69	112
03:15-03:30	11	5	16	09:15-09:30	86	71	157	03:15-03:30	86	155	241	09:15-09:30	37	50	87
03:30-03:45	7	8	15	09:30-09:45	83	69	152	03:30-03:45	125	127	252	09:30-09:45	32	51	83
03:45-04:00	4	3	7	09:45-10:00	77	80	157	03:45-04:00	122	134	256	09:45-10:00	30	51	81
04:00-04:15	7	9	16	10:00-10:15	89	73	162	04:00-04:15	116	125	241	10:00-10:15	32	48	80
04:15-04:30	16	14	30	10:15-10:30	84	78	162	04:15-04:30	117	136	253	10:15-10:30	22	48	70
04:30-04:45	14	13	27	10:30-10:45	85	86	171	04:30-04:45	136	127	263	10:30-10:45	23	32	55
04:45-05:00	23	16	39	10:45-11:00	80	84	164	04:45-05:00	139	174	313	10:45-11:00	22	24	46
05:00-05:15	24	22	46	11:00-11:15	84	94	178	05:00-05:15	113	150	263	11:00-11:15	15	14	29
05:15-05:30	44	28	72	11:15-11:30	80	84	164	05:15-05:30	97	144	241	11:15-11:30	20	12	32
05:30-05:45	40	42	82	11:30-11:45	86	84	170	05:30-05:45	107	159	266	11:30-11:45	17	18	35
05:45-06:00	58	48	106	11:45-12:00	86	93	179	05:45-06:00	82	129	211	11:45-12:00	10	16	26

AM COMMUTER PERIOD (05:00-09:00)	DIR 1	DIR 2	
TWO DIRECTIONAL PEAK			
AM - PEAK HR TIME	07:15 AM to 08:15 AM		
AM - PEAK HR VOLUME	394	525	919
AM - K FACTOR (%)			7.06
AM - D (%)	42.87	57.13	100.00
DIRECTIONAL PEAK			
AM - PEAK HR TIME	07:15 AM to 08:15 AM	07:15 AM to 08:15 AM	
AM - PEAK HR VOLUME	394	525	

PM COMMUTER PERIOD (15:00-19:00)	DIR 1	DIR 2	
TWO DIRECTIONAL PEAK			
PM - PEAK HR TIME	04:15 PM to 05:15 PM		
PM - PEAK HR VOLUME	505	587	1092
PM - K FACTOR (%)			8.39
PM - D (%)	46.25	53.75	100.00
DIRECTIONAL PEAK			
PM - PEAK HR TIME	04:00 PM to 05:00 PM	04:45 PM to 05:45 PM	
PM - PEAK HR VOLUME	508	627	

AM PERIOD (00:00-12:00)			
TWO DIRECTIONAL PEAK			
AM - PEAK HR TIME	07:15 AM to 08:15 AM		
AM - PEAK HR VOLUME	394	525	919
AM - K FACTOR (%)			7.06
AM - D (%)	42.87	57.13	100.00

PM PERIOD (12:00-24:00)			
TWO DIRECTIONAL PEAK			
PM - PEAK HR TIME	04:15 PM to 05:15 PM		
PM - PEAK HR VOLUME	505	587	1092
PM - K FACTOR (%)			8.39
PM - D (%)	46.25	53.75	100.00

NON-COMMUTER PERIOD (09:00-15:00)			
TWO DIRECTIONAL PEAK			
PEAK HR TIME	12:15 PM to 01:15 PM		
PEAK HR VOLUME	410	493	903
DIRECTIONAL PEAK			
PEAK HR TIME	12:45 PM to 01:45 PM	12:15 PM to 01:15 PM	
PEAK HR VOLUME	434	493	

6-HR, 12-HR, 24-HR PERIODS	DIR 1	DIR 2	Total
AM 6-HR PERIOD (06:00-12:00)	1,926	2,113	4,039
AM 12-HR PERIOD (00:00-12:00)	2,248	2,413	4,661
PM 6-HR PERIOD (12:00-18:00)	2,521	3,080	5,601
PM 12-HR PERIOD (12:00-24:00)	3,686	4,673	8,359
24 HOUR PERIOD	5,934	7,086	13,020
D (%)	45.58	54.42	100.00

Run Date: 2013/03/11

Hawaii Department of Transportation
Highways Division
Highways Planning Survey Section

Vehicle Classification Data Summary
2012

Site ID:	**B72009901271**	**Route No:**	**99**	**Date From:**	2012/02/28 0:00
Town:	**Oahu**	**Direction:**	+MP	**Date To:**	2012/02/29 23:45
Location:	**KAM Hwy - MEHEULA PARKWAY TO LANIKUHANA**				

Functional Classification: 12 URBAN:PRINCIPAL ARTERIAL - O.F.E.

REPORT TOTALS - 48 HOURS RECORDED

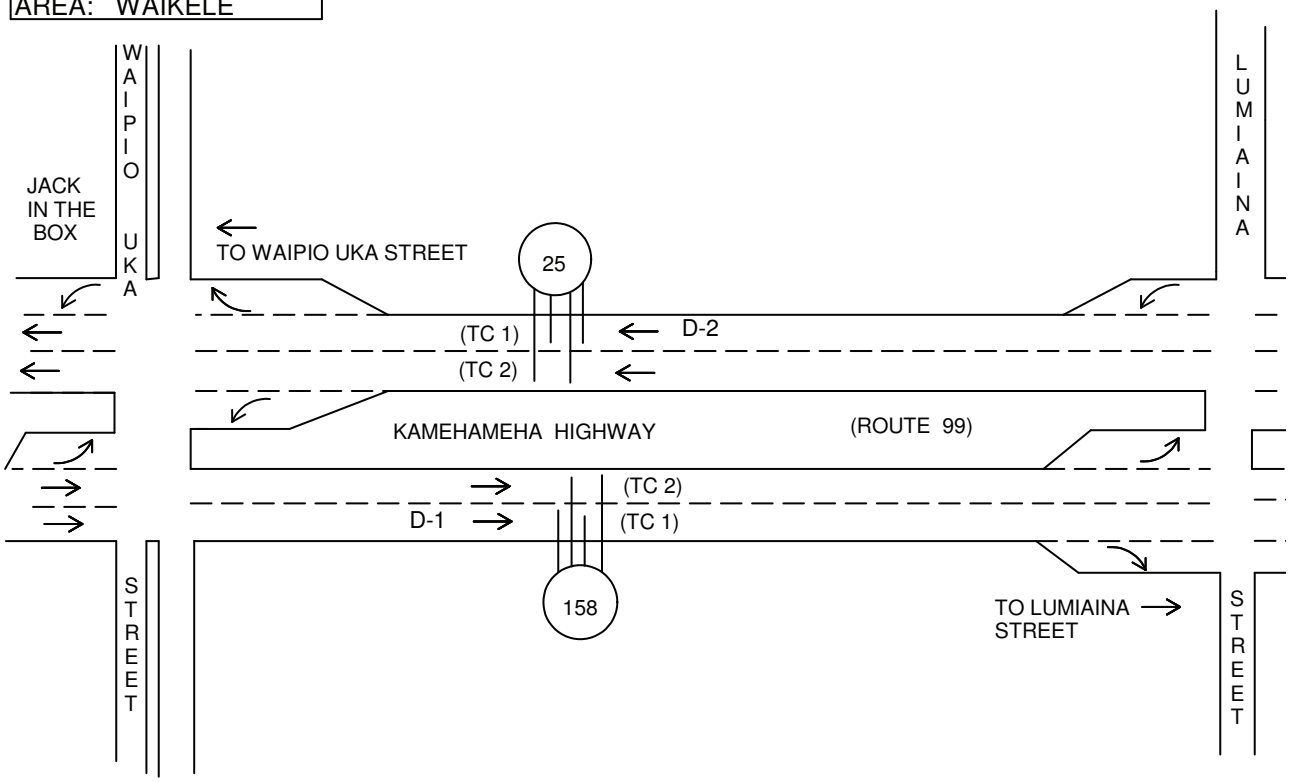
	VOLUME	%	NUMBER OF AXLES
Cycles	229	0.89%	459
PC	23463	91.01%	46927
2A-4T	1788	6.94%	3577
LIGHT VEHICLE TOTALS	25481	98.84%	50962
	HEAVY VEHICLES		
Bus	130	0.51%	326
SINGLE UNIT TRUCK			
2A-6T	96	0.37%	192
3A-SU	28	0.11%	84
4A-SU	4	0.02%	16
SINGLE-TRAILER TRUCKS			
4A-ST	31	0.12%	124
5A-ST	9	0.04%	45
6A-ST	0	0.00%	0
MULTI-TRAILER TRUCKS			
5A-MT	0	0.00%	0
6A-MT	0	0.00%	0
7A-MT	0	0.00%	0
HEAVY VEHICLE TOTALS	298	1.16%	787
CLASSIFIED VEHICLES TOTALS	25779 (A)	100.00%	51749 (B)
UNCLASSIFIED VEHICLES TOTALS	1	0.00%	

AXLE CORRECTION FACTOR (A/C) = 0.996

ROADTUBE EQUIVALENT(B/2) = 25875 (C)

PEAK HOUR VOLUME : 1070 2012/02/29 16:00	**PEAK HOUR TRUCK VOLUME**	**% TOTAL PEAK HOUR VOLUME**	**24 HOUR TRUCK VOLUME**	**AADT**	**% OF AADT**	**HPMS K-FACTOR (PEAK/AADT) (ITEM 66)**
SINGLE UNIT TRUCKS (TYPE 4-7)	**8**	**(65A-1) 0.77%**	**127**	**12300**	**(65A-2) 1.03%**	**8.70%**
COMBINATION (TYPE 8-13)	**2**	**(65B-1) 0.19%**	**19**		**(65B-2) 0.15%**	**8.70%**

ISLAND: OAHU
AREA: WAIKELE



		GPS Coord (Longitude):	157.99891 W
Begin Survey (Date/Time):	3-14-12 0000	End Survey (Date/Time):	3-16-12 0000
Survey Method: LOOP **HOSE** OTHER		Survey Type: VOL **CLASS** SPEED OTHER	
Survey Crew:	CA,CO,LT,RG	Module No.:	

HPMS DATA

Segment Description:

KAMEHAMEHA HIGHWAY - WAIPIO UKA STREET TO WAIPAHU ST

Segment Begin LRS	15.86	Segment End LRS	16.74	Length	0.88

Facility Name	Juris	Func Class	Area Type	Route No.	Route Mile	D-1 = Direction to End of Route / D-2 = Direction to Beginning of Route	
KAMEHAMEHA HIGHWAY	S	12	4	99	16.03	D-1	TO PEARL HARBOR I. C.
						D-2	TO JOSEPH P. LEONG HWY

Sketch By: COII Date: 1/25/2012 SLD: 2003

Run Date: 2013/03/12

Hawaii Department of Transportation
Highways Division — Highways Planning Survey Section
2012 Program Count - Summary

Site ID: B72009901586 **Town:** Oahu **DIR 1:** +MP **DIR 2:** -MP **Final AADT:** 30200
Functional Class: URBAN:PRINCIPAL ARTERIAL - O.F.E. **Count Type:** CLASS **Counter Type:** Tube **Route No:** 99
Location: KAM Hwy - WAIPIO UKA St TO beginNING

TIME-AM	DIR 1	DIR 2	TOTAL	TIME-AM	DIR 1	DIR 2	TOTAL	TIME-PM	DIR 1	DIR 2	TOTAL	TIME-PM	DIR 1	DIR 2	TOTAL
DATE : 03/14/2012															
12:00-12:15	32	62	94	06:00-06:15	273	120	393	12:00-12:15	231	186	417	06:00-06:15	286	320	606
12:15-12:30	24	50	74	06:15-06:30	264	148	412	12:15-12:30	239	177	416	06:15-06:30	265	397	662
12:30-12:45	29	47	76	06:30-06:45	223	172	395	12:30-12:45	236	168	404	06:30-06:45	275	373	648
12:45-01:00	24	27	51	06:45-07:00	190	215	405	12:45-01:00	240	208	448	06:45-07:00	264	361	625
01:00-01:15	14	28	42	07:00-07:15	241	215	456	01:00-01:15	233	208	441	07:00-07:15	255	372	627
01:15-01:30	17	25	42	07:15-07:30	268	262	530	01:15-01:30	225	180	405	07:15-07:30	229	348	577
01:30-01:45	20	23	43	07:30-07:45	264	222	486	01:30-01:45	223	193	416	07:30-07:45	233	321	554
01:45-02:00	19	28	47	07:45-08:00	266	212	478	01:45-02:00	204	178	382	07:45-08:00	172	268	440
02:00-02:15	17	23	40	08:00-08:15	265	212	477	02:00-02:15	227	176	403	08:00-08:15	180	268	448
02:15-02:30	22	23	45	08:15-08:30	231	225	456	02:15-02:30	210	177	387	08:15-08:30	151	218	369
02:30-02:45	32	16	48	08:30-08:45	241	213	454	02:30-02:45	252	204	456	08:30-08:45	147	229	376
02:45-03:00	20	15	35	08:45-09:00	239	240	479	02:45-03:00	243	220	463	08:45-09:00	166	220	386
03:00-03:15	23	20	43	09:00-09:15	220	200	420	03:00-03:15	256	222	478	09:00-09:15	160	225	385
03:15-03:30	41	20	61	09:15-09:30	171	207	378	03:15-03:30	227	241	468	09:15-09:30	184	212	396
03:30-03:45	34	17	51	09:30-09:45	124	239	363	03:30-03:45	243	237	480	09:30-09:45	146	199	345
03:45-04:00	40	18	58	09:45-10:00	125	219	344	03:45-04:00	234	257	491	09:45-10:00	132	162	294
04:00-04:15	63	20	83	10:00-10:15	192	241	433	04:00-04:15	250	154	404	10:00-10:15	147	172	319
04:15-04:30	77	31	108	10:15-10:30	232	201	433	04:15-04:30	277	222	499	10:15-10:30	98	140	238
04:30-04:45	95	36	131	10:30-10:45	249	154	403	04:30-04:45	286	262	548	10:30-10:45	67	120	187
04:45-05:00	141	71	212	10:45-11:00	280	185	465	04:45-05:00	278	232	510	10:45-11:00	60	108	168
05:00-05:15	172	55	227	11:00-11:15	250	218	468	05:00-05:15	252	226	478	11:00-11:15	60	100	160
05:15-05:30	189	83	272	11:15-11:30	249	164	413	05:15-05:30	270	282	552	11:15-11:30	55	90	145
05:30-05:45	259	104	363	11:30-11:45	254	174	428	05:30-05:45	302	275	577	11:30-11:45	33	72	105
05:45-06:00	278	131	409	11:45-12:00	271	167	438	05:45-06:00	290	345	635	11:45-12:00	30	62	92

AM COMMUTER PERIOD (05:00-09:00)	DIR 1	DIR 2	
TWO DIRECTIONAL PEAK			
AM - PEAK HR TIME	07:15 AM to 08:15 AM		
AM - PEAK HR VOLUME	1063	908	1971
AM - K FACTOR (%)			5.91
AM - D (%)	53.93	46.07	100.00
DIRECTIONAL PEAK			
AM - PEAK HR TIME	05:30 AM to 06:30 AM	06:45 AM to 07:45 AM	
AM - PEAK HR VOLUME	1074	914	

PM COMMUTER PERIOD (15:00-19:00)	DIR 1	DIR 2	
TWO DIRECTIONAL PEAK			
PM - PEAK HR TIME	05:45 PM to 06:45 PM		
PM - PEAK HR VOLUME	1116	1435	2551
PM - K FACTOR (%)			7.64
PM - D (%)	43.75	56.25	100.00
DIRECTIONAL PEAK			
PM - PEAK HR TIME	05:15 PM to 06:15 PM	06:00 PM to 07:00 PM	
PM - PEAK HR VOLUME	1148	1451	

AM PERIOD (00:00-12:00)			
TWO DIRECTIONAL PEAK			
AM - PEAK HR TIME	07:15 AM to 08:15 AM		
AM - PEAK HR VOLUME	1063	908	1971
AM - K FACTOR (%)			5.91
AM - D (%)	53.93	46.07	100.00

PM PERIOD (12:00-24:00)			
TWO DIRECTIONAL PEAK			
PM - PEAK HR TIME	06:15 PM to 07:15 PM		
PM - PEAK HR VOLUME	1059	1503	2562
PM - K FACTOR (%)			7.68
PM - D (%)	41.33	58.67	100.00

NON-COMMUTER PERIOD (09:00-15:00)			
TWO DIRECTIONAL PEAK			
PEAK HR TIME	10:45 AM to 11:45 AM		
PEAK HR VOLUME	1033	741	1774
DIRECTIONAL PEAK			
PEAK HR TIME	10:45 AM to 11:45 AM	09:15 AM to 10:15 AM	
PEAK HR VOLUME	1033	906	

6-HR, 12-HR, 24-HR PERIODS	DIR 1	DIR 2	Total
AM 6-HR PERIOD (06:00-12:00)	5,582	4,825	10,407
AM 12-HR PERIOD (00:00-12:00)	7,264	5,798	13,062
PM 6-HR PERIOD (12:00-18:00)	5,928	5,230	11,158
PM 12-HR PERIOD (12:00-24:00)	9,723	10,587	20,310
24 HOUR PERIOD	16,987	16,385	33,372
D (%)	50.90	49.10	100.00

Run Date: 2013/03/12

Hawaii Department of Transportation
Highways Division — Highways Planning Survey Section
2012 Program Count - Summary

Site ID: B72009901586 **Town:** Oahu **DIR 1:** +MP **DIR 2:** -MP **Final AADT:** 30200
Functional Class: URBAN:PRINCIPAL ARTERIAL - O.F.E. **Count Type:** CLASS **Counter Type:** Tube **Route No:** 99
Location: KAM Hwy - WAIPIO UKA St TO beginNING

TIME-AM	DIR 1	DIR 2	TOTAL	TIME-AM	DIR 1	DIR 2	TOTAL	TIME-PM	DIR 1	DIR 2	TOTAL	TIME-PM	DIR 1	DIR 2	TOTAL
DATE : 03/15/2012															
12:00-12:15	37	59	96	06:00-06:15	277	129	406	12:00-12:15	247	229	476	06:00-06:15	290	218	508
12:15-12:30	29	30	59	06:15-06:30	239	180	419	12:15-12:30	247	179	426	06:15-06:30	262	286	548
12:30-12:45	27	41	68	06:30-06:45	218	192	410	12:30-12:45	223	209	432	06:30-06:45	266	325	591
12:45-01:00	20	35	55	06:45-07:00	201	216	417	12:45-01:00	240	180	420	06:45-07:00	254	400	654
01:00-01:15	25	32	57	07:00-07:15	227	208	435	01:00-01:15	247	171	418	07:00-07:15	290	371	661
01:15-01:30	19	35	54	07:15-07:30	259	199	458	01:15-01:30	228	146	374	07:15-07:30	224	311	535
01:30-01:45	22	36	58	07:30-07:45	262	238	500	01:30-01:45	218	114	332	07:30-07:45	218	305	523
01:45-02:00	22	34	56	07:45-08:00	234	252	486	01:45-02:00	220	161	381	07:45-08:00	190	275	465
02:00-02:15	23	17	40	08:00-08:15	261	189	450	02:00-02:15	217	174	391	08:00-08:15	152	237	389
02:15-02:30	20	16	36	08:15-08:30	250	218	468	02:15-02:30	231	200	431	08:15-08:30	167	244	411
02:30-02:45	23	21	44	08:30-08:45	220	245	465	02:30-02:45	263	214	477	08:30-08:45	137	234	371
02:45-03:00	25	19	44	08:45-09:00	248	207	455	02:45-03:00	234	217	451	08:45-09:00	183	212	395
03:00-03:15	21	18	39	09:00-09:15	199	218	417	03:00-03:15	254	261	515	09:00-09:15	180	212	392
03:15-03:30	30	23	53	09:15-09:30	250	189	439	03:15-03:30	258	229	487	09:15-09:30	144	212	356
03:30-03:45	42	23	65	09:30-09:45	250	178	428	03:30-03:45	258	251	509	09:30-09:45	162	198	360
03:45-04:00	44	15	59	09:45-10:00	239	236	475	03:45-04:00	265	291	556	09:45-10:00	132	198	330
04:00-04:15	46	23	69	10:00-10:15	244	229	473	04:00-04:15	265	239	504	10:00-10:15	127	148	275
04:15-04:30	59	32	91	10:15-10:30	233	222	455	04:15-04:30	265	186	451	10:15-10:30	76	153	229
04:30-04:45	101	40	141	10:30-10:45	244	189	433	04:30-04:45	271	238	509	10:30-10:45	90	110	200
04:45-05:00	136	52	188	10:45-11:00	253	151	404	04:45-05:00	266	196	462	10:45-11:00	52	113	165
05:00-05:15	163	53	216	11:00-11:15	245	152	397	05:00-05:15	277	166	443	11:00-11:15	61	102	163
05:15-05:30	194	85	279	11:15-11:30	278	162	440	05:15-05:30	228	190	418	11:15-11:30	46	97	143
05:30-05:45	244	107	351	11:30-11:45	265	184	449	05:30-05:45	265	247	512	11:30-11:45	61	86	147
05:45-06:00	241	153	394	11:45-12:00	259	181	440	05:45-06:00	265	252	517	11:45-12:00	35	73	108

AM COMMUTER PERIOD (05:00-09:00)	DIR 1	DIR 2	
TWO DIRECTIONAL PEAK			
AM - PEAK HR TIME	07:30 AM to 08:30 AM		
AM - PEAK HR VOLUME	1007	897	1904
AM - K FACTOR (%)			5.76
AM - D (%)	52.89	47.11	100.00
DIRECTIONAL PEAK			
AM - PEAK HR TIME	07:15 AM to 08:15 AM	07:45 AM to 08:45 AM	
AM - PEAK HR VOLUME	1016	904	

PM COMMUTER PERIOD (15:00-19:00)	DIR 1	DIR 2	
TWO DIRECTIONAL PEAK			
PM - PEAK HR TIME	06:00 PM to 07:00 PM		
PM - PEAK HR VOLUME	1072	1229	2301
PM - K FACTOR (%)			6.96
PM - D (%)	46.59	53.41	100.00
DIRECTIONAL PEAK			
PM - PEAK HR TIME	05:45 PM to 06:45 PM	06:00 PM to 07:00 PM	
PM - PEAK HR VOLUME	1083	1229	

AM PERIOD (00:00-12:00)			
TWO DIRECTIONAL PEAK			
AM - PEAK HR TIME	07:30 AM to 08:30 AM		
AM - PEAK HR VOLUME	1007	897	1904
AM - K FACTOR (%)			5.76
AM - D (%)	52.89	47.11	100.00

PM PERIOD (12:00-24:00)			
TWO DIRECTIONAL PEAK			
PM - PEAK HR TIME	06:15 PM to 07:15 PM		
PM - PEAK HR VOLUME	1072	1382	2454
PM - K FACTOR (%)			7.43
PM - D (%)	43.68	56.32	100.00

NON-COMMUTER PERIOD (09:00-15:00)			
TWO DIRECTIONAL PEAK			
PEAK HR TIME	09:45 AM to 10:45 AM		
PEAK HR VOLUME	960	876	1836
DIRECTIONAL PEAK			
PEAK HR TIME	11:15 AM to 12:15 PM	09:45 AM to 10:45 AM	
PEAK HR VOLUME	1049	876	

6-HR, 12-HR, 24-HR PERIODS	DIR 1	DIR 2	Total
AM 6-HR PERIOD (06:00-12:00)	5,855	4,764	10,619
AM 12-HR PERIOD (00:00-12:00)	7,468	5,763	13,231
PM 6-HR PERIOD (12:00-18:00)	5,952	4,940	10,892
PM 12-HR PERIOD (12:00-24:00)	9,751	10,060	19,811
24 HOUR PERIOD	17,219	15,823	33,042
D (%)	52.11	47.89	100.00

Run Date: 2013/03/12

Hawaii Department of Transportation
Highways Division
Highways Planning Survey Section

Vehicle Classification Data Summary
2012

Site ID:	**B72009901586**	**Route No:**	**99**	**Date From:**	2012/03/14 0:00
Town:	**Oahu**	**Direction:**	+MP	**Date To:**	2012/03/15 23:45
Location:	**KAM Hwy - WAIPIO UKA St TO beginNING**				

Functional Classification: 12 URBAN:PRINCIPAL ARTERIAL - O.F.E.

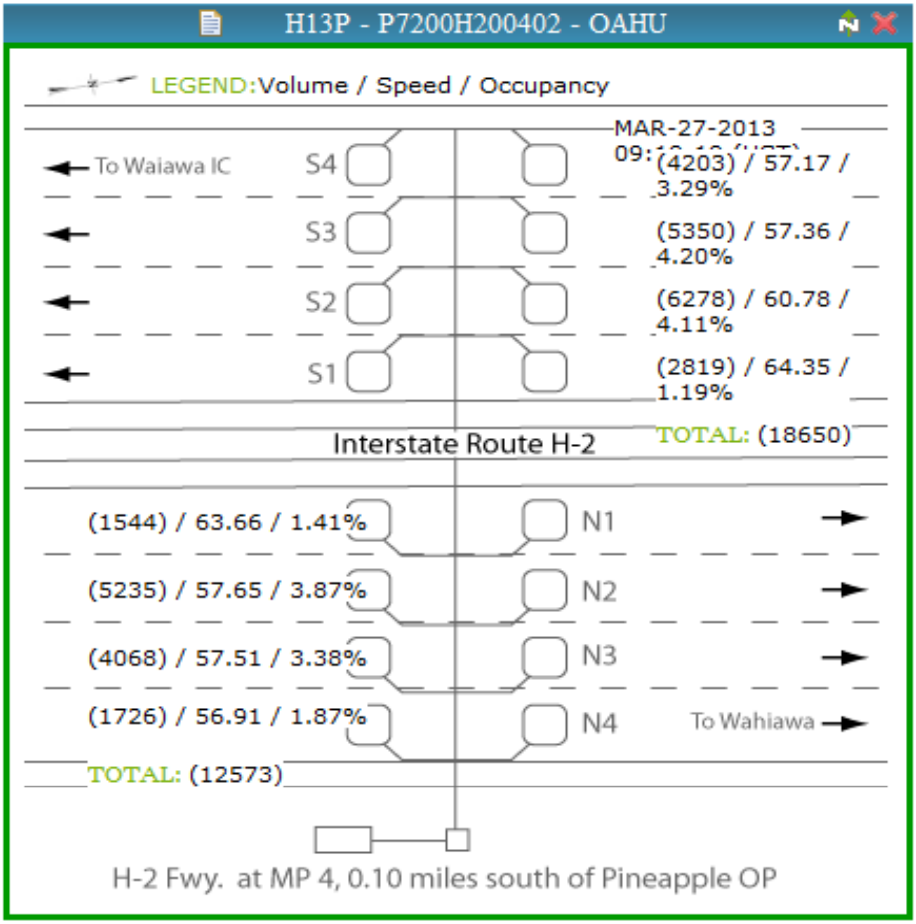
REPORT TOTALS - 48 HOURS RECORDED

	VOLUME	%	NUMBER OF AXLES
Cycles	2882	4.34%	5765
PC	59874	90.15%	119747
2A-4T	2226	3.35%	4451
LIGHT VEHICLE TOTALS	64982	97.84%	129963
	HEAVY VEHICLES		
Bus	231	0.35%	578
SINGLE UNIT TRUCK			
2A-6T	321	0.48%	642
3A-SU	315	0.47%	945
4A-SU	21	0.03%	84
SINGLE-TRAILER TRUCKS			
4A-ST	377	0.57%	1508
5A-ST	78	0.12%	390
6A-ST	27	0.04%	162
MULTI-TRAILER TRUCKS			
5A-MT	0	0.00%	0
6A-MT	1	0.00%	6
7A-MT	62	0.09%	434
HEAVY VEHICLE TOTALS	1432	2.16%	4749
CLASSIFIED VEHICLES TOTALS	66414 (A)	100.00%	134713 (B)
UNCLASSIFIED VEHICLES TOTALS	-0	-0.00%	

AXLE CORRECTION FACTOR (A/C) = 0.986

ROADTUBE EQUIVALENT(B/2) = 67356 (C)

PEAK HOUR VOLUME : 2541 2012/03/14 18:00	**PEAK HOUR TRUCK VOLUME**	**% TOTAL PEAK HOUR VOLUME**	**24 HOUR TRUCK VOLUME**	**AADT**	**% OF AADT**	**HPMS K-FACTOR (PEAK/AADT) (ITEM 66)**
SINGLE UNIT TRUCKS (TYPE 4-7)	**25**	**(65A-1) 1.00%**	**428**	**30200**	**(65A-2) 1.42%**	**8.41%**
COMBINATION (TYPE 8-13)	**33**	**(65B-1) 1.32%**	**262**		**(65B-2) 0.87%**	**8.41%**


H13P - P7200H200402 - OAHU
LEGEND:Volume / Speed / Occupancy
MAR-27-2013
09:
To Waiawa IC
S4
(4203) / 57.17 / 3.29%
S3
(5350) / 57.36 / 4.20%
S2
(6278) / 60.78 / 4.11%
S1
(2819) / 64.35 / 1.19%
TOTAL: (18650)
Interstate Route H-2
(1544) / 63.66 / 1.41%
N1
(5235) / 57.65 / 3.87%
N2
(4068) / 57.51 / 3.38%
N3
(1726) / 56.91 / 1.87%
N4
To Wahiawa
TOTAL: (12573)
H-2 Fwy. at MP 4, 0.10 miles south of Pineapple OP

STATION: 00H13P
STATION DESCRIPTION: H13P H-2 Fwy at MP 4.0, 0.1 mi S of Pinneapple OP
YEAR: 2012 - 2012

Oahu
DIRECTION 01 (D1): Wahiawa., MOV 1
DIRECTION 02 (D2): Waiawa IC, MOV 5

MONTH	MON	TUE	WED	THU	FRI	SAT	SUN	WEEKDAY AVERAGE	MONTHLY AVERAGE	AADT MON AVE	AADT AVE WKDY
January	94379	96059	97424	98435	102759	87248	70127	97811	92347	1.01555	0.95882
February	95292	97358	99124	99257	104056	90015	74954	99017	94293	0.99459	0.94714
March	91438	94184	97438	98533	101263	88145	72482	96571	91926	1.02021	0.97114
April	94639	96204	98540	100141	103844	89364	74397	98673	93875	0.99902	0.95044
May	95556	97194	98710	99704	102778	89248	77345	98788	94362	0.99387	0.94934
June	94836	97163	98951	100356	105023	89638	76470	99266	94634	0.99101	0.94477
July	96874	100082	99957	99774	105865	90466	76697	100510	95674	0.98024	0.93307
August	96139	98561	100069	100953	105753	90895	75977	100295	95478	0.98225	0.93507
September	92633	95447	95793	96363	102757	88025	73371	96599	92056	1.01877	0.97086
October	93278	95362	96047	96886	102110	88250	72447	96736	92054	1.01879	0.96948
November	95352	98116	99778	98627	104611	87612	72918	99297	93859	0.99919	0.94448
December	96748	99397	97571	98692	105245	90899	75349	99531	94843	0.98883	0.94226
AVERAGE	94764	97094	98283	98977	103838	89150	74378	AVERAGE 98591	D1+D2 AADT 93783		

K-FACTOR 8.44%
K-FACTOR PERIOD PM
D-FACTOR 53.01%

STATION: 00H13P
STATION DESCRIPTION: H13P H-2 Fwy at MP 4.0, 0.1 mi S of Pinneapple OP
YEAR: 2012 - 2012

Oahu
DIRECTION 01 (D1): Wahiawa., MOV 1

MONTH	MON	TUE	WED	THU	FRI	SAT	SUN	WEEKDAY AVERAGE	MONTHLY AVERAGE	AADT MON AVE	AADT AVE WKDY
January	46338	47181	47872	48363	50178	43383	35147	47986	45495	1.01566	0.96292
February	46735	47741	48818	48757	50985	44842	37434	48607	46473	0.99428	0.95062
March	44784	46276	47756	48354	49513	43800	36336	47337	45260	1.02093	0.97614
April	46345	47796	48459	49278	50799	44386	37356	48535	46345	0.99701	0.95203
May	46945	47790	48633	49124	50375	44353	38543	48573	46538	0.99290	0.95128
June	46747	48052	48748	49465	51570	44530	38167	48916	46754	0.98830	0.94462
July	47829	49456	49440	49292	52025	45031	38278	49608	47336	0.97615	0.93144
August	47267	48512	49329	49747	51909	45147	37939	49353	47121	0.98060	0.93626
September	45321	46699	46804	47307	50055	43863	36586	47237	45234	1.02152	0.97819
October	45603	46731	47038	47512	49880	44046	35745	47353	45222	1.02178	0.97580
November	46722	48009	48883	47964	51042	43550	36240	48524	46059	1.00322	0.95225
December	47465	48708	47800	48519	51548	45011	37493	48808	46649	0.99053	0.94671
AVERAGE	46508	47746	48298	48640	50823	44328	37105	AVERAGE 48403	D1 AADT 46207		

STATION: 00H13P
STATION DESCRIPTION: H13P H-2 Fwy at MP 4.0, 0.1 mi S of Pinneapple OP
YEAR: 2012 - 2012

Oahu
DIRECTION 02 (D2): Waiawa IC, MOV 5

MONTH	MON	TUE	WED	THU	FRI	SAT	SUN	WEEKDAY AVERAGE	MONTHLY AVERAGE	AADT MON AVE	AADT AVE WKDY
January	48042	48878	49552	50072	52581	43865	34980	49825	46853	1.01545	0.95488
February	48557	49617	50305	50500	53071	45173	37520	50410	47820	0.99490	0.94379
March	46654	47907	49681	50179	51750	44345	36146	49234	46666	1.01951	0.96632
April	48294	48409	50081	50863	53045	44978	37041	50138	47530	1.00098	0.94891
May	48611	49404	50077	50580	52403	44895	38801	50215	47824	0.99481	0.94746
June	48089	49111	50203	50892	53453	45108	38303	50350	47880	0.99366	0.94492
July	49045	50626	50517	50482	53840	45436	38419	50902	48338	0.98425	0.93467
August	48872	50050	50740	51206	53845	45748	38038	50942	48357	0.98386	0.93392
September	47311	48748	48990	49056	52703	44162	36785	49361	46822	1.01611	0.96384
October	47675	48630	49009	49374	52230	44204	36703	49383	46832	1.01590	0.96341
November	48630	50107	50895	50663	53568	44062	36678	50773	47800	0.99531	0.93705
December	49284	50689	49771	50173	53697	45888	37856	50723	48194	0.98718	0.93797
AVERAGE	48255	49348	49985	50337	53015	44822	37272	AVERAGE 50188	D2 AADT 47576		

January, 2012

STATION NO 00H13P STATION DESCRIPTION H13P H-2 Fwy at MP 4.0, 0.1 mi S of Pinneapple OP

DIRECTION 01 Wahiawa., MOV 1
DIRECTION 02 Waiawa IC, MOV 5

Oahu

Date	Day of Week	H / WD	Unsuccessful Polling	24-HOUR TOTAL					A.M. TOTAL					P.M. TOTAL				
				%		Volume			00:00 - 12:00			PEAK HOUR		12:00-24:00			PEAK HOUR	
				D-01	D-02	D-01	D-02	1+2	D-01	D-02	1+2	D-01	D-02	D-01	D-02	1+2	D-01	D-02
1/1/2012	Sun			50.8	49.2	33751	32666	66417	11639	11281	22920	2171	2085	22112	21385	43497	2444	2250
1/2/2012	Mon	*		49.3	50.7	35013	35991	71004	10366	13091	23457	2494	2932	24647	22900	47547	2734	2710
1/3/2012	Tue			49.3	50.7	47616	48995	96611	15918	24188	40106	2011	3848	31698	24807	56505	4037	3452
1/4/2012	Wed			49.2	50.8	48499	50172	98671	16515	24609	41124	2173	4309	31984	25563	57547	4123	3488
1/5/2012	Thu			49.4	50.6	49001	50219	99220	16160	25182	41342	2070	4472	32841	25037	57878	4149	3756
1/6/2012	Fri			48.9	51.1	51054	53383	104437	16497	25624	42121	2413	4064	34557	27759	62316	3989	3596
1/7/2012	Sat			49.7	50.3	43613	44097	87710	13918	18353	32271	2773	3184	29695	25744	55439	3020	3120
1/8/2012	Sun			50.0	50.0	35863	35930	71793	11780	13984	25764	2354	2680	24083	21946	46029	2627	2735
1/9/2012	Mon			49.0	51.0	46941	48799	95740	15866	25272	41138	2175	4492	31075	23527	54602	4097	3183
1/10/2012	Tue			49.0	51.0	47590	49534	97124	15922	25505	41427	2191	4539	31668	24029	55697	3574	3447
1/11/2012	Wed			49.1	50.9	48564	50276	98840	16362	25616	41978	2254	4439	32202	24660	56862	4123	3626
1/12/2012	Thu			49.1	50.9	48825	50567	99392	16108	25598	41706	2553	4259	32717	24969	57686	4057	3663
1/13/2012	Fri			48.8	51.2	50283	52853	103136	15185	26066	41251	2500	3969	35098	26787	61885	4234	3344
1/14/2012	Sat			49.7	50.3	42589	43105	85694	13807	18448	32255	2678	3400	28782	24657	53439	3119	2821
1/15/2012	Sun			49.9	50.1	36213	36413	72626	11573	14278	25851	2451	2799	24640	22135	46775	2669	2685
1/16/2012	Mon	*		49.4	50.6	38294	39224	77518	11454	17906	29360	2274	2793	26840	21318	48158	3498	2604
1/17/2012	Tue			49.0	51.0	46216	48072	94288	15539	25523	41062	2449	4083	30677	22549	53226	4045	3384
1/18/2012	Wed			49.2	50.8	46852	48388	95240	15033	24373	39406	2469	4180	31819	24015	55834	4145	3394
1/19/2012	Thu			49.1	50.9	48142	49896	98038	15954	25638	41592	2262	4380	32188	24258	56446	4005	3785
1/20/2012	Fri			48.7	51.3	49660	52215	101875	16491	25716	42207	2112	4467	33169	26499	59668	4174	3393
1/21/2012	Sat			49.8	50.2	43858	44188	88046	14330	18128	32458	2909	3063	29528	26060	55588	3345	2848
1/22/2012	Sun			50.1	49.9	34123	33992	68115	11442	13683	25125	2305	2603	22681	20309	42990	2645	2499
1/23/2012	Mon			49.1	50.9	46121	47827	93948	15471	24855	40326	2405	4073	30650	22972	53622	4210	3202
1/24/2012	Tue			49.1	50.9	46772	48432	95204	15867	25311	41178	2399	4213	30905	23121	54026	4101	3516
1/25/2012	Wed			49.1	50.9	47572	49371	96943	15685	25189	40874	1994	4569	31887	24182	56069	4129	3553
1/26/2012	Thu			48.9	51.1	47484	49605	97089	15563	25647	41210	2278	4350	31921	23958	55879	4091	3671
1/27/2012	Fri			48.9	51.1	49716	51871	101587	16015	25428	41443	2071	4425	33701	26443	60144	4013	3532
1/28/2012	Sat			49.7	50.3	43472	44069	87541	13800	18400	32200	2808	3307	29672	25669	55341	3143	2978
1/29/2012	Sun			49.9	50.1	35785	35899	71684	11428	15069	26497	2255	3181	24357	20830	45187	2587	2858
1/30/2012	Mon			49.2	50.8	45951	47499	93450	15354	24674	40028	2128	4450	30597	22825	53422	4096	3245
1/31/2012	Tue			49.2	50.8	47711	49355	97066	15846	25621	41467	2091	4745	31865	23734	55599	4016	3681

1 - INCOMPLETE FILE
2 - DIRECTIONAL SPLIT
3 - USER DEFINED ERROR

February, 2012

STATION NO 00H13P STATION DESCRIPTION H13P H-2 Fwy at MP 4.0, 0.1 mi S of Pinneapple OP

DIRECTION 01 Wahiawa., MOV 1
DIRECTION 02 Waiawa IC, MOV 5

Oahu

Date	Day of Week	H / WD	Unsuccessful Polling	24-HOUR TOTAL					A.M. TOTAL					P.M. TOTAL				
				%		Volume			00:00 - 12:00			PEAK HOUR		12:00-24:00			PEAK HOUR	
				D-01	D-02	D-01	D-02	1+2	D-01	D-02	1+2	D-01	D-02	D-01	D-02	1+2	D-01	D-02
2/1/2012	Wed			49.2	50.8	48598	50181	98779	16062	25703	41765	2119	4600	32536	24478	57014	4218	3392
2/2/2012	Thu			49.2	50.8	48541	50099	98640	15841	25663	41504	2261	4398	32700	24436	57136	4043	3792
2/3/2012	Fri			48.8	51.2	50954	53368	104322	16220	25784	42004	2436	4020	34734	27584	62318	4135	3500
2/4/2012	Sat			49.9	50.1	44820	45084	89904	14642	18898	33540	2865	3344	30178	26186	56364	3769	2843
2/5/2012	Sun		3	52.3	47.7	33708	30803	64511	12271	13700	25971	2874	2831	21437	17103	38540	3431	3131
2/6/2012	Mon			49.2	50.8	45891	47434	93325	15577	25010	40587	2207	4181	30314	22424	52738	4043	3367
2/7/2012	Tue			49.1	50.9	46073	47839	93912	15252	25115	40367	2496	4095	30821	22724	53545	3924	3503
2/8/2012	Wed			49.4	50.6	48941	50191	99132	16050	25635	41685	2562	4156	32891	24556	57447	4208	3455
2/9/2012	Thu			49.2	50.8	48689	50200	98889	15902	25631	41533	2589	4344	32787	24569	57356	4103	3851
2/10/2012	Fri			49.2	50.8	51554	53321	104875	16412	25948	42360	2528	4087	35142	27373	62515	4125	3509
2/11/2012	Sat			49.8	50.2	46126	46442	92568	14811	19009	33820	3018	3220	31315	27433	58748	3292	3379
2/12/2012	Sun			50.0	50.0	37517	37590	75107	12179	15045	27224	2540	2952	25338	22545	47883	2964	2841
2/13/2012	Mon			48.9	51.1	47563	49683	97246	15790	25357	41147	2558	4140	31773	24326	56099	4163	3866
2/14/2012	Tue			49.0	51.0	49461	51393	100854	16171	25968	42139	2483	4237	33290	25425	58715	4020	3961
2/15/2012	Wed			49.2	50.8	49285	50798	100083	16599	25769	42368	2565	4283	32686	25029	57715	4016	3542
2/16/2012	Thu			49.0	51.0	49288	51318	100606	16139	25707	41846	2414	4246	33149	25611	58760	4036	3869
2/17/2012	Fri			49.1	50.9	50649	52566	103215	15436	25579	41015	2511	3939	35213	26987	62200	4063	3436
2/18/2012	Sat			49.8	50.2	44722	45088	89810	13965	18783	32748	2854	3195	30757	26305	57062	3179	3146
2/19/2012	Sun			49.8	50.2	38026	38316	76342	11911	14622	26533	2529	2935	26115	23694	49809	2917	2908
2/20/2012	Mon	*		49.5	50.5	38181	38954	77135	12591	17562	30153	2686	3059	25590	21392	46982	2901	2530
2/21/2012	Tue			48.9	51.1	47531	49598	97129	16031	25673	41704	2435	4139	31500	23925	55425	3871	3474
2/22/2012	Wed			49.3	50.7	48358	49805	98163	15895	25570	41465	2443	4279	32463	24235	56698	4052	3440
2/23/2012	Thu			49.1	50.9	48508	50383	98891	15867	25484	41351	2379	4262	32641	24899	57540	3995	3930
2/24/2012	Fri			48.9	51.1	50782	53028	103810	16370	25818	42188	2511	4182	34412	27210	61622	4143	3457
2/25/2012	Sat			49.8	50.2	43700	44076	87776	13853	18699	32552	2801	3090	29847	25377	55224	3194	2833
2/26/2012	Sun			50.1	49.9	36760	36654	73414	12377	14381	26758	2499	2874	24383	22273	46656	2887	2902
2/27/2012	Mon			49.1	50.9	46750	48555	95305	15739	25167	40906	2606	4213	31011	23388	54399	4098	3394
2/28/2012	Tue			49.1	50.9	47899	49638	97537	16178	25667	41845	2570	4295	31721	23971	55692	4037	3646
2/29/2012	Wed			49.2	50.8	48910	50551	99461	16313	25937	42250	2711	4307	32597	24614	57211	4118	3428

1 - INCOMPLETE FILE
2 - DIRECTIONAL SPLIT
3 - USER DEFINED ERROR

March, 2012

STATION NO 00H13P STATION DESCRIPTION H13P H-2 Fwy at MP 4.0, 0.1 mi S of Pinneapple OP DIRECTION 01 Wahiawa., MOV 1

DIRECTION 02 Waiawa IC, MOV 5

Oahu

Date	Day of Week	H / WD	Unsuccessful Polling	24-HOUR TOTAL					A.M. TOTAL					P.M. TOTAL				
				%		Volume			00:00 - 12:00			PEAK HOUR		12:00-24:00			PEAK HOUR	
				D-01	D-02	D-01	D-02	1+2	D-01	D-02	1+2	D-01	D-02	D-01	D-02	1+2	D-01	D-02
3/1/2012	Thu			49.2	50.8	49212	50836	100048	16096	25866	41962	2498	4238	33116	24970	58086	4005	3801
3/2/2012	Fri			48.8	51.2	50478	53039	103517	16041	25994	42035	2438	4193	34437	27045	61482	4086	3399
3/3/2012	Sat			50.0	50.0	44227	44292	88519	13732	18451	32183	2592	3160	30495	25841	56336	3283	3214
3/4/2012	Sun			50.0	50.0	35778	35750	71528	11551	14657	26208	2337	2794	24227	21093	45320	2845	2734
3/5/2012	Mon			48.9	51.1	43715	45696	89411	14297	24613	38910	2174	4034	29418	21083	50501	3920	3063
3/6/2012	Tue			49.0	51.0	43648	45348	88996	14532	24543	39075	2263	4161	29116	20805	49921	3911	2983
3/7/2012	Wed			49.1	50.9	46771	48558	95329	15020	25435	40455	2423	4311	31751	23123	54874	4102	3274
3/8/2012	Thu			48.9	51.1	47494	49634	97128	15113	25570	40683	2225	4239	32381	24064	56445	4091	3634
3/9/2012	Fri			48.8	51.2	46180	48422	94602	14225	24760	38985	1631	4030	31955	23662	55617	3971	3008
3/10/2012	Sat			49.7	50.3	41510	41951	83461	12458	18039	30497	2593	3169	29052	23912	52964	2926	2985
3/11/2012	Sun			50.1	49.9	35019	34823	69842	11046	14198	25244	2384	2760	23973	20625	44598	2736	2709
3/12/2012	Mon			48.9	51.1	44532	46444	90976	14089	24222	38311	1782	4067	30443	22222	52665	3882	3141
3/13/2012	Tue			49.2	50.8	46617	48206	94823	15115	24833	39948	1884	4254	31502	23373	54875	3950	3345
3/14/2012	Wed			48.7	51.3	47713	50164	97877	15245	25994	41239	1798	4260	32468	24170	56638	3886	3370
3/15/2012	Thu			48.9	51.1	47871	50068	97939	15523	25318	40841	1904	4161	32348	24750	57098	3862	3423
3/16/2012	Fri			49.0	51.0	49740	51853	101593	15901	25230	41131	2117	3713	33839	26623	60462	3894	3478
3/17/2012	Sat			49.2	50.8	43649	45022	88671	14206	18714	32920	2890	3246	29443	26308	55751	3277	2979
3/18/2012	Sun			50.5	49.5	37474	36730	74204	12244	14205	26449	2426	2963	25230	22525	47755	2918	2861
3/19/2012	Mon			49.1	50.9	46106	47822	93928	15378	24642	40020	2292	4069	30728	23180	53908	3815	3382
3/20/2012	Tue			48.9	51.1	46981	49065	96046	15593	25288	40881	1981	4459	31388	23777	55165	3956	3626
3/21/2012	Wed			49.1	50.9	48019	49844	97863	15956	25256	41212	2176	4351	32063	24588	56651	4118	3516
3/22/2012	Thu			49.2	50.8	48302	49914	98216	16084	25248	41332	2595	4104	32218	24666	56884	3987	3801
3/23/2012	Fri			48.9	51.1	49886	52042	101928	15665	25620	41285	2254	4024	34221	26422	60643	3910	3483
3/24/2012	Sat			49.8	50.2	45187	45633	90820	15256	18286	33542	3091	3113	29931	27347	57278	3480	3017
3/25/2012	Sun			49.9	50.1	37072	37280	74352	11648	14941	26589	2499	2834	25424	22339	47763	2835	2723
3/26/2012	Mon	*		49.2	50.8	43948	45394	89342	14988	21717	36705	2483	2668	28960	23677	52637	3758	3098
3/27/2012	Tue			49.4	50.6	47859	49010	96869	16328	25089	41417	2503	4196	31531	23921	55452	4049	3493
3/28/2012	Wed			49.2	50.8	48522	50159	98681	16083	25345	41428	2294	4363	32439	24814	57253	4081	3502
3/29/2012	Thu			49.2	50.8	48889	50443	99332	16370	25075	41445	2493	4136	32519	25368	57887	4016	3857
3/30/2012	Fri			49.0	51.0	51279	53395	104674	16370	25655	42025	2449	4063	34909	27740	62649	4144	3678
3/31/2012	Sat			49.8	50.2	44428	44825	89253	13753	19030	32783	2834	3325	30675	25795	56470	3378	2734

1 - INCOMPLETE FILE
2 - DIRECTIONAL SPLIT
3 - USER DEFINED ERROR

April, 2012

STATION NO 00H13P STATION DESCRIPTION H13P H-2 Fwy at MP 4.0, 0.1 mi S of Pinneapple OP

Oahu

DIRECTION 01 Wahiawa., MOV 1
DIRECTION 02 Waiawa IC, MOV 5

Date	Day of Week	H / WD	Unsuccessful Polling	24-HOUR TOTAL					A.M. TOTAL					P.M. TOTAL				
				%		Volume			00:00 - 12:00			PEAK HOUR		12:00-24:00			PEAK HOUR	
				D-01	D-02	D-01	D-02	1+2	D-01	D-02	1+2	D-01	D-02	D-01	D-02	1+2	D-01	D-02
4/1/2012	Sun			50.2	49.8	38270	37912	76182	12567	15215	27782	2694	2894	25703	22697	48400	3021	2795
4/2/2012	Mon			48.8	51.2	45935	48250	94185	15688	25619	41307	2416	4330	30247	22631	52878	3211	3262
4/3/2012	Tue			49.5	50.5	49003	49922	98925	16565	26075	42640	2284	4547	32438	23847	56285	4059	3532
4/4/2012	Wed			49.1	50.9	48980	50685	99665	16399	26036	42435	2488	4320	32581	24649	57230	4058	3542
4/5/2012	Thu			49.1	50.9	50471	52259	102730	16307	25976	42283	2414	4348	34164	26283	60447	4100	3768
4/6/2012	Fri	*		49.2	50.8	47527	49093	96620	15056	22953	38009	2800	3149	32471	26140	58611	3902	3187
4/7/2012	Sat			49.6	50.4	43929	44569	88498	14561	18339	32900	2933	3194	29368	26230	55598	3127	3137
4/8/2012	Sun	*		50.1	49.9	34680	34513	69193	11935	13383	25318	2591	2553	22745	21130	43875	2760	2427
4/9/2012	Mon			48.9	51.1	45736	47832	93568	14611	25261	39872	2480	4018	31125	22571	53696	4059	3322
4/10/2012	Tue			49.3	50.7	47275	48641	95916	15847	25523	41370	2347	4315	31428	23118	54546	4078	3584
4/11/2012	Wed			49.1	50.9	47937	49623	97560	16078	25480	41558	2479	4268	31859	24143	56002	4006	3524
4/12/2012	Thu			49.3	50.7	48827	50300	99127	16548	25640	42188	2551	4331	32279	24660	56939	4114	3839
4/13/2012	Fri			48.9	51.1	50958	53158	104116	16605	26153	42758	2519	4122	34353	27005	61358	3848	3540
4/14/2012	Sat			49.7	50.3	45241	45771	91012	14354	19962	34316	2564	3484	30887	25809	56696	3224	2999
4/15/2012	Sun			50.1	49.9	38574	38356	76930	13190	15930	29120	2625	3113	25384	22426	47810	2822	2983
4/16/2012	Mon			49.3	50.7	47667	49063	96730	15910	25394	41304	2660	4248	31757	23669	55426	4104	3487
4/17/2012	Tue			50.8	49.2	47637	46056	93693	15995	24785	40780	2474	4237	31642	21271	52913	3807	3591
4/18/2012	Wed			49.2	50.8	48309	49864	98173	16069	25549	41618	2334	4258	32240	24315	56555	4073	3429
4/19/2012	Thu			49.3	50.7	48912	50290	99202	16497	25611	42108	2437	4345	32415	24679	57094	4041	3744
4/20/2012	Fri			48.8	51.2	50681	53086	103767	16105	25709	41814	2373	4097	34576	27377	61953	4054	3577
4/21/2012	Sat			49.7	50.3	44145	44744	88889	13951	19362	33313	2724	3306	30194	25382	55576	3515	2655
4/22/2012	Sun			50.1	49.9	35765	35553	71318	11373	14590	25963	2283	2880	24392	20963	45355	2740	2696
4/23/2012	Mon			48.9	51.1	45104	47109	92213	14747	24868	39615	1886	4541	30357	22241	52598	3927	3331
4/24/2012	Tue			49.1	50.9	47267	49015	96282	16027	25298	41325	2095	4666	31240	23717	54957	3993	3522
4/25/2012	Wed			49.2	50.8	48610	50151	98761	16171	25640	41811	2539	4242	32439	24511	56950	3993	3307
4/26/2012	Thu			49.1	50.9	48902	50601	99503	16565	25759	42324	2534	4247	32337	24842	57179	3969	3794
4/27/2012	Fri			49.0	51.0	50757	52891	103648	16288	26143	42431	2418	4124	34469	26748	61217	3973	3477
4/28/2012	Sat			49.7	50.3	44227	44828	89055	14204	19266	33470	2723	3271	30023	25562	55585	3326	2695
4/29/2012	Sun			50.3	49.7	36816	36341	73157	12462	14770	27232	2476	2808	24354	21571	45925	2882	2852
4/30/2012	Mon			49.0	51.0	47284	49216	96500	15806	25538	41344	2464	4260	31478	23678	55156	4198	3188

1 - INCOMPLETE FILE
2 - DIRECTIONAL SPLIT
3 - USER DEFINED ERROR

May, 2012

STATION NO 00H13P STATION DESCRIPTION H13P H-2 Fwy at MP 4.0, 0.1 mi S of Pinneapple OP

Oahu

DIRECTION 01 Wahiawa., MOV 1
DIRECTION 02 Waiawa IC, MOV 5

Date	Day of Week	H / WD	Unsuccessful Polling	24-HOUR TOTAL					A.M. TOTAL					P.M. TOTAL				
				%		Volume			00:00 - 12:00			PEAK HOUR		12:00-24:00			PEAK HOUR	
				D-01	D-02	D-01	D-02	1+2	D-01	D-02	1+2	D-01	D-02	D-01	D-02	1+2	D-01	D-02
5/1/2012	Tue			49.2	50.8	48147	49753	97900	16267	25826	42093	2349	4394	31880	23927	55807	4060	3437
5/2/2012	Wed			49.1	50.9	48674	50498	99172	16191	25532	41723	2422	4155	32483	24966	57449	4115	3514
5/3/2012	Thu			49.3	50.7	49138	50564	99702	16654	25342	41996	2315	4631	32484	25222	57706	3919	3592
5/4/2012	Fri			48.8	51.2	50000	52411	102411	15775	25490	41265	2122	4097	34225	26921	61146	3823	3587
5/5/2012	Sat			49.8	50.2	44846	45152	89998	14295	19328	33623	2859	3033	30551	25824	56375	3069	3083
5/6/2012	Sun			50.0	50.0	38257	38185	76442	12512	15326	27838	2584	2764	25745	22859	48604	2970	2904
5/7/2012	Mon			49.0	51.0	46281	48205	94486	15353	24876	40229	2132	4385	30928	23329	54257	3881	3531
5/8/2012	Tue			49.2	50.8	47544	49117	96661	16287	25297	41584	2230	4539	31257	23820	55077	3915	3528
5/9/2012	Wed			49.2	50.8	48638	50194	98832	16647	25456	42103	2594	4297	31991	24738	56729	3887	3625
5/10/2012	Thu			49.2	50.8	49515	51210	100725	16837	25851	42688	2131	4631	32678	25359	58037	3931	3700
5/11/2012	Fri			49.1	50.9	51567	53511	105078	17141	25811	42952	2591	4153	34426	27700	62126	3917	3446
5/12/2012	Sat			49.6	50.4	45555	46289	91844	14406	19767	34173	2655	3505	31149	26522	57671	3337	2828
5/13/2012	Sun			49.6	50.4	39559	40119	79678	12413	15327	27740	2510	3091	27146	24792	51938	2697	3180
5/14/2012	Mon			49.2	50.8	47303	48891	96194	16067	25049	41116	2497	4266	31236	23842	55078	3994	3369
5/15/2012	Tue			49.0	51.0	48076	50007	98083	16061	25344	41405	2263	4339	32015	24663	56678	4083	3500
5/16/2012	Wed			49.3	50.7	48767	50107	98874	16612	25448	42060	2524	4221	32155	24659	56814	3874	3397
5/17/2012	Thu			49.3	50.7	48917	50271	99188	16405	25384	41789	2214	4477	32512	24887	57399	4027	3659
5/18/2012	Fri			49.1	50.9	50718	52494	103212	16411	25182	41593	2468	4050	34307	27312	61619	3797	3388
5/19/2012	Sat			49.5	50.5	44611	45468	90079	14427	19776	34203	2652	3313	30184	25692	55876	3154	2992
5/20/2012	Sun			50.0	50.0	38109	38106	76215	12196	15198	27394	2490	2932	25913	22908	48821	3050	2674
5/21/2012	Mon			49.2	50.8	47251	48737	95988	16037	24888	40925	2503	4220	31214	23849	55063	3969	3279
5/22/2012	Tue			49.2	50.8	48160	49749	97909	16518	25487	42005	2605	4283	31642	24262	55904	3921	3397
5/23/2012	Wed			49.3	50.7	49000	50346	99346	16348	25510	41858	2149	4492	32652	24836	57488	4088	3442
5/24/2012	Thu			49.2	50.8	48894	50556	99450	16420	25341	41761	2604	4166	32474	25215	57689	3850	3440
5/25/2012	Fri			49.0	51.0	49215	51195	100410	14904	24765	39669	2081	3634	34311	26430	60741	3908	3230
5/26/2012	Sat			49.8	50.2	42398	42672	85070	13359	17824	31183	2564	3219	29039	24848	53887	3074	2705
5/27/2012	Sun			49.6	50.4	38248	38795	77043	12114	14982	27096	2632	2917	26134	23813	49947	2927	2813
5/28/2012	Mon	*		49.2	50.8	33209	34237	67446	10768	13508	24276	2250	2715	22441	20729	43170	2484	2415
5/29/2012	Tue			49.3	50.7	47021	48394	95415	15655	24652	40307	2330	3849	31366	23742	55108	3870	3204
5/30/2012	Wed			49.4	50.6	48087	49240	97327	16173	25059	41232	2379	3913	31914	24181	56095	3993	3263
5/31/2012	Thu			49.4	50.6	49157	50297	99454	16219	25210	41429	2276	3990	32938	25087	58025	3824	3479

1 - INCOMPLETE FILE
2 - DIRECTIONAL SPLIT
3 - USER DEFINED ERROR

June, 2012

STATION NO 00H13P STATION DESCRIPTION H13P H-2 Fwy at MP 4.0, 0.1 mi S of Pinneapple OP DIRECTION 01 Wahiawa., MOV 1

DIRECTION 02 Waiawa IC, MOV 5

Oahu

Date	Day of Week	H / WD	Unsuccessful Polling	24-HOUR TOTAL					A.M. TOTAL					P.M. TOTAL				
				%		Volume			00:00 - 12:00			PEAK HOUR		12:00-24:00			PEAK HOUR	
				D-01	D-02	D-01	D-02	1+2	D-01	D-02	1+2	D-01	D-02	D-01	D-02	1+2	D-01	D-02
6/1/2012	Fri			49.2	50.8	51719	53496	105215	16852	25575	42427	2348	3882	34867	27921	62788	4063	3442
6/2/2012	Sat			49.7	50.3	43715	44301	88016	14185	18716	32901	2716	3198	29530	25585	55115	3093	2803
6/3/2012	Sun			50.0	50.0	38069	38072	76141	12854	14715	27569	2553	2750	25215	23357	48572	2942	2777
6/4/2012	Mon			49.3	50.7	46355	47692	94047	15610	24294	39904	2263	3830	30745	23398	54143	3846	3290
6/5/2012	Tue			49.5	50.5	48234	49125	97359	16386	24954	41340	2331	3972	31848	24171	56019	3903	3415
6/6/2012	Wed			49.0	51.0	48598	50580	99178	16341	25901	42242	2384	4848	32257	24679	56936	3771	3436
6/7/2012	Thu			49.2	50.8	48733	50260	98993	16156	24888	41044	2309	4019	32577	25372	57949	3891	3491
6/8/2012	Fri			49.2	50.8	50230	51783	102013	16441	24722	41163	2346	3965	33789	27061	60850	3900	3470
6/9/2012	Sat			49.6	50.4	42783	43476	86259	14032	18045	32077	2757	2887	28751	25431	54182	3036	2922
6/10/2012	Sun			50.0	50.0	38266	38231	76497	12311	14218	26529	2564	2866	25955	24013	49968	2940	2844
6/11/2012	Mon	*		49.4	50.6	42484	43579	86063	14341	19734	34075	2547	2817	28143	23845	51988	3324	3240
6/12/2012	Tue			49.5	50.5	48122	49148	97270	16326	24822	41148	2373	4120	31796	24326	56122	3918	3380
6/13/2012	Wed			49.5	50.5	48805	49858	98663	16576	24905	41481	2513	4194	32229	24953	57182	3832	3497
6/14/2012	Thu			49.4	50.6	49832	51130	100962	16788	25172	41960	2435	4170	33044	25958	59002	4013	3574
6/15/2012	Fri			49.0	51.0	51973	54057	106030	16564	25922	42486	2519	3988	35409	28135	63544	4068	3579
6/16/2012	Sat			49.7	50.3	45519	46035	91554	14597	18904	33501	2730	3469	30922	27131	58053	3098	3395
6/17/2012	Sun			49.8	50.2	38390	38747	77137	12475	14804	27279	2657	2972	25915	23943	49858	3025	2882
6/18/2012	Mon			49.3	50.7	46983	48288	95271	16114	24196	40310	2322	4010	30869	24092	54961	3951	3379
6/19/2012	Tue			49.5	50.5	48105	49029	97134	16546	24682	41228	2386	4112	31559	24347	55906	3934	3362
6/20/2012	Wed			49.3	50.7	48943	50337	99280	16793	25132	41925	2464	4122	32150	25205	57355	3851	3469
6/21/2012	Thu			49.4	50.6	49557	50670	100227	17140	25024	42164	2408	4180	32417	25646	58063	3820	3543
6/22/2012	Fri			49.2	50.8	51631	53339	104970	17038	25241	42279	2398	3967	34593	28098	62691	4032	3534
6/23/2012	Sat			49.6	50.4	44719	45477	90196	15035	18769	33804	2950	3204	29684	26708	56392	3029	2970
6/24/2012	Sun			49.9	50.1	37941	38162	76103	12604	14560	27164	2428	3016	25337	23602	48939	2928	2916
6/25/2012	Mon			49.3	50.7	46903	48287	95190	15866	24565	40431	2254	4163	31037	23722	54759	3973	3310
6/26/2012	Tue			49.3	50.7	47746	49141	96887	16186	24847	41033	1895	4380	31560	24294	55854	4001	3368
6/27/2012	Wed			49.3	50.7	48647	50036	98683	16411	25129	41540	2111	4344	32236	24907	57143	3914	3538
6/28/2012	Thu			49.1	50.9	49736	51507	101243	16837	25094	41931	2357	4117	32899	26413	59312	3788	3896
6/29/2012	Fri			48.9	51.1	52295	54592	106887	16823	25743	42566	2161	4040	35472	28849	64321	3992	3480
6/30/2012	Sat			49.8	50.2	45914	46253	92167	15195	19259	34454	2898	3302	30719	26994	57713	3156	3044

1 - INCOMPLETE FILE
2 - DIRECTIONAL SPLIT
3 - USER DEFINED ERROR

July, 2012

STATION NO 00H13P STATION DESCRIPTION H13P H-2 Fwy at MP 4.0, 0.1 mi S of Pinneapple OP DIRECTION 01 Wahiawa., MOV 1
DIRECTION 02 Waiawa IC, MOV 5

Oahu

Date	Day of Week	H / WD	Unsuccessful Polling	24-HOUR TOTAL					A.M. TOTAL					P.M. TOTAL				
				%		Volume			00:00 - 12:00			PEAK HOUR		12:00-24:00			PEAK HOUR	
				D-01	D-02	D-01	D-02	1+2	D-01	D-02	1+2	D-01	D-02	D-01	D-02	1+2	D-01	D-02
7/1/2012	Sun			49.8	50.2	38692	38953	77645	12768	15104	27872	2441	2985	25924	23849	49773	2991	2904
7/2/2012	Mon			49.3	50.7	48448	49905	98353	16171	24752	40923	2098	4180	32277	25153	57430	3979	3422
7/3/2012	Tue			49.3	50.7	51446	52936	104382	17221	25205	42426	2035	4310	34225	27731	61956	4009	3579
7/4/2012	Wed	*		49.4	50.6	34015	34883	68898	11471	12496	23967	2352	2293	22544	22387	44931	2442	2186
7/5/2012	Thu			49.4	50.6	47358	48587	95945	14837	24113	38950	1815	3786	32521	24474	56995	3852	3102
7/6/2012	Fri			49.1	50.9	51060	52935	103995	17070	25417	42487	2174	4070	33990	27518	61508	3874	3465
7/7/2012	Sat			49.9	50.1	44284	44550	88834	14318	18406	32724	2711	3220	29966	26144	56110	3427	2693
7/8/2012	Sun			49.7	50.3	37710	38182	75892	12330	14854	27184	2527	2768	25380	23328	48708	2876	2804
7/9/2012	Mon			49.5	50.5	48043	49015	97058	16662	24808	41470	2396	4064	31381	24207	55588	4001	3251
7/10/2012	Tue			49.4	50.6	48771	49872	98643	16901	25114	42015	2464	4121	31870	24758	56628	3977	3464
7/11/2012	Wed			49.5	50.5	49181	50205	99386	16801	25157	41958	2506	4080	32380	25048	57428	4028	3550
7/12/2012	Thu			49.3	50.7	50218	51673	101891	16840	25077	41917	2438	4107	33378	26596	59974	3883	3969
7/13/2012	Fri			49.0	51.0	52563	54626	107189	17437	25726	43163	2353	4023	35126	28900	64026	3942	3842
7/14/2012	Sat			49.8	50.2	46291	46586	92877	15030	18976	34006	2741	3316	31261	27610	58871	3196	3117
7/15/2012	Sun			49.9	50.1	38873	39004	77877	12978	15221	28199	2597	2960	25895	23783	49678	3042	2890
7/16/2012	Mon			49.4	50.6	47670	48805	96475	16294	24557	40851	2346	4088	31376	24248	55624	3870	3409
7/17/2012	Tue			49.3	50.7	48832	50148	98980	16675	25093	41768	2151	4227	32157	25055	57212	4039	3411
7/18/2012	Wed			49.4	50.6	49381	50527	99908	16812	25213	42025	2362	4133	32569	25314	57883	4020	3513
7/19/2012	Thu			49.4	50.6	49645	50765	100410	16632	24827	41459	2273	4177	33013	25938	58951	3942	3742
7/20/2012	Fri			49.2	50.8	52274	54028	106302	17438	25535	42973	2331	3980	34836	28493	63329	4147	3801
7/21/2012	Sat			49.7	50.3	45467	45974	91441	15473	18445	33918	2984	3139	29994	27529	57523	3357	2976
7/22/2012	Sun			50.0	50.0	38549	38530	77079	13206	14549	27755	2737	2746	25343	23981	49324	2995	2871
7/23/2012	Mon			49.4	50.6	47687	48767	96454	16517	24313	40830	2274	4115	31170	24454	55624	4002	3432
7/24/2012	Tue			49.5	50.5	48827	49786	98613	16920	24738	41658	2474	4369	31907	25048	56955	3902	3594
7/25/2012	Wed			49.5	50.5	49759	50819	100578	17200	25216	42416	2582	4336	32559	25603	58162	3932	3605
7/26/2012	Thu			49.5	50.5	49946	50904	100850	17116	24986	42102	2387	4081	32830	25918	58748	3988	3732
7/27/2012	Fri			49.3	50.7	52204	53769	105973	17516	25316	42832	2408	3843	34688	28453	63141	3938	3701
7/28/2012	Sat			49.7	50.3	44081	44632	88713	14447	17995	32442	2753	3199	29634	26637	56271	3283	2799
7/29/2012	Sun			50.1	49.9	37567	37426	74993	12551	14230	26781	2465	2964	25016	23196	48212	2892	2837
7/30/2012	Mon			49.3	50.7	47297	48735	96032	16288	24691	40979	2555	4039	31009	24044	55053	4017	3494
7/31/2012	Tue			49.5	50.5	49404	50388	99792	16768	25162	41930	2428	4304	32636	25226	57862	4164	3597

1 - INCOMPLETE FILE
2 - DIRECTIONAL SPLIT
3 - USER DEFINED ERROR

August, 2012

STATION NO 00H13P STATION DESCRIPTION H13P H-2 Fwy at MP 4.0, 0.1 mi S of Pinneapple OP

DIRECTION 01 Wahiawa., MOV 1
DIRECTION 02 Waiawa IC, MOV 5

Oahu

Date	Day of Week	H / WD	Unsuccessful Polling	24-HOUR TOTAL					A.M. TOTAL					P.M. TOTAL				
				%		Volume			00:00 - 12:00			PEAK HOUR		12:00-24:00			PEAK HOUR	
				D-01	D-02	D-01	D-02	1+2	D-01	D-02	1+2	D-01	D-02	D-01	D-02	1+2	D-01	D-02
8/1/2012	Wed			49.5	50.5	50108	51167	101275	17023	25347	42370	2598	4094	33085	25820	58905	4007	3582
8/2/2012	Thu			49.5	50.5	50252	51283	101535	17450	25260	42710	2613	4292	32802	26023	58825	4038	4012
8/3/2012	Fri			49.1	50.9	52520	54515	107035	17376	25589	42965	2409	4059	35144	28926	64070	3929	3643
8/4/2012	Sat			49.8	50.2	46675	47076	93751	15713	19401	35114	3000	3231	30962	27675	58637	3202	3275
8/5/2012	Sun			50.0	50.0	38882	38928	77810	13058	15141	28199	2684	2917	25824	23787	49611	3036	2837
8/6/2012	Mon			49.4	50.6	47921	49044	96965	16836	24748	41584	2589	4247	31085	24296	55381	3962	3475
8/7/2012	Tue			49.3	50.7	48935	50285	99220	17299	25366	42665	2583	4419	31636	24919	56555	4021	3653
8/8/2012	Wed			49.3	50.7	48880	50286	99166	17016	25049	42065	2631	4247	31864	25237	57101	3938	3443
8/9/2012	Thu			49.4	50.6	49283	50564	99847	16901	25209	42110	2585	4295	32382	25355	57737	3887	3738
8/10/2012	Fri			49.1	50.9	52002	53831	105833	17282	25599	42881	2418	4279	34720	28232	62952	4076	3612
8/11/2012	Sat			49.8	50.2	45008	45367	90375	14394	18432	32826	2735	3283	30614	26935	57549	3273	2958
8/12/2012	Sun			50.0	50.0	38130	38183	76313	12722	14682	27404	2698	2812	25408	23501	48909	2968	2790
8/13/2012	Mon			49.3	50.7	47792	49182	96974	16752	25048	41800	2237	4531	31040	24134	55174	3993	3498
8/14/2012	Tue			49.2	50.8	48859	50404	99263	16491	25391	41882	2408	4425	32368	25013	57381	4003	3519
8/15/2012	Wed			49.4	50.6	50527	51757	102284	17456	25869	43325	2650	4455	33071	25888	58959	3891	3603
8/16/2012	Thu			49.4	50.6	51533	52847	104380	17328	25722	43050	2695	4333	34205	27125	61330	4074	3981
8/17/2012	Fri	*		49.2	50.8	50747	52324	103071	16257	23913	40170	2710	3298	34490	28411	62901	3976	3498
8/18/2012	Sat			49.6	50.4	45094	45903	90997	14641	19483	34124	2789	3479	30453	26420	56873	3115	3073
8/19/2012	Sun			49.9	50.1	37756	37909	75665	12011	14963	26974	2542	2926	25745	22946	48691	2932	2756
8/20/2012	Mon			49.1	50.9	47603	49361	96964	16224	25608	41832	2094	4548	31379	23753	55132	3984	3450
8/21/2012	Tue			49.3	50.7	48809	50282	99091	16688	25818	42506	2328	4662	32121	24464	56585	3977	3447
8/22/2012	Wed			49.1	50.9	49128	50924	100052	16921	25989	42910	2503	4497	32207	24935	57142	3924	3499
8/23/2012	Thu			49.2	50.8	48650	50247	98897	16542	25727	42269	2635	4496	32108	24520	56628	3924	3852
8/24/2012	Fri			49.2	50.8	51419	53151	104570	16812	25858	42670	2608	4315	34607	27293	61900	3993	3711
8/25/2012	Sat			49.5	50.5	43811	44646	88457	13780	18706	32486	2825	3234	30031	25940	55971	3310	2695
8/26/2012	Sun			49.9	50.1	36989	37131	74120	12189	14520	26709	2511	2875	24800	22611	47411	2883	2707
8/27/2012	Mon			48.9	51.1	45753	47901	93654	15372	25006	40378	1963	4727	30381	22895	53276	4084	3290
8/28/2012	Tue			49.1	50.9	47444	49227	96671	16038	25650	41688	2095	4818	31406	23577	54983	4127	3446
8/29/2012	Wed			49.2	50.8	48001	49566	97567	16092	25682	41774	2258	4700	31909	23884	55793	3945	3368
8/30/2012	Thu			49.0	51.0	49016	51091	100107	16156	26002	42158	2048	4829	32860	25089	57949	4058	3642
8/31/2012	Fri			49.0	51.0	51694	53881	105575	15553	26632	42185	2414	3996	36141	27249	63390	4128	3426

1 - INCOMPLETE FILE
2 - DIRECTIONAL SPLIT
3 - USER DEFINED ERROR

September, 2012

STATION NO 00H13P STATION DESCRIPTION H13P H-2 Fwy at MP 4.0, 0.1 mi S of Pinneapple OP

Oahu

DIRECTION 01 Wahiawa., MOV 1
DIRECTION 02 Waiawa IC, MOV 5

Date	Day of Week	H / WD	Unsuccessful Polling	24-HOUR TOTAL					A.M. TOTAL					P.M. TOTAL				
				%		Volume			00:00 - 12:00			PEAK HOUR		12:00-24:00			PEAK HOUR	
				D-01	D-02	D-01	D-02	1+2	D-01	D-02	1+2	D-01	D-02	D-01	D-02	1+2	D-01	D-02
9/1/2012	Sat			49.9	50.1	43318	43488	86806	14152	18323	32475	2655	3223	29166	25165	54331	3256	2951
9/2/2012	Sun			49.6	50.4	38407	39050	77457	12495	14607	27102	2676	2854	25912	24443	50355	2906	2815
9/3/2012	Mon	*		49.4	50.6	32521	33353	65874	10394	12688	23082	2323	2613	22127	20665	42792	2512	2426
9/4/2012	Tue			48.8	51.2	47836	50155	97991	15973	25743	41716	2033	4823	31863	24412	56275	4058	3575
9/5/2012	Wed			48.9	51.1	47759	49956	97715	15936	25775	41711	2137	4671	31823	24181	56004	3908	3312
9/6/2012	Thu			49.1	50.9	48511	50317	98828	16114	25791	41905	2058	4944	32397	24526	56923	3991	3703
9/7/2012	Fri			48.9	51.1	51095	53378	104473	16960	26151	43111	2049	4774	34135	27227	61362	4045	3281
9/8/2012	Sat			49.8	50.2	44719	45084	89803	14780	19008	33788	2806	3055	29939	26076	56015	3555	2734
9/9/2012	Sun			50.0	50.0	36721	36718	73439	12210	14507	26717	2497	2690	24511	22211	46722	2627	3017
9/10/2012	Mon			49.0	51.0	46391	48233	94624	16018	25285	41303	2158	4860	30373	22948	53321	3969	3458
9/11/2012	Tue			49.1	50.9	47608	49340	96948	16281	25625	41906	2088	4915	31327	23715	55042	3824	3567
9/12/2012	Wed			48.6	51.4	47143	49943	97086	15452	25461	40913	1967	4850	31691	24482	56173	4078	3481
9/13/2012	Thu			49.1	50.9	49152	50972	100124	16705	26121	42826	2205	4819	32447	24851	57298	4057	3653
9/14/2012	Fri			48.6	51.4	50933	53922	104855	16889	26356	43245	2155	4677	34044	27566	61610	4004	3624
9/15/2012	Sat			49.8	50.2	44712	45007	89719	14180	18999	33179	2789	3298	30532	26008	56540	3520	2854
9/16/2012	Sun			50.0	50.0	36483	36498	72981	11721	14829	26550	2533	2694	24762	21669	46431	2942	2721
9/17/2012	Mon			49.0	51.0	45004	46929	91933	15474	24657	40131	2325	4347	29530	22272	51802	3768	3061
9/18/2012	Tue			48.8	51.2	45393	47589	92982	15351	24870	40221	2146	4662	30042	22719	52761	3760	3181
9/19/2012	Wed			49.2	50.8	46125	47719	93844	15655	25096	40751	1849	4769	30470	22623	53093	3934	3107
9/20/2012	Thu			49.3	50.7	45319	46573	91892	15522	24932	40454	1872	4623	29797	21641	51438	3543	3089
9/21/2012	Fri			48.7	51.3	48643	51188	99831	15938	25463	41401	2193	4166	32705	25725	58430	3864	3219
9/22/2012	Sat			49.9	50.1	43354	43587	86941	14591	18501	33092	2769	3262	28763	25086	53849	3170	2857
9/23/2012	Sun			49.7	50.3	34908	35318	70226	11538	14132	25670	2393	2784	23370	21186	44556	2689	2689
9/24/2012	Mon			48.8	51.2	44569	46772	91341	15122	24853	39975	1844	4622	29447	21919	51366	3855	2965
9/25/2012	Tue			49.0	51.0	45959	47907	93866	15582	25129	40711	1924	4702	30377	22778	53155	3842	3113
9/26/2012	Wed			48.9	51.1	46188	48340	94528	15438	25226	40664	1865	4641	30750	23114	53864	3885	3095
9/27/2012	Thu			48.9	51.1	46247	48362	94609	15438	25094	40532	2041	4559	30809	23268	54077	3791	3257
9/28/2012	Fri			48.6	51.4	49547	52322	101869	16050	25829	41879	2376	4035	33497	26493	59990	3953	3217
9/29/2012	Sat			49.8	50.2	43213	43644	86857	13964	18908	32872	2652	3365	29249	24736	53985	2978	2988
9/30/2012	Sun			50.0	50.0	36411	36339	72750	11978	14922	26900	2425	2842	24433	21417	45850	2757	2732

1 - INCOMPLETE FILE
2 - DIRECTIONAL SPLIT
3 - USER DEFINED ERROR

October, 2012

STATION NO 00H13P STATION DESCRIPTION H13P H-2 Fwy at MP 4.0, 0.1 mi S of Pinneapple OP DIRECTION 01 Wahiawa., MOV 1

DIRECTION 02 Waiawa IC, MOV 5

Oahu

Date	Day of Week	H / WD	Unsuccessful Polling	24-HOUR TOTAL					A.M. TOTAL					P.M. TOTAL				
				%		Volume			00:00 - 12:00			PEAK HOUR		12:00-24:00			PEAK HOUR	
				D-01	D-02	D-01	D-02	1+2	D-01	D-02	1+2	D-01	D-02	D-01	D-02	1+2	D-01	D-02
10/1/2012	Mon			48.8	51.2	45528	47703	93231	15167	24985	40152	1671	4281	30361	22718	53079	3791	3023
10/2/2012	Tue			49.1	50.9	46359	48106	94465	15409	24882	40291	1710	4348	30950	23224	54174	3961	3078
10/3/2012	Wed			49.1	50.9	46739	48465	95204	15493	25418	40911	1745	4392	31246	23047	54293	3653	3132
10/4/2012	Thu			49.3	50.7	47356	48720	96076	15618	25080	40698	2191	3845	31738	23640	55378	4005	3233
10/5/2012	Fri			48.9	51.1	49006	51114	100120	14998	25559	40557	2047	3744	34008	25555	59563	4050	3096
10/6/2012	Sat			49.8	50.2	42731	43085	85816	14121	18458	32579	2761	3105	28610	24627	53237	3194	2915
10/7/2012	Sun			49.5	50.5	36238	36992	73230	11543	14909	26452	2456	2783	24695	22083	46778	2753	2723
10/8/2012	Mon	*		49.3	50.7	38717	39795	78512	11486	19797	31283	2309	2805	27231	19998	47229	3362	2365
10/9/2012	Tue			49.1	50.9	47111	48768	95879	16314	25535	41849	2316	4309	30797	23233	54030	3868	3145
10/10/2012	Wed			49.3	50.7	47391	48802	96193	16302	25292	41594	2548	4194	31089	23510	54599	3792	3299
10/11/2012	Thu			49.2	50.8	47703	49313	97016	16354	25507	41861	2534	4170	31349	23806	55155	3850	3323
10/12/2012	Fri			48.6	51.4	49583	52435	102018	16241	25985	42226	2450	4134	33342	26450	59792	3967	3200
10/13/2012	Sat			49.6	50.4	44213	44902	89115	14701	18666	33367	2805	3071	29512	26236	55748	2946	3148
10/14/2012	Sun			49.8	50.2	36272	36497	72769	11935	14585	26520	2389	2773	24337	21912	46249	2739	2830
10/15/2012	Mon			48.8	51.2	45933	48161	94094	15675	25364	41039	2259	4308	30258	22797	53055	3915	3196
10/16/2012	Tue			48.9	51.1	46224	48355	94579	16042	25505	41547	2523	4109	30182	22850	53032	4096	3278
10/17/2012	Wed			49.0	51.0	47109	49045	96154	15702	25542	41244	2038	4551	31407	23503	54910	3831	3246
10/18/2012	Thu			48.5	51.5	47684	50597	98281	16307	25418	41725	2196	4554	31377	25179	56556	4277	3840
10/19/2012	Fri			48.9	51.1	50874	53102	103976	16522	26182	42704	2537	4169	34352	26920	61272	4116	3374
10/20/2012	Sat			49.5	50.5	43028	43936	86964	13886	18910	32796	2758	3222	29142	25026	54168	3261	2794
10/21/2012	Sun			49.7	50.3	36055	36448	72503	12069	14669	26738	2618	2695	23986	21779	45765	2765	2805
10/22/2012	Mon			49.0	51.0	45327	47210	92537	15306	25117	40423	2159	4479	30021	22093	52114	3985	3170
10/23/2012	Tue			48.9	51.1	46567	48576	95143	15600	25574	41174	2321	4395	30967	23002	53969	4088	3351
10/24/2012	Wed			49.1	50.9	47329	49145	96474	15944	25401	41345	1878	4721	31385	23744	55129	3980	3490
10/25/2012	Thu			49.2	50.8	47305	48864	96169	15978	25393	41371	2258	4473	31327	23471	54798	3866	3514
10/26/2012	Fri			48.9	51.1	50058	52267	102325	16311	25520	41831	2522	4070	33747	26747	60494	3969	3453
10/27/2012	Sat			50.7	49.3	46213	44892	91105	14451	18695	33146	2772	3095	31762	26197	57959	3094	2996
10/28/2012	Sun			48.3	51.7	34414	36873	71287	10692	15318	26010	2447	2697	23722	21555	45277	2791	2698
10/29/2012	Mon			48.9	51.1	45623	47626	93249	15525	25017	40542	2390	4218	30098	22609	52707	3961	3318
10/30/2012	Tue			49.0	51.0	47396	49347	96743	15811	25511	41322	2029	4744	31585	23836	55421	4109	3443
10/31/2012	Wed			48.5	51.5	46621	49587	96208	15974	25544	41518	2200	4410	30647	24043	54690	3447	3275

1 - INCOMPLETE FILE
2 - DIRECTIONAL SPLIT
3 - USER DEFINED ERROR

November, 2012

STATION NO 00H13P STATION DESCRIPTION H13P H-2 Fwy at MP 4.0, 0.1 mi S of Pinneapple OP

Oahu

DIRECTION 01 Wahiawa., MOV 1
DIRECTION 02 Waiawa IC, MOV 5

Date	Day of Week	H / WD	Unsuccessful Polling	24-HOUR TOTAL					A.M. TOTAL					P.M. TOTAL				
				%		Volume			00:00 - 12:00			PEAK HOUR		12:00-24:00			PEAK HOUR	
				D-01	D-02	D-01	D-02	1+2	D-01	D-02	1+2	D-01	D-02	D-01	D-02	1+2	D-01	D-02
11/1/2012	Thu			49.6	50.4	48783	49604	98387	16567	25463	42030	2165	4318	32216	24141	56357	4074	3666
11/2/2012	Fri			48.8	51.2	50194	52660	102854	16199	25734	41933	2309	4184	33995	26926	60921	4000	3539
11/3/2012	Sat			49.8	50.2	44044	44459	88503	14918	19429	34347	2877	3272	29126	25030	54156	3116	2968
11/4/2012	Sun			49.6	50.4	35807	36337	72144	12097	15137	27234	2393	2827	23710	21200	44910	2694	2652
11/5/2012	Mon			49.1	50.9	47015	48835	95850	16146	25412	41558	2578	4199	30869	23423	54292	3869	3410
11/6/2012	Tue	*		49.2	50.8	46015	47458	93473	15949	23459	39408	2234	3343	30066	23999	54065	4065	3410
11/7/2012	Wed			49.0	51.0	47538	49512	97050	16174	25509	41683	2494	4212	31364	24003	55367	4020	3562
11/8/2012	Thu			47.3	52.7	44219	49297	93516	12630	24890	37520	1878	3987	31589	24407	55996	3509	3695
11/9/2012	Fri			49.0	51.0	50279	52410	102689	15856	26167	42023	2484	4075	34423	26243	60666	4043	3415
11/10/2012	Sat			49.9	50.1	44278	44492	88770	14463	19027	33490	2681	3291	29815	25465	55280	2897	3238
11/11/2012	Sun			49.7	50.3	37826	38273	76099	12104	14863	26967	2516	2956	25722	23410	49132	2880	2757
11/12/2012	Mon	*		49.4	50.6	37984	38874	76858	12017	17392	29409	2299	2946	25967	21482	47449	3208	2515
11/13/2012	Tue			49.0	51.0	47298	49208	96506	16258	25641	41899	2050	4651	31040	23567	54607	4016	3468
11/14/2012	Wed			49.1	50.9	48634	50501	99135	16233	25949	42182	2358	4379	32401	24552	56953	4155	3465
11/15/2012	Thu			48.8	51.2	49721	52212	101933	16882	26887	43769	2527	4470	32839	25325	58164	4102	3961
11/16/2012	Fri			48.9	51.1	51690	54092	105782	17072	26480	43552	2451	4215	34618	27612	62230	4197	3720
11/17/2012	Sat			49.7	50.3	43915	44441	88356	14598	18816	33414	2754	3187	29317	25625	54942	3345	2931
11/18/2012	Sun			49.8	50.2	36162	36380	72542	12062	14384	26446	2265	2813	24100	21996	46096	2666	2857
11/19/2012	Mon			49.0	51.0	47275	49164	96439	15860	25715	41575	2264	4320	31415	23449	54864	4124	3367
11/20/2012	Tue			48.9	51.1	49102	51394	100496	16495	26208	42703	1978	4650	32607	25186	57793	4163	3680
11/21/2012	Wed			48.9	51.1	51016	53376	104392	17155	26250	43405	2520	4206	33861	27126	60987	4115	3435
11/22/2012	Thu	*		49.2	50.8	34508	35675	70183	10951	10225	21176	2531	2437	23557	25450	49007	2346	2878
11/23/2012	Fri		3	49.5	50.5	43275	44235	87510	14616	20591	35207	2580	2957	28659	23644	52303	3543	2506
11/24/2012	Sat			49.5	50.5	41962	42855	84817	13738	17449	31187	2689	3130	28224	25406	53630	3021	2893
11/25/2012	Sun			49.6	50.4	35165	35722	70887	11361	14207	25568	2381	2890	23804	21515	45319	2807	2668
11/26/2012	Mon			48.9	51.1	45876	47892	93768	15607	25050	40657	1923	4482	30269	22842	53111	3976	3276
11/27/2012	Tue			48.9	51.1	47627	49720	97347	16322	25554	41876	2367	4322	31305	24166	55471	4037	3494
11/28/2012	Wed			49.1	50.9	48345	50189	98534	16238	25731	41969	1980	4572	32107	24458	56565	4055	3369
11/29/2012	Thu			48.8	51.2	49133	51539	100672	16582	25996	42578	2054	4567	32551	25543	58094	4191	3990
11/30/2012	Fri			48.6	51.4	52006	55111	107117	17217	26456	43673	2596	4128	34789	28655	63444	4061	3783

1 - INCOMPLETE FILE
2 - DIRECTIONAL SPLIT
3 - USER DEFINED ERROR

December, 2012

STATION NO 00H13P STATION DESCRIPTION H13P H-2 Fwy at MP 4.0, 0.1 mi S of Pinneapple OP DIRECTION 01 Wahiawa., MOV 1

DIRECTION 02 Waiawa IC, MOV 5

Oahu

Date	Day of Week	H / WD	Unsuccessful Polling	24-HOUR TOTAL					A.M. TOTAL					P.M. TOTAL				
				%		Volume			00:00 - 12:00			PEAK HOUR		12:00-24:00			PEAK HOUR	
				D-01	D-02	D-01	D-02	1+2	D-01	D-02	1+2	D-01	D-02	D-01	D-02	1+2	D-01	D-02
12/1/2012	Sat			50.0	50.0	47055	47126	94181	15497	19712	35209	2950	3410	31558	27414	58972	3130	3498
12/2/2012	Sun			49.8	50.2	36049	36281	72330	11178	15196	26374	2230	2855	24871	21085	45956	2621	2847
12/3/2012	Mon			49.0	51.0	47877	49745	97622	16520	25905	42425	2459	4107	31357	23840	55197	3978	3465
12/4/2012	Tue			48.9	51.1	48765	51018	99783	16707	26440	43147	2035	4639	32058	24578	56636	4059	3671
12/5/2012	Wed			49.0	51.0	49109	51091	100200	16456	26242	42698	2476	4191	32653	24849	57502	3994	3530
12/6/2012	Thu			49.1	50.9	49266	51155	100421	16472	26144	42616	2512	4216	32794	25011	57805	4084	3858
12/7/2012	Fri			48.8	51.2	51779	54217	105996	17098	26165	43263	2520	4029	34681	28052	62733	4128	3754
12/8/2012	Sat			49.7	50.3	45438	46019	91457	14410	19424	33834	2919	3178	31028	26595	57623	3471	2924
12/9/2012	Sun			49.9	50.1	37244	37381	74625	12174	14721	26895	2508	2800	25070	22660	47730	2830	2841
12/10/2012	Mon			49.0	51.0	47832	49856	97688	16069	26076	42145	2623	4038	31763	23780	55543	4049	3381
12/11/2012	Tue			49.0	51.0	48852	50850	99702	16387	25995	42382	2502	4126	32465	24855	57320	4052	3599
12/12/2012	Wed			49.0	51.0	49374	51456	100830	16447	26188	42635	2614	4136	32927	25268	58195	4042	3570
12/13/2012	Thu			49.1	50.9	49744	51663	101407	16434	26362	42796	1934	4578	33310	25301	58611	3992	3829
12/14/2012	Fri			49.0	51.0	53800	56012	109812	18052	26362	44414	2572	4166	35748	29650	65398	4042	3919
12/15/2012	Sat			48.9	51.1	46345	48408	94753	14669	21050	35719	2401	4041	31676	27358	59034	3124	3399
12/16/2012	Sun			50.1	49.9	38679	38449	77128	11861	15149	27010	2519	2918	26818	23300	50118	2969	2818
12/17/2012	Mon			49.2	50.8	46685	48250	94935	15185	25314	40499	1837	4131	31500	22936	54436	3591	3027
12/18/2012	Tue			49.1	50.9	48507	50200	98707	15533	25123	40656	1946	4130	32974	25077	58051	3949	3222
12/19/2012	Wed			49.1	50.9	48519	50203	98722	15745	25377	41122	1996	3930	32774	24826	57600	3705	3078
12/20/2012	Thu			49.3	50.7	48468	49844	98312	15434	25177	40611	2493	3247	33034	24667	57701	3787	3172
12/21/2012	Fri			48.9	51.1	50844	53028	103872	16445	25707	42152	2855	3485	34399	27321	61720	3750	3237
12/22/2012	Sat			49.5	50.5	43917	44778	88695	13525	18077	31602	2838	3236	30392	26701	57093	3096	2973
12/23/2012	Sun			49.4	50.6	38155	39049	77204	11572	14887	26459	2456	2794	26583	24162	50745	2773	2848
12/24/2012	Mon		3	49.4	50.6	43087	44076	87163	12787	19238	32025	2709	2993	30300	24838	55138	3293	2739
12/25/2012	Tue	*		49.6	50.4	29881	30409	60290	8588	8702	17290	2006	2053	21293	21707	43000	2096	2497
12/26/2012	Wed			48.8	51.2	44198	46333	90531	14385	21930	36315	2503	2844	29813	24403	54216	3782	3173
12/27/2012	Thu			49.2	50.8	46597	48031	94628	15476	22808	38284	2745	2975	31121	25223	56344	3827	3294
12/28/2012	Fri			49.1	50.9	49768	51531	101299	16607	23494	40101	2894	3201	33161	28037	61198	3916	3435
12/29/2012	Sat			49.5	50.5	42299	43110	85409	13718	17071	30789	2777	3222	28581	26039	54620	3208	2903
12/30/2012	Sun			49.5	50.5	37340	38120	75460	12314	13774	26088	2559	2833	25026	24346	49372	2760	3029
12/31/2012	Mon		3	48.5	51.5	42559	45146	87705	13719	19814	33533	2933	2971	28840	25332	54172	3575	2808

1 - INCOMPLETE FILE
2 - DIRECTIONAL SPLIT
3 - USER DEFINED ERROR

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