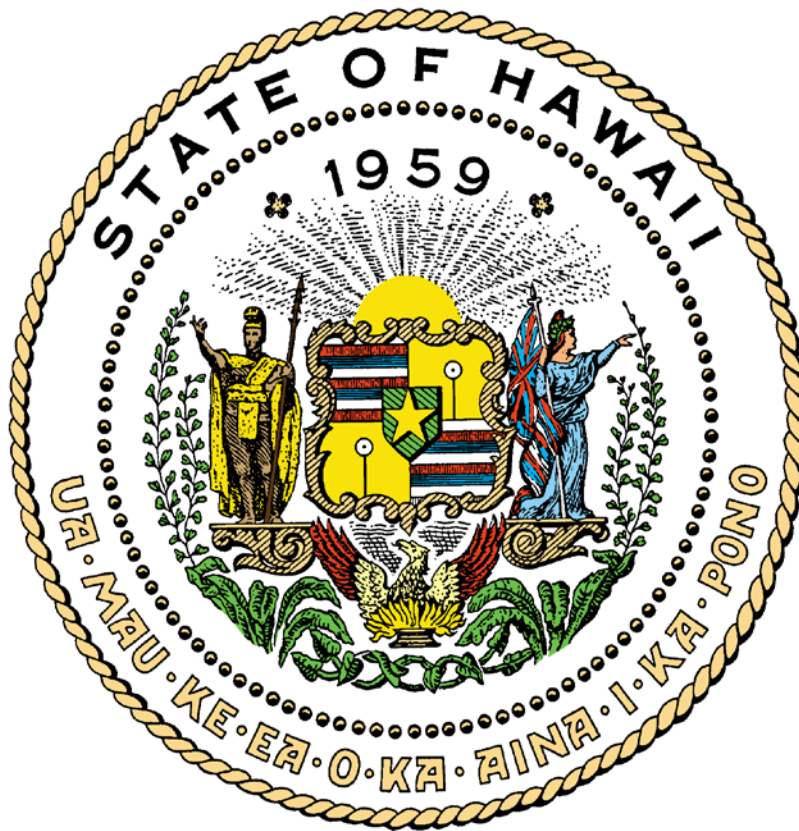


Report to the 2013 Hawai‘i State Legislature

Lead By Example State of Hawai‘i Agencies’ Energy Initiatives FY 2011-2012



State of Hawai‘i
Department of Business, Economic Development & Tourism
March 2013

This report and the original agency submissions in accordance with Section 93-16, Hawai‘i Revised Statutes.

<http://energy.Hawai‘i.gov/programs/achieving-efficiency/lead-by-example>

Hawai‘i Department of Business, Economic Development, and Tourism. Strategic Industries Division.

Sate of Hawai‘i agencies energy initiatives: leading by example, FY2011-2012. Honolulu: 2012-.

Report to the 2013 Hawai‘i State Legislature

TABLE OF CONTENTS

EXECUTIVE SUMMARY	1
The LBE Initiative	10
Executive Agency Electricity Consumption	13
Electricity Costs by State Agencies	17
Efficiency in Buildings	23
Rebates Save Money at State Facilities	28
Highlights of Current State Energy Activities	33
Plans for Future LBE Activities	40
Individual Agency Responses	42
Consolidated LBE Reports from State of Hawai'i Executive Agencies	43
Act 96 SLH 2006: Buildings and Facilities	43
Act 96 SLH 2006: Transportation Vehicles and Fuel	75
Renewable Energy and Resource Development	89
Benchmarking Requirement	103

TABLES

Table 1: Utility Electricity Consumption by State Agencies	15
Table 2: Differences in Electricity Consumption (kWh) for Reported Years	16
Table 3: Cost of Electricity Purchased by State Agencies	20
Table 4: Differences in Cost of Electricity for Reported Years (\$)	21

FIGURES

Figure 1: Comparison of State Agencies' Electricity Consumption in kWh	13
Figure 2: Comparison of kWh Consumption by Agency by Year	14
Figure 3: Comparison of State Electricity Utility Costs FY05 to FY12	17
Figure 4: Percent Change (over FY05) of Electricity Price, Cost, and Consumption	18
Figure 5: Cost of Purchased Electricity by Agency from FY05 to FY12	19
Figure 6: Consumption and Cost Percentage Change from FY05 to FY12 by Agency	22
Figure 7: Rebates since 1996, by Agency	28
Figure 8: State Agency Rebate Savings (\$) from HECO since 1996	29
Figure 9: Annual State Executive Facilities' Energy Savings (kWh) from HECO Rebate Programs since 1996	30
Figure 10: Rebate Energy Savings (kWh) by Technology in 2012	30
Figure 11: Typical Office Building Energy Use Breakdown	31
Figure 12: State of Hawai'i Facilities on O'ahu,	31
Figure 13: Percentage of Total State Agency Consumption by Island in 2012	32

APPENDICES

Appendix 1: DOE Vehicle Data	A - 1
Appendix 2: DHHL Vehicle Data	A - 14
Appendix 3: PSD Vehicle Data	A - 15
Appendix 4: DOT-Airport Fuel Data	A - 24
Appendix 5: DOT-Harbors Vehicle Data	A - 41
Appendix 6: DOT-Highways Vehicle Data	A - 45
Appendix 7: HSPLS Vehicle Data	A - 60
Appendix 8: DLNR Building List	A - 61

EXECUTIVE SUMMARY

The Lead By Example (LBE) initiative began in 2006 in response to legislative and executive mandates to make government buildings, fleets, and personnel practices leaders in energy efficiency and conservation. These efforts acknowledge the high cost of electricity in Hawai‘i; the energy security benefits of implementing alternative fuel use; and the many opportunities for increasing energy efficiency in new and existing state offices, facilities and schools. The legislation also required incorporating environmentally preferable purchasing into state operations. Fully implemented, the LBE initiative represents an important step in achieving long-term economic and environmental benefits for the state.

This report addresses State agency activity during the fiscal year 2011-2012. During FY12 state agencies’ energy consumption decreased by 1.2% from FY11 levels, but the state paid 19.4 % more than FY11. When comparing FY12 figures against the 2005 baseline year, energy consumption dropped 5.7%, but, due to the increasing cost for electricity, costs rose 93.8%.

Year-to-year figures from the beginning of LBE are as follows:

- FY05-FY06: consumption increased 2.4% (16M kWh), costs increased 24% (\$25M)
- FY06-FY07: consumption increased 1.1% (8M kWh), costs increased 3.1% (\$4M)
- FY07-FY08: consumption decreased 0.1% (-1M kWh), costs increased 21.8% (\$30M)
- FY08-FY09: consumption decreased 5.7% (-40M kWh), costs increased 1.2% (\$2M)
- FY09-FY10: consumption decreased 2.8% (-18M kWh), costs decreased 12.1% (-\$20M)
- FY10-FY11: consumption increased 0.6% (2M kWh), costs increased 17.2% (\$25M)
- FY11-FY12: consumption decreased 1.2% (-7M kWh), costs increased 19.4% (\$33M)

Overall, from baseline year 2005:

- FY05-FY12: consumption decreased 5.7% (-38M kWh), costs increased 93.8% (\$99M)

As seen above, the decrease in FY12 put the State’s consumption back on a downward trajectory after having shown a slight increase in consumption in FY11. A primary objective of Lead By Example is to protect the state against escalating energy costs and to expedite energy security to protect Hawai‘i and our economy against the volatility of world oil markets. Over the years, costs closely have mirrored the rise and fall in the price of oil and electricity, and FY12 again demonstrated the extent to which price hikes negatively affect our economy. While electricity consumption decreased by 1.2% from FY11, state agencies paid \$33M more than in FY11, a 19.4% increase. Comparisons to the baseline year illustrate the challenge state agencies still face and highlight the importance of continued efforts to pursue energy efficiency and renewable energy opportunities.

State of Hawai‘i executive branch agencies have led by example and were active during fiscal year 2012 with several energy conservation and renewable energy

generation projects. Retrofitting existing buildings for energy efficiency and modifying operations strategies were the primary contributors to reducing electrical consumption and cost, but progress also was made in green building design, environmentally preferable purchasing, transportation and the adoption of renewable energy. Some highlights follow.

Efficiency

- Twenty-one (21) state buildings have received ENERGY STAR® awards, acknowledging that they rank in the top 25% of similar buildings nationwide. Agencies are reviewing buildings to recertify existing buildings and to identify new buildings for certification.
- Sixteen (16) state buildings are LEED certified. An additional 56 LEED projects are in the process toward the goal of certification.
- Thirteen (13) state buildings were retro-commissioned to the investigation phase since 2008, an additional fifty-one (51) were in the process, and five (5) have been retro-commissioned or will be as part of LEED projects.
- A total of 18 workshops and other events relating to LBE topics were held in FY12, attracting at least 930 participants, including many from state agencies. In some cases, DBEDT provided funds so that other executive agencies' staff members could attend the training.
- The State Building Code Council approved the 2006 International Energy Conservation Code (IECC) and modified the code to better suit the climate in Hawai'i, resulting in an estimated 15% efficiency improvement.
- DBEDT assisted with adoption of county building energy codes. IECC 2006 was adopted by Maui County in October 2009, Hawai'i County in October 2010, and the City and County of Honolulu in November 2009. Kaua'i County adopted IECC 2009 in May 2010.
- The Energy Services Coalition, a national nonprofit organization dedicated to supporting performance contracting, recognized the State of Hawai'i as first in the nation in Energy Savings Performance Contracts, per capita, for State and County Building. To date, over \$193 million has been invested in both State and County

Energy Savings Performance Contracting

The State of Hawaii was awarded the Energy Services Coalition's (ESC) *Race to the Top* in recognition for leading the nation in per capita performance contracting for state and county buildings. The ESC is a national nonprofit organization dedicated to supporting performance contracting. To date, over \$193 million has been invested in both State and County ESPCs with cost savings expected to grow to more than \$341 million over the 20-year life of the contracts. DBEDT provides technical assistance to agencies.

ESPCs with cost savings expected to grow to more than \$341 million over the 20-year life of the contracts. DBEDT has provided technical assistance to agencies for projects dating back to 1996.

- DBEDT, in coordination with the EPA and pursuant to Act 155, offered training and assistance for benchmarking to state agencies. Act 155, SLH 2009, requires benchmarking of all state facilities. Benchmarking is a process which involves calculating the building's annual energy consumption per square foot, allowing buildings to be compared and identifying areas for improving energy efficiency. To date, 277 state facilities have been benchmarked using the ENERGY STAR® Portfolio Manager online tool.
- State agencies have received more than \$6.69 million in efficiency rebates since 1996 from the Hawai'ian Electric Company (HECO) and its subsidiaries and from Hawai'i Energy. These rebates combined have resulted in estimated cumulative dollar savings of over \$153 million and electricity savings of 688 million kilowatt-hours. Over the life of the equipment, the savings will be equivalent to approximately 157,000 households' annual electricity use. In FY12 state agencies received \$495,784 in rebates.
- The Department of Health (DOH) hired a contractor to conduct an audit and study of the mechanical systems at the State Lab to identify various options for reducing energy.
- DOH is installing super T8 lamps and electronic ballasts at Diamond Head, Lanakila, Leeward, and Windward Health Centers as well as the Hale Complex. DOH is also in the process of making a number of reroofing and mechanical system upgrades for the purpose of energy efficiency.
- In March of 2012 the Department of Education (DOE) helped host the first Student Energy Ambassador Development (SEAD) training for high school students and mentors. These trainings are part of an education campaign sponsored by Hawai'i Energy and put on by the UH Rewarding Internships for Sustainable Employment (RISE) intern program. Groups from Kalani, Mililani and Waipahu High Schools participated and learned how to do an energy audit at their schools, identify strategies for conserving energy and put together a plan to accomplish energy savings.
- About 100 schools have been added to ENERGY STAR® Portfolio Manager. Through the implementation of the DOE's Energy Efficiency and Sustainability Master Plan, as well as the hiring of additional resources, the DOE plans to complete benchmarking for all 250 plus DOE facilities statewide within the next two years.
- The Department of Labor and Industrial Relations (DLIR) has actively participated in the State's "Green Champion" -iConserve Workshops. DLIR and the Department of Taxation (DoTAX) jointly hosted an energy conservation workshop at the Princess Ke'elikōlani Building with Hawai'i Energy, which covered energy saving practices at work and home for all employees.

- The Hawai‘i Housing Finance and Development Corporation (HHFDC), with Hawai‘i Energy, conducted an energy audit of the Pohulani Elderly building and will apply recommendations as the building’s capital improvements budget allows. Information from the Pohulani Elderly building audit, as applicable, will be applied to two (2) other high rise buildings; Kauhale Kaka‘ako and Kamake‘e Vista.
- HHFDC’s high rise affordable apartment building Kauhale Kaka‘ako is being pipelined for a major overhaul of physical and mechanical systems to include a roofing system (replacement, recoating, resealing), vertical side wall/widows (repair, repainting), and “Cool Roof & Cool Wall” coating systems.
- HHFDC is continuing to replace failing solar water heating system collection panels, circulator pumps and reservoir tanks on the Big Island of Hawai‘i at the La‘ilani Apartments (200) in Kona. Over the past years 29 units have been replaced.
- HHFDC has incorporated heat recovery systems in the Air Conditioning Plants that cool the commercial spaces in several of its high rise buildings. These recovery systems are designed to pre-heat the cold water entering the circulating system thus reducing the burden on the natural gas boilers and conversely cooling the air conditioning system.
- The Hawai‘i Public Housing Authority (HPHA) has a consultant selected and are obtaining internal approvals to begin negotiations to provide a facility-wide green assessment and report, or Green Physical Needs Assessment (GPNA).

ENERGY STAR® Benchmarking

Benchmarking is a process which involves calculating the building’s annual energy consumption per square foot, allowing buildings to be compared and identifying areas for improving energy efficiency. To date, 277 state facilities have been benchmarked using the ENERGY STAR® Portfolio Manager online tool. If a building receives a score of 75 or higher, it indicates that the building is in the top 25% of similar buildings nationally and can be certified as an ENERGY STAR® building. To date, 21 state buildings have received the ENERGY STAR®.

ENERGY STAR® Certified State Buildings

- AAFES Building*
- Abner Paki Hale Courthouse
- ‘Aiea High School
- Ala Moana Health Center
- Diamond Head Health Center
- Hilo State Office Building
- Ho‘oponohono*
- Kakuhihewa Building (Kapolei State Building)*
- Kāne‘ohe Elementary School
- Kāne‘ohe Civic Center*
- Ke‘elikōlani Building
- Kekūanāno‘a Building
- Keoni Ana Building*
- King Kalākaua Building*
- Leeward Health Center
- Leiopapa A Kamehameha Building (State Office Tower)*
- OR&L Main*
- State Capitol Building
- Uluakupu (Building 4)
- Wahiawa Civic Center*
- Waipahu Civic Center*

*Received ENERGY STAR® certification in multiple years

The report will include electronic drawings, site surveys, building assessments, etc., to include recommendations for potential energy-savings and environmental strategies for existing HPHA projects statewide. Estimated completion of this study is October 2013. The report will be used to schedule a plan of action for the next five years.

- The Department of Transportation (DOT) Highways Division's Kaua'i District Office has replaced interior lighting with new LED lights.
- Three new energy efficient variable frequency drives were installed at the Natural Energy Laboratory of Hawai'i Authority's (NELHA) 55" seawater distribution system.
- The Department of Public Safety (PSD) executed an ESPC with total energy "cost avoidance" projected to be approximately \$2.3 million, of which there is a guaranteed \$1.98 million in savings as per the contract for the OCCC and Halawa facilities.
- The University of Hawai'i (UH) Community Colleges (CC) completed re-lamping existing lighting throughout the Kaua'i CC, Honolulu CC, Leeward CC, and Kapi'olani CC campuses to energy efficient lamps/bulbs with occupancy sensors as well as installing energy management controls to all AC equipment, PC monitors, and vending machines.
- Hawai'i CC replaced an old chiller with a split AC system, delamped light fixtures campus wide, and sub-metered four shops and two portable buildings to monitor electrical costs.
- Honolulu CC, Kapi'olani CC, and Kaua'i CC replaced toilets, urinals, and lavatory fixtures with low flow type valves and moderators.

Capitalizing on Energy Efficiency Incentives

State agencies have received more than \$6.69 million in efficiency rebates since 1996 from the Hawai'ian Electric Company (HECO) and its subsidiaries and from Hawai'i Energy. These rebates combined have resulted in estimated cumulative dollar savings of over \$153 million and electricity savings of 688 million kilowatt-hours. Over the life of the equipment, the savings will be equivalent to approximately 157,000 households' annual electricity use. In FY12 state agencies received \$495,784 in rebates.

Renewable Energy

- DOT Highways installed solar water heating systems at the Maui District Baseyard as well as PV systems at the Kaua'i District Office and Moloka'i Baseyard facilities. DOT Highways is also in the process of installing photovoltaic (PV) systems at the Hawai'i District Office, Maui District Office, and Ke'anae Baseyard facilities.

DAGS Photovoltaic System

A photovoltaic system project installed on the Kalanimoku Building has been completed by the Department of Accounting and General Services (DAGS) and a net metering agreement has been executed with the Hawai'ian Electric Company (HECO). The system has been fully operational since February 2012 and has reduced electrical consumption by 47% (20,800 kWh per month) and cost by 42% (\$6,000 per month). American Recovery and Reinvestment Funds were used.

- NELHA received a \$412,562 reimbursable federal grant for the development and deployment of distributed energy systems at NELHA and to update NELHA's strategy as a demonstration site for Distributed Energy Resources.
- A PV system was installed on the Department of Land and Natural Resources' (DLNR) Kure Bunkhouse. The system creates 1020 watts of power and will be capable of producing 4,080 watts per day and with 8 Full River 6 volt golf-cart batteries the system will provide 10,000 watts of storage capacity.
- The Science and Technology building at UH-Hilo uses a heat recovery system for domestic hot water and dehumidification of the building. Also, Kaua'i CC produces electricity through an 82.3 kWh PV system installed on the roof of the One Stop Center building.
- The Edmondson Hall and Gartley Hall projects at UH-Mānoa presently under construction will employ a solar water reheating system for the central HVAC systems. Solar water re-heating will also be employed in planned new construction and renovation projects where economically feasible.

Transportation

- Electrical utility vehicles, as an option to fossil fueled service vehicles and trucks, are being used in Wai'anapanapa State Park, Maui, at various park areas on O'ahu, and is planned for park use on Hawai'i by the DLNR.
- DBEDT partnered with the state Department of Commerce & Consumer Affairs (DCCA) to manage the EV Ready Rebate Program, offering rebates up to \$4,500 for eligible EVs purchased in Hawaii and up to \$500 for purchase and installation of EV charging equipment. The program provided 453 rebates for electric vehicles and 274 rebates for public and private charging stations. At the end of 2012 there were 1,136 EVs registered in the state, compared to 162 when the program began. The program also resulted in the installation of over 230 Level 2 public EV charging sites and six DC fast chargers at more than 100 locations throughout Hawaii. American Recovery and Reinvestment Funds were used for these projects.
- Kaua'i CC purchased a 2011 Toyota Prius Hybrid vehicle to reduce gasoline consumption.
- UH-Hilo has a hybrid gas/electric, an electric vehicle, and owns and operates one vehicle on O'ahu and that vehicle runs on Flex Fuel, which complies with the Federal regulations.
- NELHA owns a Nissan Leaf EV.

Electric Vehicles

Electric Vehicle (EV) charging stations have been installed at the DAGS motor pool (3), Central Services (1), and UH motor pool.

Also, three Public Stations have been installed and operating at the State Capitol, Circuit Court and Kapolei Judiciary.

The State Procurement Office (SPO), DAGS-Automotive Management Division, and the Department of Business, Economic Development, and Tourism (DBEDT) have developed guidelines for the purchase of vehicles including energy-efficient vehicles.

These guidelines are available on the DBEDT website.

- Kapi‘olani CC has a small scale program to produce bio-diesel from waste oil for use in gas carts operated on campus. The project is conducted with the cooperation of the food services and science faculty together with students enrolled in their classes.

Purchasing Practices

- Most departments already use life-cycle cost analyses, purchase efficient equipment such as those with the ENERGY STAR® label, and take advantage of utility rebates. The State Procurement Office (SPO) continues to provide price and vendor listings which include ENERGY STAR®, recycled, or environmentally preferred products. Information on recycled and environmentally preferable products (EPP) has been prepared by DBEDT. Lead By Example, in partnership with the SPO, also has hosted trainings on EPP that are available to state employees.
- DBEDT worked with the UH Mānoa in developing the *2011 Environmental Product Guide* which was printed and distributed to State agencies, businesses, and at the 12th Annual Build and Buy Green Conference in Spring 2012. It is also posted online at: www.energy.hawaii.gov/wp-content/uploads/2011/10/2011-EPG-FINAL_WEB.pdf.
- The DOE has increased its application of environmentally preferable purchasing in a number of ways. As part of ‘Ewa Makai Middle School’s sustainability efforts, the custodial staff has embraced the use of green cleaning products and uses them exclusively. This includes the use of dispensing systems for cleaners, which allows the school to buy in bulk - with less packaging and therefore less waste. Mop buckets can be filled directly and spray bottles can be reused rather than end up in the land fill after one use. In 2012 Waikī Elementary School was the site of a “Green Classroom Professional Training +Toolkit” event which included training on the use of environmentally preferable cleaning products.
- HHFDC has mandated that all janitorial and associated products used in cleaning operations will be environmentally friendly products.
- DAGS Central Services Division (CSD) procures environmentally preferable products, whenever possible. The CSD’s Custodial Program uses Green Seal or other certified environmentally friendly products to clean their buildings.
- The SPO, DAGS-AMD, and DBEDT have developed guidelines for the purchase of vehicles including energy-efficient vehicles. These guidelines are available on the DBEDT website: <http://Hawaii.gov/dbedt/info/energy/efficiency/state/>

Environmentally Preferable Purchasing at UH Māui College

The Operations and Maintenance Department at UH Māui College uses organic fertilizers and environmentally friendly cleaning solutions. College perimeter fencing and parking lot curbs are made out of recycled plastic and parking lot planters were filled with rounded recycled glass chips.

- The Hawaii Community Development Authority (HCDA) has followed DAGS procurement price lists and has purchased environmentally friendly products such as paper, paper towels and light bulbs.
- NELHA purchases all paper products to include copy and bond paper, paper towels, toilet paper, etc. through the State Bid List that contain the recommended content. It also replaced its old Xerox photo copy machine with a new ENERGY STAR® rated Ricoh.
- The Foreign Trade Zone (FTZ) has upgraded seven new, energy efficient computer systems and monitors over the past few years and also recently replaced two copier/printer units with newer, more energy efficient models.
- Kaua'i CC utilizes bio-diesel from Kaua'i Farm Fuels, Inc. to operate the college's tractor mower.
- HHFDC replaces all fans with ENERGY STAR® rated models and equips one of its apartment buildings with ENERGY STAR® rated window air conditioners, ceiling fans, washers & dryers

Leadership in Energy and Environmental Design (LEED)

Hawai'i remains a member of the U.S. Green Buildings Council (USGBC), the non-profit entity which administers the LEED program. DAGS is developing LEED application guidelines to be used by state agencies. There are currently 30 LEED Accredited Professionals on staff at six state agencies; DAGS, DBEDT, DOE, DOT, HPHA, and UH. Others are in training for this goal. DBEDT continues to offer LEED training opportunities for state agency staff.

A significant number of additional buildings which are anticipated to meet LEED Silver standards or better are either

State of Hawai'i LEED Certified Buildings

Six years ago, there was only one LEED Accredited Professional (AP) working for the state. Now, there are over 30 LEED APs and the state requires all new construction and major renovation to meet LEED Silver standards. To date, sixteen state facilities have been certified as meeting LEED standards or have been completed and are awaiting certification by USGBC:

LEED Platinum

- Natural Energy Laboratory of Hawai'i Authority Gateway Energy Center

LEED Gold

- UH-Hilo Student Life Complex
- UH-Mānoa Center for Microbial Oceanography Research and Education
- North Kohala Public Library
- State Office Tower for LEED-Operations & Maintenance
- Baldwin High School Library

LEED Silver

- Frear Hall Residence Housing
- 'Ewa Makai Middle School
- Honolulu International Airport Lounge for LEED-Commercial Interiors
- Windward Community College Library and Learning Center
- UH-Mānoa Webster Hall Translational Health Science Simulation Center
- Mānoa Public Library

LEED Certified

- Waipahu Intermediate School Cafeteria
- UH-Hilo 'Imiloa Astronomy Center of Hawai'i
- UH-Mānoa John A. Burns School of Medicine
- UH Hilo Science and Technology Center

being planned or are in the design phase. The following state facilities are currently under construction or construction bids have been awarded, and are expected to be rated by LEED:

- DOE Waialua Elementary's Library (Silver)
- DAGS Hawaii District Office, Kona Baseyard (Silver)
- DAGS Hawaii District Office, Hilo Baseyard (Silver)
- HSPLS 'Aiea Public Library (Silver)
- Keaukaha Military Reservation (Silver)
- UH System Information Technology Center (Silver)
- UH-Hilo Hawai'ian Language Building (Silver)
- UH-Hilo Student Services Building (Silver)
- UH-West O'ahu New Campus Development (Silver)
- UH-Mānoa Campus Center (Silver)
- UH-Mānoa Edmundson Hall (Silver)
- UH-Mānoa Gartley Hall (Silver)
- UH-Mānoa New Dance Building (Gold)
- UH-Mānoa Clarence T.C. Ching Complex (Silver)
- UH-Mānoa Cancer Research Center of Hawai'i (Gold)
- Leeward Community College Education and Innovation Instructional Facility (Silver)
- Maui Community College Science Facility (Silver)
- Hawai'i Community College Hale Aloha (Silver)

DBEDT in coordination with DAGS and a number of other departments with offices in the State Office Tower worked to achieve LEED Gold certification for the building under the LEED for Existing Buildings: Operations and Maintenance (EBOM) program, which implements green strategies, technologies, and operations in existing buildings. It is the first major office building public or private in the state to be certified Gold under EBOM.

LEAD BY EXAMPLE: STATE OF HAWAI'I EXECUTIVE AGENCIES' ACHIEVEMENT IN ENERGY

This report responds to legislative and executive mandates issued in 2006, which require state agencies to implement a variety of energy programs now known as the Lead By Example (LBE) initiative. A number of requirements were established by Act 96, SLH 2006, Part III, which reflects Administrative Directive 06-01, issued on January 20, 2006. Act 96 directs state agencies to improve energy, water and resource efficiency in state facilities, increase fuel efficiency, and use alternative fuels in state vehicles with the goal of stimulating growth today that will rebuild the local economy and realize savings far into the future.

In addition, we are continuing with the requirements of Act 160, Section 168.5, SLH 2006, to report state agencies' electricity consumption, the steps taken to reduce energy use, and their plans for future reductions. Although not mandated by law, the costs of purchasing utility electricity also have been compiled.

This LBE report provides data on electricity use and costs, as well as highlights of state agencies' energy activities under the LBE initiative. Executive agencies were invited to submit reports containing department-specific information pertaining to LBE activities; these reports have been consolidated by the Department of Business, Economic Development, and Tourism (DBEDT). The consolidated reports are attached and list all agencies' actions.

The LBE effort was kicked off at a meeting of all cabinet members, convened by DBEDT, on May 11, 2006. Since that initial meeting, agencies developed a framework for planning, implementing and reporting energy efficiency activities. State agency personnel have been trained and received technical assistance as needed. The agencies have set energy-savings targets and are developing tools which will enable their goals to be reached.

Agency representatives formed a Lead By Example Leadership Group to coordinate these actions, supported by three Working Groups. These Working Groups address Buildings, Transportation, and Environmental Practices and Procurement. Each Working Group develops plans and recommendations to be reviewed by the Leadership Group, which is composed of high-level representatives of executive departments and the University of Hawai'i. The Leadership Group members have the authority to ensure efficient communication and the commitment to develop effective policies and plans for each department.

The LBE Initiative

Fiscal year 2012, the seventh year of the Lead By Example initiative, was impacted by the ongoing economic recovery, limited state budget, and steadily rising world oil prices. Combined, these factors highlighted the importance of LBE and the

program's intent of transforming how state agencies use energy and resources in operations, facilities, and transportation.

New state buildings are being designed and constructed to higher efficiency standards and existing buildings are receiving equipment retrofits and are being retro-commissioned to ensure proper operation of energy systems. Several agencies are moving forward with performance contracting for groups of buildings and incorporating renewable energy technologies, such as photovoltaic (PV), in projects.

Consistency in data collection and accuracy in recordkeeping have been some of the challenges of the LBE initiative. Starting in 2008 electricity consumption and billing information, with approval by all agencies, was acquired directly from the utilities to be compiled and maintained by statisticians in DBEDT's Research and Economic Analysis Division (READ). Before 2008 each agency provided data from their own records. Compiling data from 26 agencies was less consistent than obtaining data from a sole source such as the utility. READ also requested utility data from before 2008 going back to 2005, the baseline year for LBE. As expected, there were slight discrepancies between the utility and agency data going back to 2005. Starting with the FY09 report, utility data was used for all years of the LBE initiative to provide a standard of consistency that did not exist in previous reports. Fiscal Year 2005 continues to serve as the baseline year and all data have been updated to reflect this new standard.

Lead By Example Training Opportunities

Executive agencies continued training their personnel in subjects such as building commissioning, performance contracting, financing, green building design and construction, energy-efficient equipment, and renewable energy generation. A total of 18 workshops and other events relating to LBE topics were held in FY12, attracting at least 930 participants, including many from state agencies. In some cases, DBEDT provided American Recovery and Reinvestment Act funds so that other executive agencies' staff members could attend the training.

This report summarizes the achievements and activities of executive agencies as they "Lead By Example" in 2012. The 28 participating agencies include:

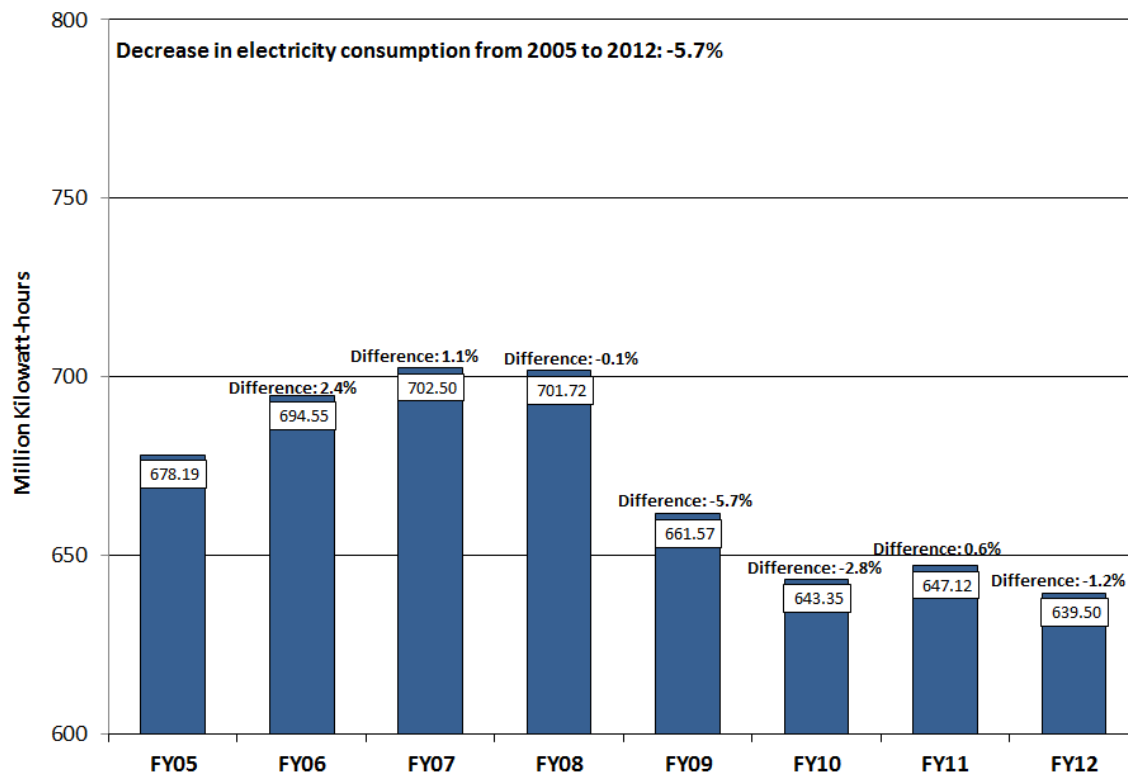
- Department of Accounting and General Services (DAGS)
- Department of Agriculture (DOA)
- Department of the Attorney General (AG)
- Department of Budget and Finance (B&F)
- Department of Business, Economic Development and Tourism (DBEDT)
- Department of Commerce and Consumer Affairs (DCCA)
- Department of Defense (DOD)
- Department of Education (DOE)
- Department of Hawai'ian Home Lands (DHHL)
- Department of Health (DOH)
- Department of Human Resources Development (DHRD)

Department of Human Services (DHS)
Department of Labor and Industrial Relations (DLIR)
Department of Land and Natural Resources (DLNR)
Department of Public Safety (PSD)
Department of Taxation (DoTAX)
Department of Transportation—Airports Division (DOT-Air)
Department of Transportation—Harbors Division (DOT-Har)
Department of Transportation—Highways Division (DOT-Hwy)
Foreign Trade Zone (FTZ)
Hawai‘i Community Development Authority (HCDA)
Hawai‘i Health Systems Corporation (HHSC)
Hawai‘i Housing Finance and Development Corporation (HHFDC)
Hawai‘i Public Housing Authority (HPHA)
Hawai‘i State Public Library System (HSPLS)
Hawai‘i Tourism Authority—Convention Center (HTA/CC)
Natural Energy Laboratory of Hawai‘i Authority (NELHA)
University of Hawai‘i System (UH)

Executive Agency Electricity Consumption

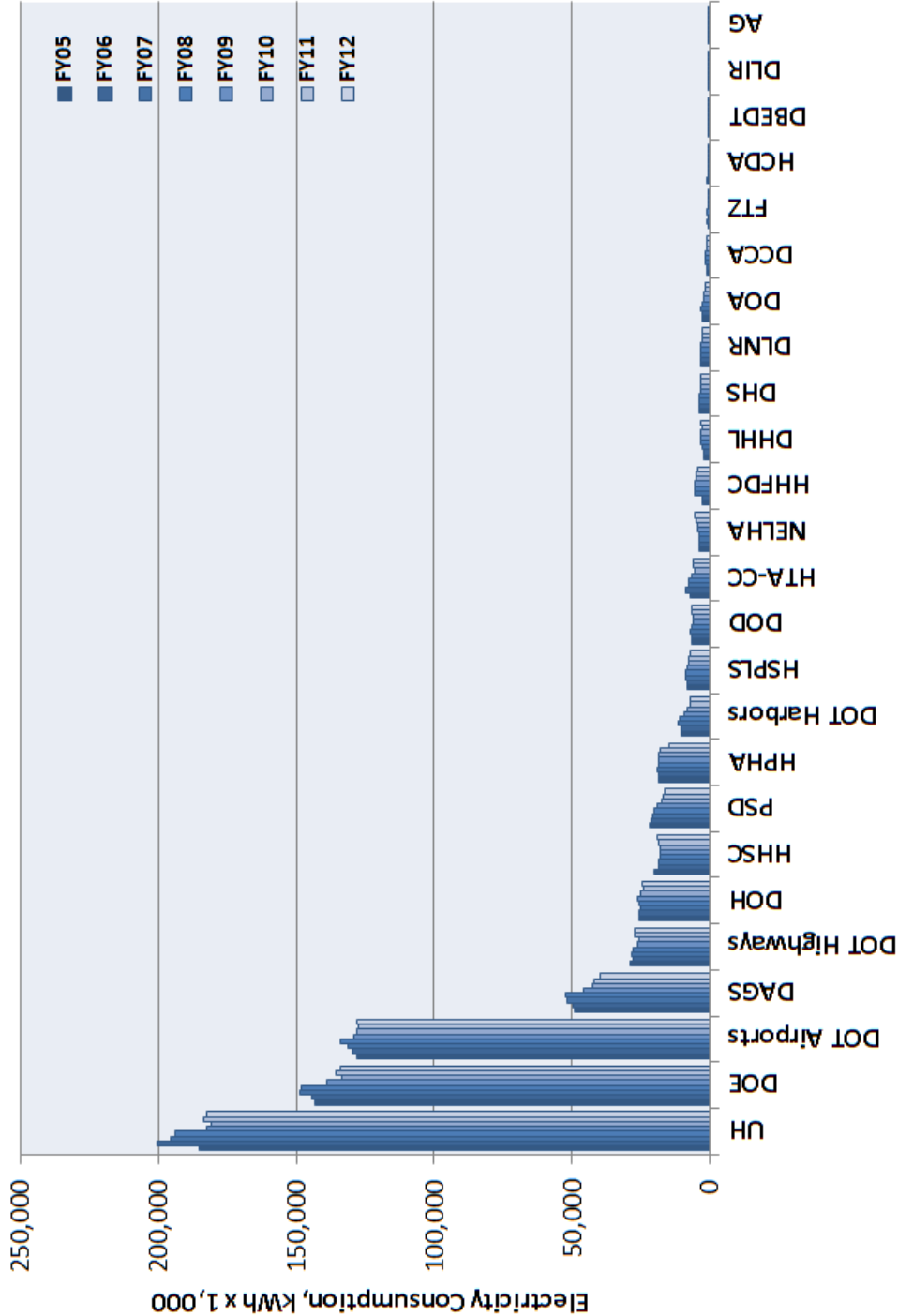
In 2012 agencies consumed 639 million kilowatt-hours (kWh) of electricity, approximately 7 million kWh less than in FY11. The FY12 total is the lowest annual total since the Lead By Example initiative began. State agencies have lowered electricity consumption by 63 million kWh, or 8.9%, since it peaked in 2007 at 702 million kWh. In baseline year 2005, agencies used 678 million kWh. Initially, consumption increased 2.4% in 2006 and another 1.1% in 2007. The drop of 0.1% in 2008 marked the first decrease from a previous year and signaled that energy conservation efforts were beginning to impact overall consumption. With the 5.7% drop in consumption for 2009, the state achieved its largest single-year decline and realized the first real decrease in consumption, dropping 2.5% below 2005 baseline levels. The 2.8% reduction in 2010 continued the downward trend. There was a slight 0.6% uptick in 2011 and 2012's 1.2% decrease brought total agency consumption to 5.7% below the 2005 baseline levels, a savings of 39 million kWh. Electricity use for State of Hawai'i executive agencies is depicted in Figure 1.

Figure 1: Comparison of State Agencies' Electricity Consumption in kWh



Energy use varies widely within individual agencies. In 2012 most agencies reported reductions in energy use; others noted minimal increases and a few used significantly more electricity. Four agencies account for most of the electricity used by the executive branch: the University of Hawai‘i (UH) campuses, the Department of Education (DOE), the Airports Division of the Department of Transportation (DOT-Air), and the Department of Accounting and General Services (DAGS). DAGS, DOE, and UH experienced decreases of 5.5%, 1.1%, and 0.7% respectively, while DOT-Air had a small 0.2% increase between FY11 and FY12. From FY05 to FY12, 21 executive agencies were able to decrease their electricity consumption. Each agency’s year-by-year kWh consumption is summarized in Figure 2.

Figure 2: Comparison of kWh Consumption by Agency by Year



Tables 1 and 2 provide information on individual agencies' electricity consumption and the changes from year to year since FY05. The reported number of kilowatt-hours consumed annually is provided in Table 1, while Table 2 presents the differences among years in kWh as well as percentage change. It should be noted that several agencies' utility records are consolidated into DAGS' report since DAGS manages their buildings. These include the departments of Budget and Finance (B&F), Human Resource Development (DHRD), Taxation (DOTAX), and most offices within the Department of Business, Economic Development, and Tourism (DBEDT).

Table 1: Utility Electricity Consumption by State Agencies

Agency	FY05 kWh	FY06 kWh	FY07 kWh	FY08 kWh	FY09 kWh	FY10 kWh	FY11 kWh	FY12 kWh
AG	35,420	34,798	34,945	35,849	33,890	33,224	32,900	36,863
DAGS	49,230,992	49,779,316	51,797,308	52,245,047	45,519,417	42,576,283	41,994,459	39,675,805
DBEDT	496,413	358,760	610,347	546,138	546,359	729,112	417,862	395,154
DCCA	1,535,941	1,541,342	1,611,503	1,615,431	1,642,705	1,447,930	1,456,311	1,454,021
DHHL	2,283,061	2,494,168	2,989,292	3,391,736	3,694,566	3,404,418	3,169,941	3,276,837
DHS	3,857,967	4,007,321	4,046,162	3,924,563	3,717,370	3,586,914	3,315,318	3,214,454
DLIR	330,872	400,854	394,799	373,783	299,619	284,408	267,338	280,539
DLNR	3,454,292	3,454,427	3,628,338	3,648,394	3,480,072	3,024,661	2,920,740	2,884,183
DOA	2,825,754	2,920,780	3,309,250	2,845,190	2,327,260	2,127,374	2,038,538	2,097,191
DOD	6,703,102	6,913,967	7,129,678	6,932,392	6,392,223	6,155,416	6,588,379	6,561,904
DOE	143,384,951	144,128,064	148,414,237	147,987,700	138,927,520	133,201,033	135,465,041	134,041,288
DOH	25,726,039	25,496,454	25,404,262	25,887,669	26,216,375	24,971,055	24,371,917	24,454,315
DOT - Air	128,101,116	129,604,326	131,269,766	133,988,212	129,019,506	128,111,323	127,666,443	127,935,776
DOT - Har	10,315,114	10,702,082	11,374,640	11,325,990	9,550,867	8,123,410	7,373,193	7,405,532
DOT - Hwy	28,804,170	28,203,362	28,303,598	27,941,945	26,426,481	25,754,283	27,418,651	27,463,879
FTZ	921,920	1,044,160	1,011,840	1,033,600	895,680	934,400	876,480	856,091
HCDA	1,150,027	252,285	322,151	318,810	312,752	677,124	664,687	662,451
HHFDC	3,057,300	3,142,688	5,430,162	5,832,603	5,485,910	5,205,445	4,864,788	4,774,109
HHSC	20,127,174	18,553,340	18,804,930	18,146,647	17,914,301	18,172,891	18,672,780	19,026,424
HPHA	18,456,206	18,567,637	19,235,874	18,884,841	18,481,546	18,553,412	18,061,647	14,847,182
HSPLS	8,477,520	8,512,526	8,890,675	8,714,828	8,181,762	7,654,267	7,648,544	7,305,685
HTA - CC	7,389,600	8,715,000	8,056,800	7,848,600	6,525,600	5,777,400	6,214,200	6,372,514
NELHA	4,270,831	3,917,223	4,035,528	4,178,093	4,500,456	4,500,909	4,832,161	5,522,035
PSD	21,966,423	21,584,032	20,839,695	20,431,439	18,910,860	17,861,470	17,172,764	16,563,200
UH	185,299,794	200,215,505	195,556,630	193,639,569	182,226,984	180,442,128	183,610,659	182,395,823
Totals	678,201,997	694,544,416	702,502,409	701,719,068	661,230,080	643,310,297	647,115,738	639,503,255

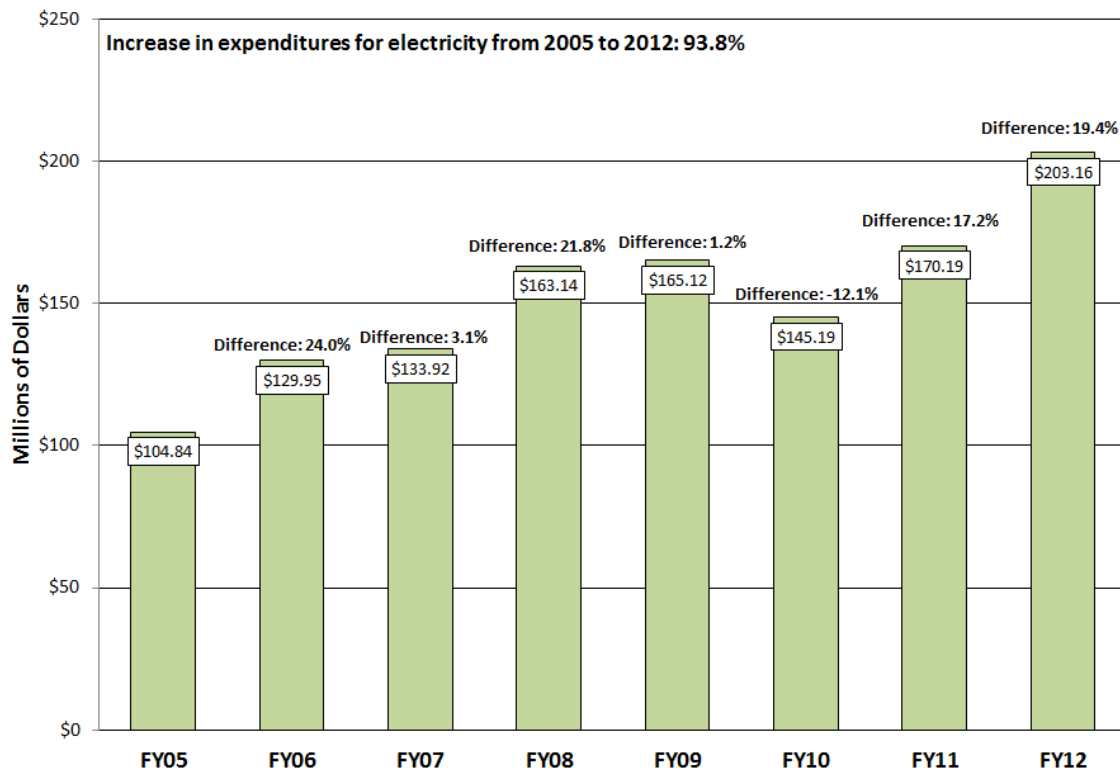
Table 2: Differences in Electricity Consumption (kWh) for Reported Years

Agency	FY05- FY06	%	FY06- FY07	%	FY07- FY08	%	FY08- FY09	%	FY09- FY10	%	FY10- FY11	%	FY11- FY12	%	FY05- FY12	%
AG	-622	-1.8	147	0.4	904	2.6	-1,959	-5.5	-666	-2.0	-324	-1.0	3,963	12.0	1,443	4.1
DAGS	548,325	1.1	2,017,992	4.1	447,739	0.9	-6,725,630	-12.9	-3,132,934	-6.9	-581,824	-1.4	-2,318,654	-5.5	-9,555,186	-19.4
DBEDT	-137,653	-27.7	251,587	70.1	-64,209	-10.5	221	0.0	182,753	33.4	-311,250	-42.7	-22,708	-5.4	-101,259	-20.4
DCCA	5,402	0.4	70,160	4.6	3,928	0.2	27,275	1.7	-144,215	-9.1	8,381	0.6	-2,290	-0.2	-81,919	-5.3
DHHL	211,107	9.2	495,124	19.9	402,444	13.5	302,830	8.9	-290,228	-7.9	-234,477	-6.9	106,896	3.4	993,776	43.5
DHS	149,354	3.9	38,841	1.0	-121,599	-3.0	-207,193	-5.3	-130,456	-3.5	-271,596	-7.6	-100,864	-3.0	-643,513	-16.7
DLIR	69,982	21.2	-6,055	-1.5	-21,016	-5.3	-74,164	-19.8	-15,211	-5.1	-17,070	-6.0	13,201	4.9	-50,333	-15.2
DLNR	135	0.0	173,911	5.0	20,056	0.6	-168,322	-4.6	-455,411	-13.1	-103,921	-3.4	-36,557	-1.3	-570,109	-16.5
DOA	95,026	3.4	388,470	13.3	-464,060	-14.0	-517,930	-18.2	-200,466	-8.6	-88,836	-4.2	58,635	2.9	-728,563	-25.8
DOD	210,865	3.1	215,711	3.1	-197,286	-2.8	-540,170	-7.8	-236,807	-3.7	432,963	7.0	-26,475	-0.4	-141,198	-2.1
DOE	743,113	0.5	4,286,173	3.0	-426,537	-0.3	-9,060,180	-6.1	-5,720,327	-4.1	2,246,928	1.7	-1,423,753	-1.1	-9,343,663	-6.5
DOH	-229,585	-0.9	-92,192	-0.4	483,407	1.9	328,706	1.3	-1,252,481	-4.8	-599,137	-2.4	82,398	0.3	-1,271,724	-4.9
DOT-Air	1,503,210	1.2	1,665,440	1.3	2,718,446	2.1	-4,968,706	-3.7	-905,908	-0.7	-447,155	-0.3	269,333	0.2	-165,340	-0.1
DOT-Har	386,968	3.8	672,558	6.3	-48,650	-0.4	-1,775,123	-15.7	-1,422,117	-14.9	-756,757	-9.3	32,339	0.4	-2,909,581	-28.2
DOT-Hwy	-600,808	-2.1	100,236	0.4	-361,653	-1.3	-1,515,465	-5.4	-684,021	-2.6	1,662,982	6.5	45,228	0.2	-1,340,291	-4.7
FTZ	122,240	13.3	-32,320	-3.1	21,760	2.2	-137,920	-13.3	38,720	4.3	-57,920	-6.2	-20,389	-2.3	-65,829	-7.1
HCDA	-897,742	-78.1	69,866	27.7	-3,341	-1.0	-6,058	-1.9	364,372	116.5	-12,437	-1.8	-2,236	-0.3	-487,576	-42.4
HHFDC	85,389	2.8	2,287,474	72.8	402,441	7.4	-346,693	-5.9	-280,465	-5.1	-340,657	-6.5	-90,679	-1.9	1,733,129	57.0
HHSC	-1,573,834	-7.8	251,590	1.4	-658,283	-3.5	-232,346	-1.3	258,590	1.4	499,889	2.8	353,644	1.9	-1,100,750	-5.5
HPHA	111,430	0.6	668,237	3.6	-351,033	-1.8	-403,295	-2.1	71,603	0.4	-491,764	-2.7	-3,214,465	-17.8	-3,609,024	-19.6
HSPLS	35,006	0.4	378,149	4.4	-175,847	-2.0	-533,066	-6.1	-527,486	-6.4	-5,732	-0.1	-342,859	-4.5	-1,171,835	-13.8
HTA-CC	1,325,400	17.9	-658,200	-7.6	-208,200	-2.6	-1,323,000	-16.9	-748,200	-11.5	436,800	7.6	158,314	2.5	-1,017,086	-13.8
NELHA	-353,608	-8.3	118,305	3.0	142,565	3.5	322,363	7.7	453	0.0	331,252	7.4	689,874	14.3	1,251,204	29.3
PSD	-382,391	-1.7	-744,337	-3.4	-408,256	-2.0	-1,520,579	-7.4	-1,212,715	-6.4	-688,882	-3.9	-609,564	-3.5	-5,403,223	-24.6
UH	14,915,711	8.0	-4,658,875	-2.3	-1,917,061	-1.0	-11,412,585	-5.9	-1,772,977	-1.0	3,156,651	1.7	-1,214,835	-0.7	-2,903,970	-1.6

Electricity Costs by State Agencies

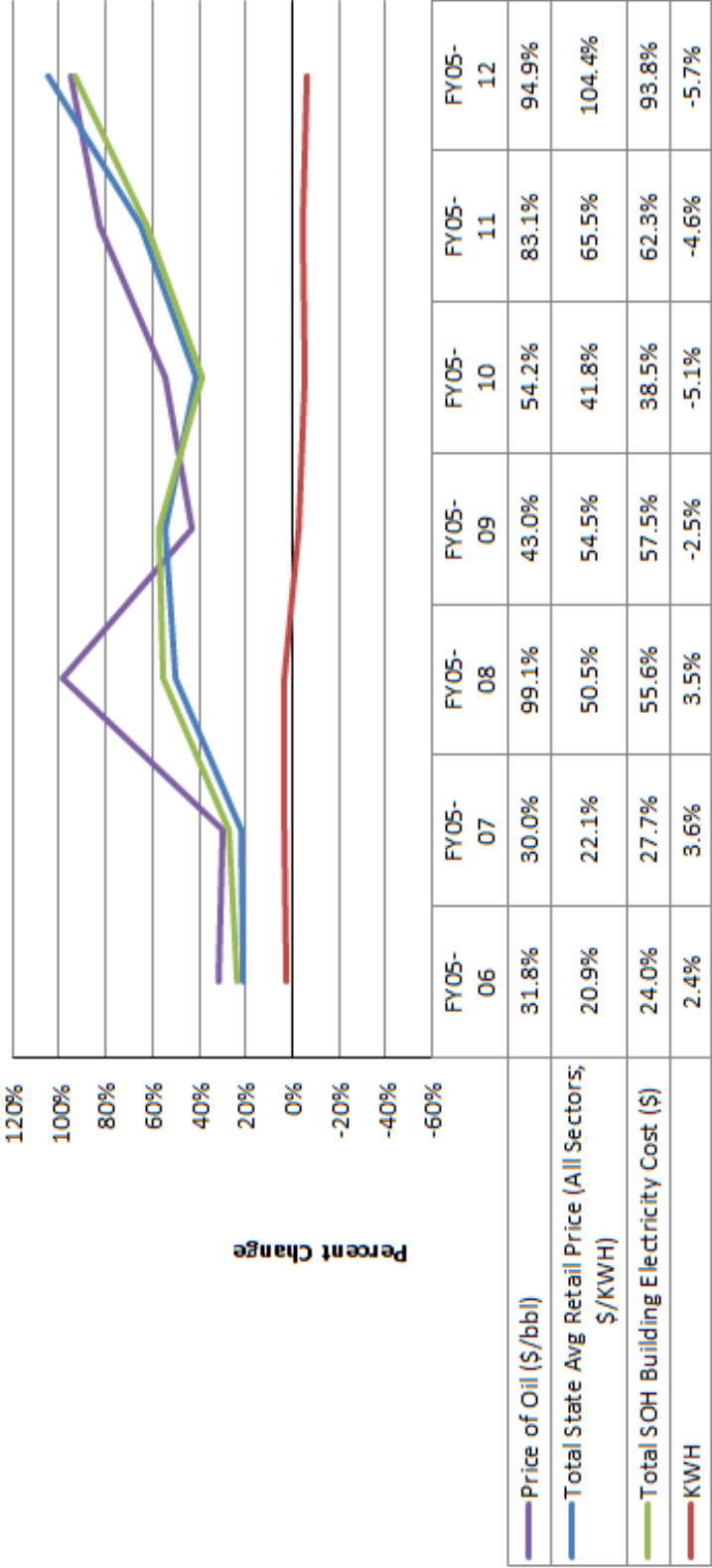
Even though state agency electricity consumption decreased by 1.2% between FY11 and FY12, in FY12 state agencies spent \$203 million on electricity, \$33 million, or 19.4%, more than in 2011. This is the most that the state paid for electricity in a single fiscal year since FY05 and serves as a reminder that Hawai'i's nearly 80% dependence on imported petroleum to produce electricity results in kWh prices heavily influenced by the volatility of world oil markets. Since LBE began, overall state agency electricity costs were driven higher each year by rising oil prices despite kWh consumption decreases, which started in 2007. Electricity cost state agencies \$104 million in baseline year 2005. Costs jumped by \$25 million in 2006, another \$4 million in 2007, \$30 million in 2008, and \$2 million in 2009. In FY10 overall state agency electricity costs declined by \$20 million as a result of efficiency and relatively lower oil prices. Aside from FY10, costs have steadily risen each year. The cost totals for the fiscal years from 2005 to 2012 are given in Figure 3.

Figure 3: Comparison of State Electricity Utility Costs FY05 to FY12



Since the beginning of LBE, agencies' energy bills have reflected the fluctuations in the price of oil and electricity. 2012 was no exception. Average electricity costs in Hawai'i increased 23.5% from the previous year. Energy savings can reduce costs from increasing oil prices and amplify declining oil prices. Figure 4 shows the relationship between the price of oil, the price of electricity, overall cost to state agencies, and consumption as a percentage change from 2005 baseline figures.

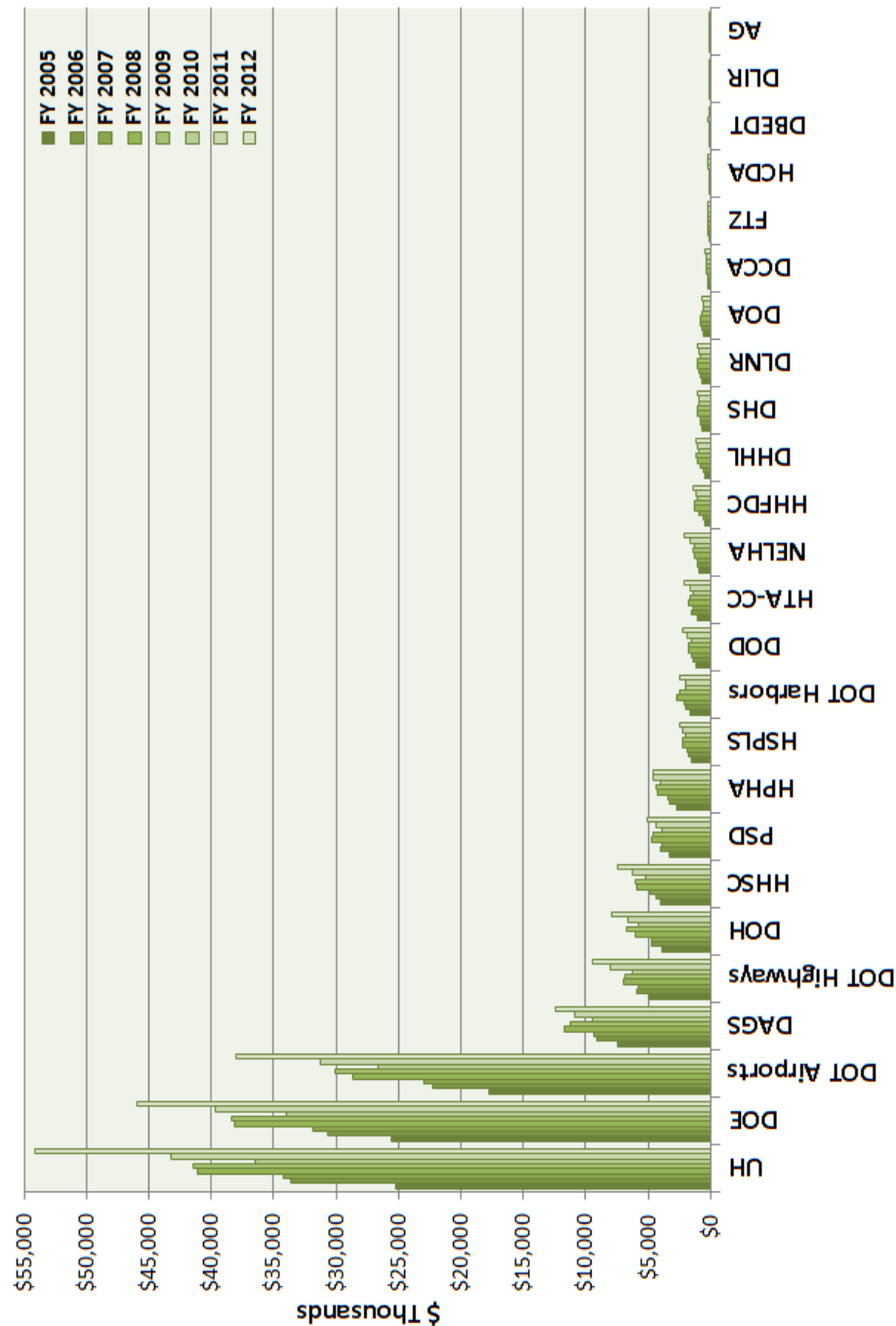
Figure 4: Percent Change (over FY05) of Electricity Price, Cost, and Consumption



Sources: NYMEX WTI Future Price; EIA-826 ; Utility (HECO, MECO, HELCO, & KIUC) Billing data

Agencies are actively addressing their energy consumption with methods such as performance contracting, retrofitting lights, tinting windows, replacing aging air conditioning systems, and assessing the potential for solar water heating. Some are also producing electricity with renewable energy systems that reduce the amount of electricity that is bought from the utility. Electricity costs for each agency are reported by fiscal year in Figure 5 below.

Figure 5: Cost of Purchased Electricity by Agency from FY05 to FY12



Agencies' electricity costs for fiscal years 2005 through 2012 are shown in Table 3. Table 4 lists the differences in dollars paid for utility electricity from year to year and the percentage change between years.

Table 3: Cost of Electricity Purchased by State Agencies

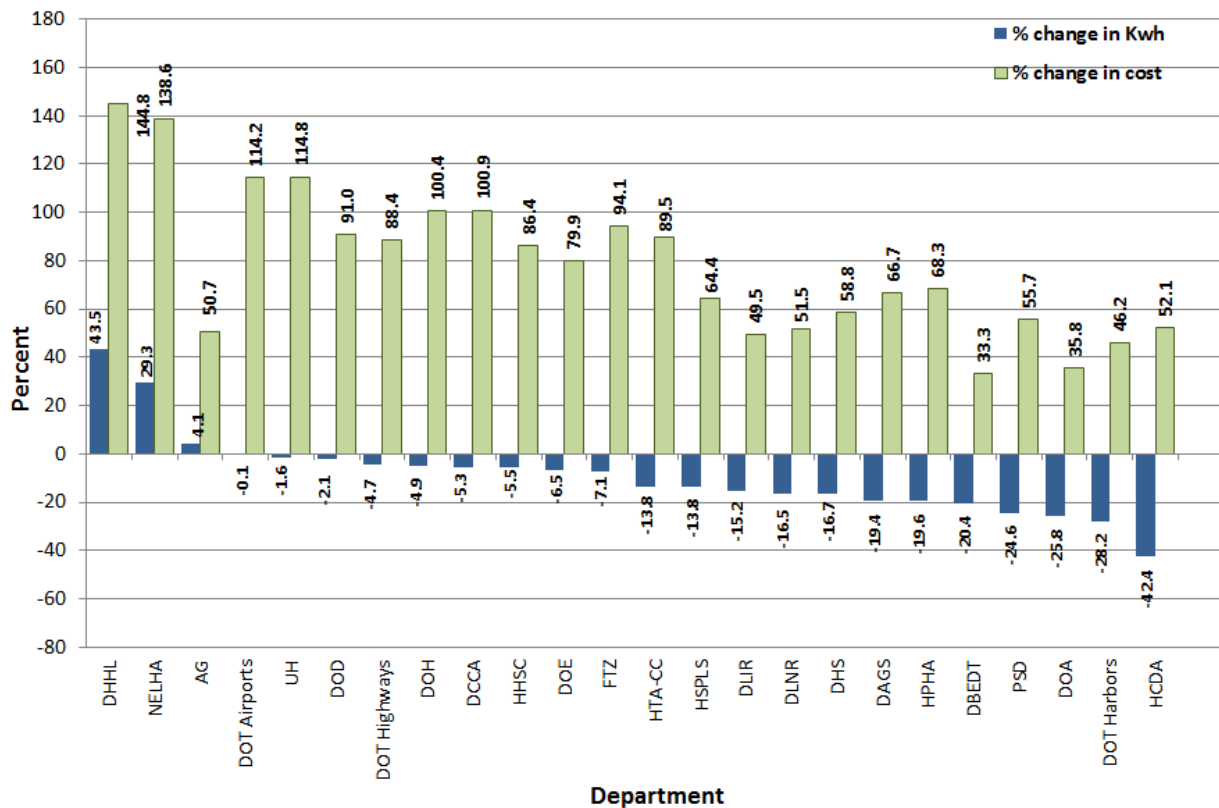
Agency	FY05	FY06	FY07	FY08	FY09	FY10	FY11	FY12
AG	\$10,741	\$11,632	\$12,204	\$14,626	\$12,843	\$11,996	\$13,483	\$16,188
DAGS	\$7,482,710	\$9,092,737	\$9,310,630	\$11,667,310	\$11,194,778	\$9,499,992	\$10,845,266	\$12,471,654
DBEDT	\$115,698	\$89,907	\$124,219	\$139,262	\$158,482	\$186,947	\$138,484	\$154,205
DCCA	\$219,025	\$268,360	\$273,982	\$347,577	\$372,611	\$309,522	\$367,715	\$439,949
DHHL	\$489,457	\$628,026	\$811,507	\$1,031,764	\$1,128,085	\$946,675	\$1,014,414	\$1,198,367
DHS	\$682,243	\$847,648	\$869,025	\$1,011,941	\$1,004,178	\$896,555	\$960,112	\$1,083,403
DLIR	\$80,885	\$116,710	\$116,422	\$130,371	\$115,599	\$99,715	\$104,559	\$120,954
DLNR	\$705,898	\$841,123	\$889,243	\$1,057,708	\$1,044,212	\$860,711	\$955,276	\$1,069,542
DOA	\$545,360	\$647,465	\$789,592	\$793,773	\$649,987	\$559,057	\$615,400	\$740,702
DOD	\$1,163,226	\$1,422,139	\$1,492,829	\$1,741,314	\$1,703,990	\$1,487,429	\$1,893,211	\$2,222,021
DOE	\$25,567,384	\$30,610,076	\$31,805,744	\$38,173,389	\$38,403,638	\$33,966,349	\$39,696,016	\$45,990,369
DOH	\$3,934,069	\$4,728,875	\$4,759,470	\$6,022,990	\$6,681,536	\$5,771,076	\$6,633,200	\$7,884,295
DOT-Air	\$17,761,072	\$22,259,323	\$22,920,171	\$28,641,831	\$30,078,400	\$26,676,871	\$31,291,001	\$38,048,678
DOT-Har	\$1,648,777	\$2,044,297	\$2,136,409	\$2,663,999	\$2,422,304	\$1,939,602	\$2,047,988	\$2,410,998
DOT-Hwy	\$5,010,087	\$5,905,006	\$5,782,714	\$6,980,180	\$6,881,176	\$6,318,805	\$7,987,219	\$9,440,048
FTZ	\$134,290	\$180,726	\$174,446	\$221,373	\$206,781	\$200,512	\$222,800	\$260,658
HCDA	\$149,278	\$53,436	\$61,014	\$74,315	\$78,566	\$166,956	\$186,974	\$227,034
HHFDC	\$451,607	\$568,198	\$910,554	\$1,243,518	\$1,256,511	\$1,101,118	\$1,215,786	\$1,461,805
HHSC	\$3,982,094	\$4,415,497	\$4,801,818	\$5,866,179	\$6,007,542	\$5,181,870	\$6,254,696	\$7,421,264
HPHA	\$2,726,530	\$3,308,536	\$3,427,260	\$4,229,350	\$4,314,868	\$4,023,549	\$4,572,759	\$4,589,421
HSPLS	\$1,533,815	\$1,808,919	\$1,893,315	\$2,244,370	\$2,249,731	\$1,946,842	\$2,272,193	\$2,521,185
HTA-CC	\$1,104,124	\$1,520,889	\$1,411,445	\$1,717,207	\$1,582,841	\$1,356,185	\$1,686,670	\$2,091,847
NELHA	\$871,574	\$1,015,139	\$1,071,918	\$1,313,291	\$1,425,614	\$1,301,215	\$1,603,147	\$2,079,918
PSD	\$3,264,187	\$3,951,300	\$3,848,077	\$4,689,674	\$4,601,729	\$3,897,747	\$4,385,946	\$5,082,344
UH	\$25,206,974	\$33,613,946	\$34,221,881	\$41,121,936	\$41,486,486	\$36,468,378	\$43,222,011	\$54,133,552
Total	\$104,841,105	\$129,949,909	\$133,915,889	\$163,139,248	\$165,062,485	\$145,175,672	\$170,186,326	\$203,160,402

Table 4: Differences in Cost of Electricity for Reported Years (\$)

Agency	FY05- FY06	%	FY06- FY07	%	FY07- FY08	%	FY08- FY09	%	FY09- FY10	%	FY10- FY11	%	FY11- FY12	%	FY05- FY12	%
AG	892	8.3	571	4.9	2,422	19.8	-1,783	-12.2	-847	-6.6	1,488	12.4	2,705	20.1	5,448	50.7
DAGS	1,610,028	21.5	217,892	2.4	2,356,681	25.3	-472,533	-4.1	-1,726,902	-15.4	1,345,274	14.2	1,626,389	15.0	4,988,944	66.7
DBEDT	-25,792	-22.3	34,312	38.2	15,043	12.1	19,220	13.8	28,464	18.0	-48,462	-25.9	15,721	11.4	38,507	33.3
DCCA	49,335	22.5	5,622	2.1	73,595	26.9	25,034	7.2	-52,553	-14.5	58,194	18.8	72,234	19.6	220,924	100.9
DHHL	138,569	28.3	183,480	29.2	220,257	27.1	96,320	9.3	-181,446	-16.1	67,739	7.2	183,953	18.1	708,910	144.8
DHS	165,405	24.2	21,378	2.5	142,915	16.4	-7,762	-0.8	-107,623	-10.7	63,557	7.1	123,291	12.8	401,161	58.8
DLJR	35,825	44.3	-288	-0.2	13,948	12.0	-14,771	-11.3	-15,884	-13.7	4,844	4.9	16,395	15.7	40,069	49.5
DLNR	135,225	19.2	48,120	5.7	168,465	18.9	-13,497	-1.3	-183,501	-17.6	94,565	11.0	114,266	12.0	363,644	51.5
DOA	102,105	18.7	142,127	22.0	4,181	0.5	-143,787	-18.1	-91,165	-14.0	56,342	10.1	125,302	20.4	195,342	35.8
DOD	258,913	22.3	70,690	5.0	248,485	16.6	-37,324	-2.1	-216,561	-12.7	405,782	27.3	328,809	17.4	1,058,795	91.0
DOE	5,042,692	19.7	1,195,668	3.9	6,367,645	20.0	230,248	0.6	-4,436,501	-11.6	5,725,366	16.9	6,294,354	15.9	20,422,985	79.9
DOH	794,806	20.2	30,595	0.6	1,263,520	26.5	658,546	10.9	-911,871	-13.6	862,124	14.9	1,251,096	18.9	3,950,227	100.4
DOT-Air	4,498,251	25.3	660,848	3.0	5,721,661	25.0	1,436,569	5.0	-3,400,684	-11.3	4,613,285	17.3	6,757,677	21.6	20,287,606	114.2
DOT-Har	395,521	24.0	92,112	4.5	527,590	24.7	-241,695	-9.1	-481,294	-19.9	106,738	5.5	363,010	17.7	762,221	46.2
DOT-Hwy	894,919	17.9	-122,293	-2.1	1,197,467	20.7	-99,004	-1.4	-564,905	-8.2	1,668,039	26.4	1,452,661	18.2	4,429,960	88.4
FTZ	46,437	34.6	-6,281	-3.5	46,927	26.9	-14,592	-6.6	-6,268	-3.0	22,288	11.1	37,858	17.0	126,368	94.1
HCDA	-95,842	-64.2	7,579	14.2	13,301	21.8	4,251	5.7	88,390	112.5	20,018	12.0	40,060	21.4	77,756	52.1
HHFDC	116,590	25.8	342,356	60.3	332,964	36.6	12,993	1.0	-155,392	-12.4	114,667	10.4	246,019	20.2	1,012,438	225.3
HHSC	433,404	10.9	386,321	8.7	1,064,360	22.2	141,363	2.4	-825,672	-13.7	1,072,826	20.7	16,662	0.4	1,862,890	68.3
HPHA	582,006	21.3	118,724	3.6	802,090	23.4	85,518	2.0	-291,407	-6.8	549,210	13.6	1,166,568	18.7	3,439,170	86.4
HSPLS	275,104	17.9	84,396	4.7	351,055	18.5	5,361	0.2	-302,889	-13.5	325,352	16.7	248,992	11.0	987,370	64.4
HTA-CC	416,764	37.7	-109,443	-7.2	305,761	21.7	-134,366	-7.8	-226,656	-14.3	330,485	24.4	405,177	24.0	987,723	89.5
NELHA	143,565	16.5	56,779	5.6	241,373	22.5	112,323	8.6	-124,399	-8.7	301,932	23.2	476,771	29.7	1,208,344	138.6
PSD	687,113	21.1	-103,222	-2.6	841,597	21.9	-87,945	-1.9	-736,537	-15.9	488,035	12.5	696,397	15.9	1,818,157	55.7
UH	8,406,972	33.4	607,935	1.8	6,900,055	20.2	364,550	0.9	-5,014,265	-12.1	6,749,789	18.5	10,911,541	25.2	28,926,578	114.8

As stated above, since the beginning of LBE, oil prices have driven overall electricity costs higher despite agencies using less electricity. This dynamic is illustrated in Figure 6 below.

Figure 6: Consumption and Cost Percentage Change from FY05 to FY12 by Agency



Since 2005, while 21 departments managed to decrease total electricity use, no agency was able to decrease costs. For example, the Department of Land and Natural Resources (DLNR), the Department of Human Services (DHS), the Hawai'i Public Housing Authority (HPHA), the Department of Public Safety (PSD), and the Hawai'i Community Development Authority (HCDA) decreased their kWh consumption by 16.5%, 16.7%, 19.6%, 24.6%, and 42.4% respectively, between 2005 and 2012, but their electricity bills all rose by more than 50% during the same period.

Efficiency in Buildings

Applying energy efficiency to the design, construction and operation of buildings is becoming a standard practice in Hawai‘i. The State of Hawai‘i is active in several “green building” initiatives and now requires LEED Silver certification, to the extent possible, for new construction and major renovation. In addition to energy savings, LEED Silver standards dictate improved indoor environmental quality, which has been linked to reduced absenteeism, up to 16% increased productivity, 20% better test performance in schools, and an average of 2½ days earlier discharge from hospitals.¹

Leadership in Energy and Environmental Design (LEED) is a program of the internationally recognized nonprofit U.S. Green Building Council (USGBC). DBEDT joined the Council in 2006; its membership on behalf of the State of Hawai‘i allows all state employees access to USGBC publications and training sessions at a reduced cost, as well as exclusive online reports, participation in local USGBC chapter events, and reduced LEED project registration and certification fees. Although certification assures independent, third-party verification of a building’s performance to LEED standards, some agencies are designing facilities to meet LEED criteria but do not plan to formally verify and certify them because of cost considerations. In 2005 there was only one LEED Accredited Professional (LEED AP) among the state agencies. Now, there are over 30 LEED APs on staff at six agencies: DBEDT, DOE, DOT, DAGS, HPHA and UH. Other employees are in training to take the various LEED exams.

The following state buildings have either achieved LEED standards or are in process toward that goal. A number of these projects were already underway before the LBE initiative began.

LEED Platinum

- NELHA Hawai‘i Gateway Energy Center (completed)
- NELHA Gateway Center office structure (planned)

LEED Gold

- DOE ‘Ewa Makai Middle School campus (complete)
- DOE Baldwin High School Library (under construction)
- HSPLS North Kohala Public Library (complete)
- UH Institute of Marine Biology Coconut Island Biology Research Laboratories (design)
- UH Center for Microbial Oceanography Research and Education (complete)
- UH-Hilo Student Life Complex (completed)
- UH-Mānoa Cancer Research Center of Hawai‘i (under construction)
- UH-Mānoa Snyder Hall (design)
- UH-Mānoa Kuykendall Hall (design)
- UH-Mānoa New Dance Building (under construction)
- UH-Maui Science Facility (under construction)

¹ Source: Garzone, C. (2006). U.S. Green Building Council and the LEED™ Green Building Rating System

LEED Silver

- DAGS Central Services Division Administrative Building (registered)
- DAGS Keaukaha Military Reservation Joint Military Center (under construction)
- DAGS Maui Public Safety Complex (design)
- DAGS/DOH Kamāmalu Building (design)
- DAGS Hawai‘i District Office, Kona Baseyard (under construction)
- DAGS Hawai‘i District Office, Hilo Baseyard (construction awarded)
- DAGS Kaua‘i Community Correctional Center, New Segregation Housing (scope)
- DAGS Former Līhu‘e Courthouse (scope)
- DOE Kīhei High School campus (RFP)
- DOE Wailuku Elementary School II (design)
- DOH Hawai‘i State Hospital new forensic facility (design)
- DOT-Air HNL Cargo Facility (planned)
- DOT-Air HNL Commuter Terminal (design)
- DOT-Air HNL Consolidated Car Rental Facility (design)
- DOT-Air HNL Maintenance Facility (design)
- DOT-Air HNL Mauka Concourse (design)
- DOT-Air ITO Aircraft Rescue Fire Fighters Building (design)
- DOT-Air KOA Aircraft Rescue Fire Fighters Building (under construction)
- DOT-Air KOA Onizuka Space Center, phase I Building Shell (design)
- DOT-Air KOA Onizuka Space Center, phase II Interior Finishes (design)
- DOT-Air OGG Consolidated Car Rental Facility (design)
- HSPLS ‘Aiea Public Library (construction awarded)
- HSPLS Kōloa Public Library (sited)
- HSPLS Nānākuli Public Library (design)
- HSPLS Mānoa Public Library (completed)
- PSD Kaua‘i Regional Complex (planned)
- PSD O‘ahu Regional Complex (planned)
- PSD New transitional housing (planned)
- UH Information Technology Center (under construction)
- UH-Hilo Hawai‘ian Language Building (under construction)
- UH-Hilo College of Pharmacy (planning and design)
- UH-Hilo Living Learning Community Phase II (design)
- UH-Hilo Student Services Building addition and renovation (under construction)
- UH-Mānoa Campus Center renovation and addition (under construction)
- UH-Mānoa College of Education (planned)
- UH-Mānoa Edmonson Hall renovation (under construction)
- UH-Mānoa Frear Hall Residence Building (completed)
- UH-Mānoa Gartley Hall renovation (under construction)
- UH-Mānoa Kennedy Performance Arts Facilities (funded for design)
- UH-Mānoa Kuykendall Hall renovation (funded for design)
- UH-Mānoa Pacific Regional Biosafety Laboratory (funded for design and construction)

- UH-Mānoa School of Law addition and renovation (funded for planning)
- UH-Mānoa new classroom building (planning)
- UH-Mānoa Webster Hall Translational Health Science Simulation Center (completed - under review)
- UH-Mānoa Clarence T.C. Ching Complex (under construction)
- UH-West O‘ahu new Kapolei campus development (under construction)
- Hawai‘i Community College Hale Aloha (under construction)
- Hawai‘i Community College UH Center at West Hawai‘i Phase I (design)
- Honolulu Community College Advanced Technology Training Center (design)
- Kapi‘olani Community College Culinary Institute of the Pacific (design)
- Leeward Community College Education and Innovation Instructional Facility (under construction)
- Maui Community College Science Facility (under construction)
- Windward Community College Library and Learning Center (completed - under review)

LEED Certified

- DOE Waipahu Intermediate School Cafeteria (completed)
- UH-Hilo ‘Imiloa Astronomy Center of Hawai‘i (completed)
- UH-Hilo Sciences and Technology Center (completed - under review)
- UH John A. Burns School of Medicine (completed)

LEED Commercial Interiors (Silver)

- DOT-Air HNL Airport Lounge (completed)

LEED Existing Buildings: Operations and Maintenance (Gold)

- DAGS Leiopapa A. Kamehameha State Office Tower (completed)

Hawai‘i High Performance School Guidelines, developed by DBEDT in cooperation with DOE, which provide guidance for design consultants, will still be used when applicable to achieve LEED requirements in school buildings. Sustainable design criteria similar to those of LEED are being incorporated by DAGS during the design phase of the Kapolei Judiciary Complex, within the constraints of project funding. DBEDT, working with DAGS, has developed guidelines for design and construction which can be applied toward meeting LEED requirements.

Act 155, signed into law in 2009, requires all existing state buildings that are either larger than 5,000 square feet or use more than 8,000 kWh of electricity per year to be benchmarked. Benchmarking is a process which involves calculating the building’s annual energy consumption per square foot. Buildings are given an “energy usage intensity” (EUI) score, allowing buildings to be quickly compared and identify areas for improving energy efficiency. DBEDT has offered several training sessions on U.S. Environmental Protection Agency’s (EPA) Portfolio Manager to state employees and assisted a number of agencies in completing the benchmarking. Portfolio Manager is an online tool available for benchmarking a building’s energy use.

Benchmarking is also a way of evaluating whether buildings are potential candidates for ENERGY STAR® status. ENERGY STAR® is a joint program of the U.S. EPA and the U.S. Department of Energy (USDOE) to protect the environment and reduce costs through energy-efficient products and practices. ENERGY STAR® certified buildings rank in the top quartile of an EPA performance rating system calculated from actual energy use of similar existing buildings in the nation. ENERGY STAR® certified buildings also must qualify for thermal comfort while meeting lighting, ventilation, and indoor air quality requirements.

Hawai‘i has been an active member of EPA’s ENERGY STAR® 10% Challenge program since 2005. The program identifies buildings where financially attractive energy efficiency improvements could reduce energy use by 10%, and then implements those changes through low-cost building tune-ups, lighting upgrades, and replacement of old equipment. Another benefit is the reduction of greenhouse gas emissions.

Benchmarking efforts in FY12 enabled the identification and certification of twelve (12) ENERGY STAR® buildings. To date 277 state buildings have been benchmarked and the twenty-one (21) state facilities listed below have achieved ENERGY STAR® status; some of which have received annual certification more than once.

- Kakuhihewa Building (Kapolei State Building)
- Leiopapa A Kamehameha Building (State Office Tower)
- Abner Paki Hale Courthouse
- Hilo State Office Building
- Keoni Ana Building
- Waipahu Civic Center
- Kāne‘ohe Elementary School
- Kāne‘ohe Civic Center
- Wahiawā Civic Center
- OR&L Main
- AAFES Building
- King Kalākaua Building
- Ho‘opono
- State Capitol Building
- Ala Moana Health Center
- Diamond Head Health Center
- Ke‘elikolani Building
- Leeward Health Center
- ‘Aiea High School
- Kekuananoa
- Uluakupu (Building 4)

To ensure that buildings function as efficiently as possible, commissioning and retro-commissioning processes are being employed. Commissioning is applied to new buildings, while retro-commissioning optimizes an existing building's operation and maintenance.

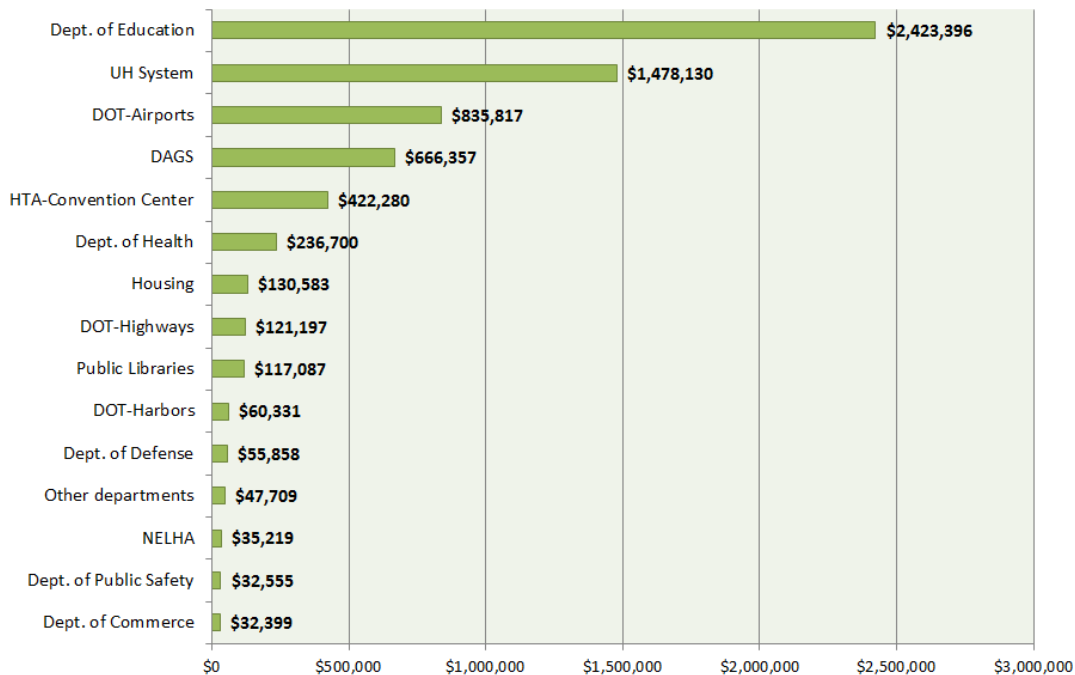
DAGS is also the state's lead agency for energy performance contracting, a proven method of implementing energy efficiency capital projects without requiring up-front funds. DAGS developed a prequalified list of Energy Service Companies and set of boilerplate documents which may be used by State and County agencies to solicit performance contracting proposals. In FY12 DAGS, in conjunction with DBEDT, worked with other agencies to initiate performance contracts for DAGS Phase II and buildings owned/managed by DOT, PSD, and UHCC.

Rebates Save Money at State Facilities

Since 1996 many public agencies have taken advantage of rebate programs. In the past, the utilities had provided rebates for both retrofit and new construction in the areas of lighting, motors, and heating/ventilation/air conditioning (HVAC) and also supported customized approaches. In FY10, following state law, the Public Utilities Commission (PUC) selected a third-party public benefits fund administrator, Hawai'i Energy, to take over the rebate programs.

More than \$6.69 million in rebates have been provided by the Hawai'ian Electric Company, Inc. (HECO), its subsidiaries, and Hawai'i Energy to State of Hawai'i executive agencies from 1996 through 2012. In FY12 state agencies received \$495,784 in rebates. Savings in 2012 from retrofits and new construction was 67,894 MWh, enough to power 9,200 homes in Hawai'i for that year. The utility costs and energy savings are expected to grow to over \$330 million and 1,163,288 MWh, respectively, over the life of the energy-efficient equipment.² Over the life of the equipment, the savings are equivalent to approximately 157,000 households' annual electricity use.³

Figure 7: Rebates since 1996, by Agency



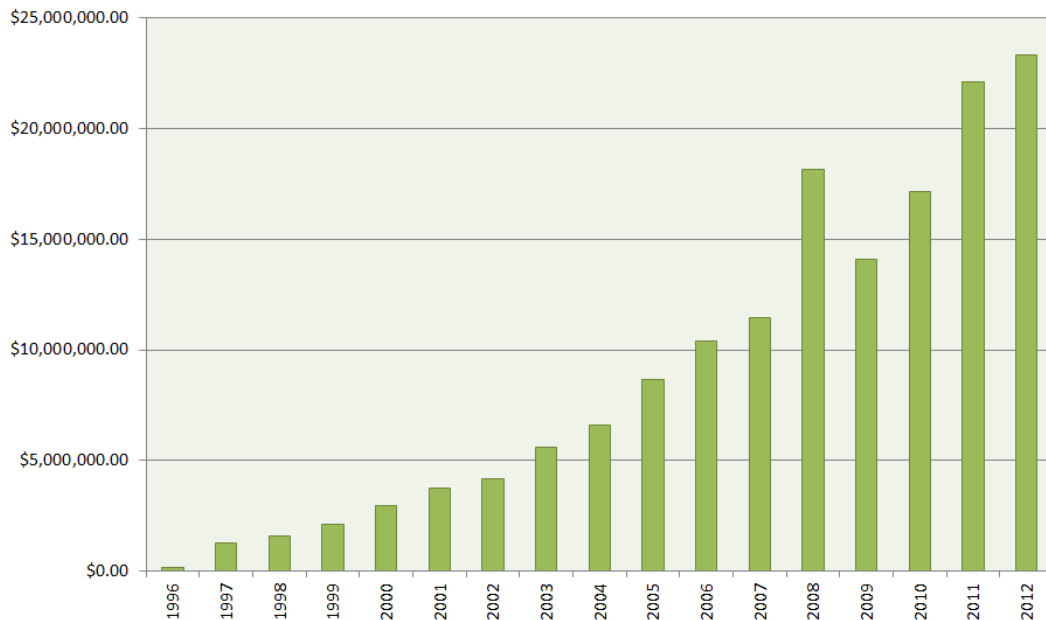
² For this report, it was assumed that the average life of appliances, custom, motor and cooling equipment is 15 years, while lighting is 14 years and water heating 10 years. (Source: 2004 HECO IRP, Appendix 11)

³ Figures representing number of households' annual electricity consumption were calculated using data from Hawai'i Energy, which shows that average household consumption per month in Hawai'i for 2010 is 615 kWh. The average annual consumption for Hawai'i households is approximately 7380 kWh. (Source: HECO)

The DOE and the UH system have been the largest beneficiaries of rebates, receiving over \$2.4 million and \$1.4 million respectively since 1996, as shown above in Figure 7. The “Housing” rebates were provided to the Housing and Community Development Corporation of Hawai‘i (HCDCH), which was reorganized in 2005 into two agencies, Hawai‘i Public Housing Authority (HPHA) and Hawai‘i Housing Finance and Development Corporation (HHFDC).

The state agencies receiving rebates from the HECO utilities saved an additional \$169,354 to \$2.6 million per year on their electricity bills from 1996 to June 30, 2012. In total the agencies have saved \$153.6 million during the same period.⁴ Annual cost savings for state executive agencies are depicted in Figure 8.

Figure 8: State Agency Rebate Savings (\$) from HECO since 1996

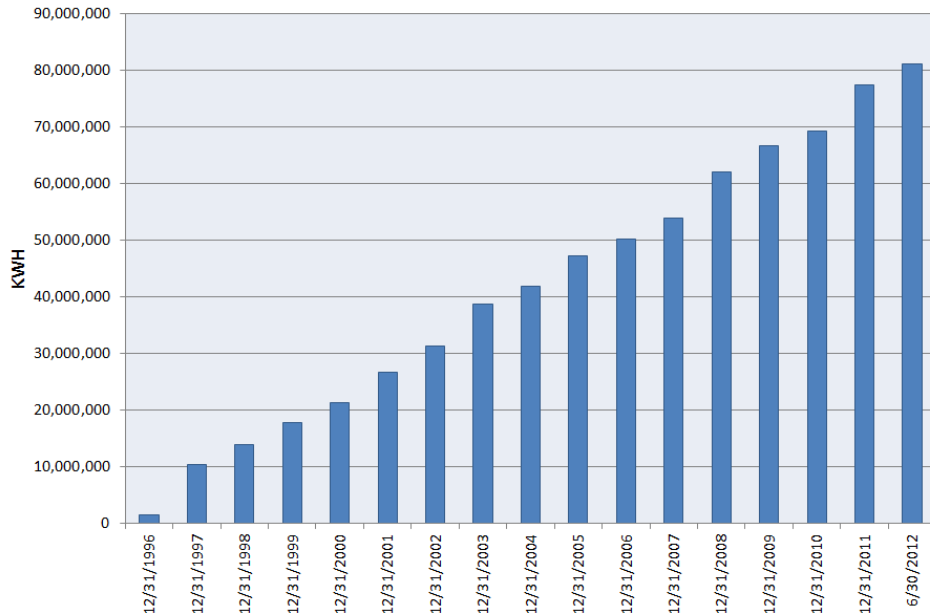


Since 1996 an estimated total of 688 million kWh have been saved through rebates at state facilities. This is enough to power approximately 93,338 households for a year.⁵ Annual electricity savings (kWh) due to state agency participation in utility efficiency rebate programs since 1996 are depicted in Figure 9.

⁴ This figure was calculated by adding up the estimated annual cost savings from 1996. Estimated annual cost savings were calculated by multiplying the kWh savings by the average cost of electricity per kWh (Source: Energy Information Administration) during each year going back to 1996. It should be noted that the annual savings are cumulative, since equipment installed in one year continues to offer savings over time.

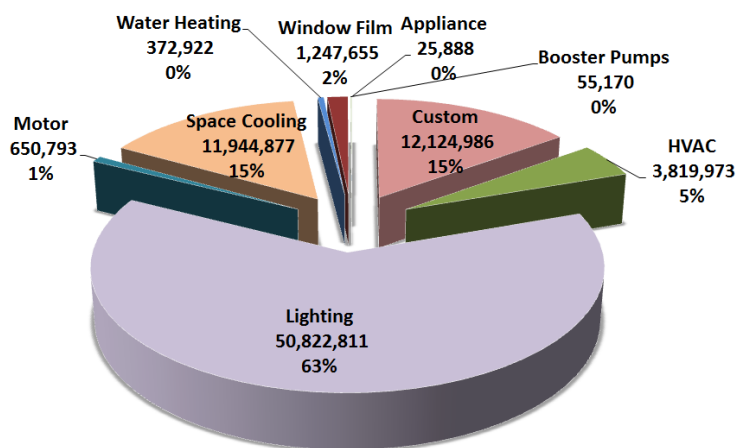
⁵ Figures representing number of households' annual electricity consumption were calculated using data from Hawai‘i Energy, which shows that average household consumption per month in Hawai‘i for 2010 is 615 kWh. The average annual consumption for Hawai‘i households is approximately 7380 kWh. (Source: HECO)

Figure 9: Annual State Executive Facilities' Energy Savings (kWh) from HECO Rebate Programs since 1996



In 2012 lighting retrofits accounted for approximately 50 million kWh of electricity savings, representing 63% of the total. Space cooling saved an additional 11.9 million kWh and custom retrofits saved 12.1 million kWh. Other rebates were provided for motors, water heating, and appliances. State agencies' 2012 energy savings due to utility rebate programs broken down by technology are depicted in Figure 10.

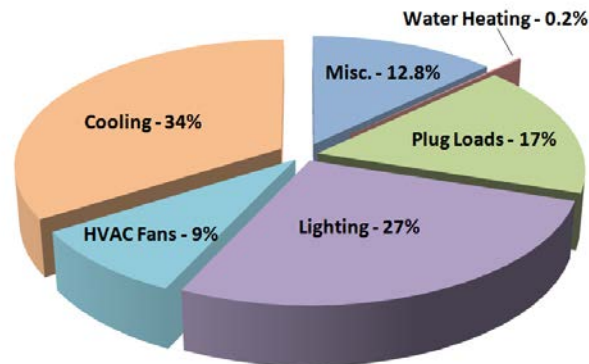
Figure 10: Rebate Energy Savings (kWh) by Technology in 2012⁶



⁶ *Custom rebates are any rebates that fall outside of prescriptive rebates and can include equipment and retrofits from the other rebate groups as well as items such as building envelope improvements, sensors/controls, variable frequency/volume equipment, and CO control parking ventilation equipment.

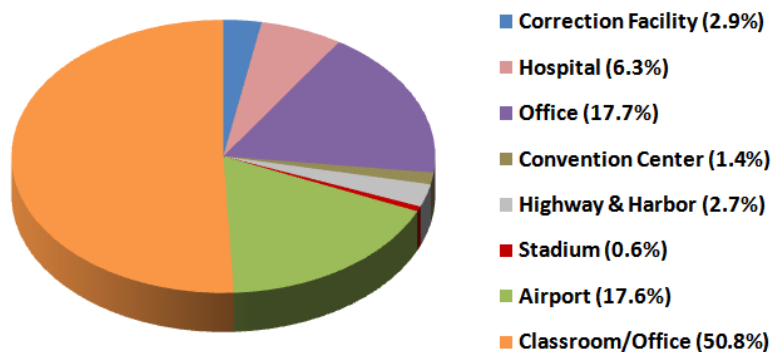
HECO's data show that a typical office building's electricity is primarily used for space conditioning. The combined burden of running systems for cooling, heating, ventilation and air-conditioning (HVAC) requires 43% of a typical office building's electricity. Lighting is responsible for about 27%. "Plug loads" such as computers, copiers, and other equipment consume an additional 17% while water heating accounts for 0.2%. Miscellaneous uses (e.g. elevators, water coolers) comprise the remaining 12.8%. These data, shown in Figure 11, highlight areas for energy conservation.

Figure 11: Typical Office Building Energy Use Breakdown⁷



When State of Hawai'i facilities on O'ahu are examined by type, campuses consisting of classrooms and offices consume about half of the electricity. Office buildings and the Honolulu International Airport each consume approximately 17% of the total. The public hospital system is also a significant consumer, accounting for around 6%. These data, provided by HECO, are shown in Figure 12.

Figure 12: State of Hawai'i Facilities on O'ahu, Electricity Consumption by Occupancy Type⁸

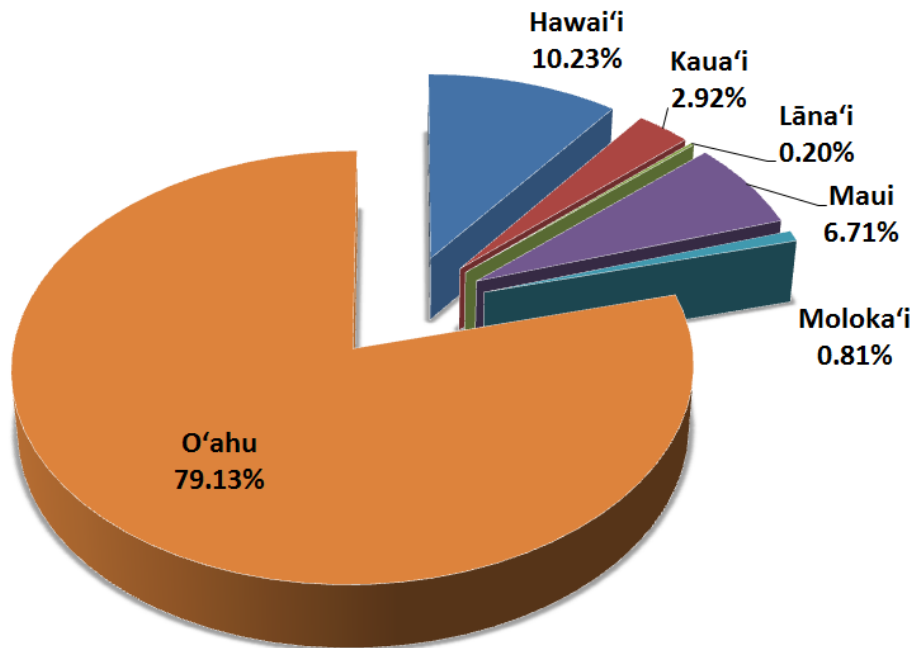


⁷ Source: Van Liew, T. (2003). HECO and Rebuild Hawai'i: Energy Benchmarking Studies in Hawai'i

⁸ Source: Cedric D.O. Chong and Associates. (2005). State of Hawai'i Facilities on O'ahu Energy Benchmarking Study

Roughly 80% of the more than 2,600 buildings owned and operated by the state government are on O‘ahu.⁹ Figure 13 shows consumption by island. These data were supplied by HECO.

Figure 13: Percentage of Total State Agency Consumption by Island in 2012



⁹ Source: Cedric D.O. Chong and Associates. (2005). State of Hawai'i Facilities on O‘ahu Energy Benchmarking Study

Highlights of Current State Energy Activities

Since the State of Hawai‘i established its energy program in 1974, state agencies have undertaken a myriad of activities focusing on energy efficiency, conservation, and renewable energy. The Department of Business, Economic Development, and Tourism’s (DBEDT) director, the state’s Energy Resources Coordinator, is responsible for coordinating energy activities statewide.

These decades of programmatic action have positioned the Administration to rapidly implement the Lead By Example (LBE) initiative. The state’s energy staff and many agencies’ efforts have already built a solid foundation, completed some benchmarking and assessments, provided numerous opportunities for training, and executed a number of projects. Some of the recent achievements are described below.

Efficiency

Twenty-one (21) state buildings have received ENERGY STAR® awards, acknowledging that they rank in the top 25% of similar buildings nationwide. Agencies are reviewing buildings to recertify existing buildings and to identify new buildings for certification.

Sixteen (16) state buildings are LEED certified. An additional 56 LEED projects are in the process toward the goal of certification.

Thirteen (13) state buildings have been retro-commissioned to the investigation phase since 2008, an additional fifty-one (51) are in the process, and five (5) have been retro-commissioned or will be as part of LEED projects.

A total of 18 workshops and other events relating to LBE topics were held in FY12, attracting at least 930 participants, including many from state agencies. In some cases, DBEDT provided funds so that other executive agencies’ staff members could attend the training.

The State Building Code Council approved the 2006 International Energy Conservation Code (IECC) and modified the code to better suit the climate in Hawai‘i, resulting in an estimated 15% efficiency improvement.

DBEDT assisted with adoption of county building energy codes. IECC 2006 was adopted by Maui County in October 2009, Hawai‘i County in October 2010, and the City and County of Honolulu in November 2009. Kaua‘i County adopted IECC 2009 in May 2010.

The Energy Services Coalition, a national nonprofit organization dedicated to supporting performance contracting, recognized the State of Hawai‘i as first in the nation in Energy Savings Performance Contracts for State Building Efficiency. To date, over \$193 million has been invested in both State and County ESPCs with cost savings

expected to grow to more than \$341 million over the 20-year life of the contracts. DBEDT has provided technical assistance to agencies for projects dating back to 1996.

DBEDT, in coordination with the EPA and pursuant to Act 155, offered training and assistance for benchmarking to state agencies. Act 155, SLH 2009 requires benchmarking of all state facilities. Benchmarking is a process which involves calculating the building's annual energy consumption per square foot, allowing buildings to be compared and identifying areas for improving energy efficiency. To date, 277 state facilities have been benchmarked using the ENERGY STAR® Portfolio Manager online tool.

State agencies have received more than \$6.69 million in efficiency rebates since 1996 from the Hawai'ian Electric Company (HECO) and its subsidiaries and from Hawai'i Energy. These rebates combined have resulted in estimated cumulative dollar savings of over \$153 million and electricity savings of 688 million kilowatt-hours. Over the life of the equipment, the savings will be equivalent to approximately 157,000 households' annual electricity use. In FY12 state agencies received \$495,784 in rebates.

DOH hired a contractor to conduct an audit and study of the mechanical systems at the State Lab to identify various options for reducing energy.

DOH is installing super T8 lamps and electronic ballasts at Diamond Head, Lanakila, Leeward, and Windward Health Centers as well as the Hale Complex. DOH is also in the process of making a number of reroofing and mechanical system upgrades for the purpose of energy efficiency.

In March of 2012 the DOE helped host the first Student Energy Ambassador Development (SEAD) training for high school students and mentors. These trainings are part of an education campaign sponsored by Hawai'i Energy and put on by the UH Rewarding Internships for Sustainable Employment (RISE) intern program. Groups from Kalani, Mililani and Waipahu High Schools participated and learned how to do an energy audit at their schools, identify strategies for conserving energy and put together a plan to accomplish energy savings.

About 100 schools have been added to ENERGY STAR® Portfolio Manager. Through the implementation of the DOE's Energy Efficiency and Sustainability Master Plan, as well as the hiring of additional resources, the DOE plans to complete benchmarking for all 250 plus DOE facilities statewide within the next two years.

DLIR has actively participated in the State's "Green Champion" iConserve Workshops. DLIR and the DoTAX jointly hosted an energy conservation workshop at the Princess Ke'elikōlani Building with Hawai'i Energy, which covered energy saving practices at work and home for all employees.

HHFDC, with Hawai'i Energy, conducted an energy audit of the Pohulani Elderly building and will apply recommendations as the building's capital improvements budget

allows. Information from the Pohulani Elderly building audit, as applicable, will be applied to two (2) other high rise buildings; Kauhale Kaka‘ako and Kamake‘e Vista.

HHFDC’s high rise affordable apartment building Kauhale Kaka‘ako is being pipelined for a major overhaul of physical and mechanical systems to include a roofing system (replacement, recoating, resealing), vertical side wall/windows (repair, repainting), and “Cool Roof & Cool Wall” coating systems.

HHFDC is continuing to replace failing solar water heating system collection panels, circulator pumps and reservoir tanks on the Big Island of Hawai‘i at the La‘ilani Apartments (200) in Kona. Over the past years 29 units have been replaced.

HHFDC has incorporated heat recovery systems in the Air Conditioning Plants that cool the commercial spaces in several of our high rise buildings. These recovery systems are designed to pre-heat the cold water entering the circulating system thus reducing the burden on the natural gas boilers and conversely cooling the air conditioning system.

HPHA has a consultant selected and are obtaining internal approvals to begin negotiations to provide a facility-wide green assessment and report, or Green Physical Needs Assessment (GPNA). The report will include electronic drawings, site surveys, building assessments, etc., to include recommendations for potential energy-savings and environmental strategies for existing HPHA projects statewide. Estimated completion of this study is October 2013. The report will be used to schedule a plan of action for the next five years.

DOT Highways' Kaua‘i District Office has replaced interior lighting with new LED lights.

Three new energy efficient variable frequency drives were installed at NELHA’s 55” seawater distribution system.

PSD executed an ESPC with total energy “cost avoidance” projected to be approximately \$2.3 million, of which there is a guaranteed \$1.98 million in savings as per the contract for the OCCC and Halawa facilities.

UH Community Colleges completed re-lamping existing lighting throughout the Kaua‘i CC, Honolulu CC, Leeward CC, and Kapi‘olani CC campuses to energy efficient lamps/bulbs with occupancy sensors as well as installing energy management controls to all AC equipment, PC monitors, and vending machines.

Hawai‘i CC replaced an old chiller with a split AC system, delamped light fixtures campus wide, and sub-metered four shops and two portable buildings to monitor electrical costs.

Honolulu CC, Kapi'olani CC, and Kaua'i CC replaced toilets, urinals, and lavatory fixtures with low flow type valves and moderators.

Renewables

A photovoltaic system project has been completed by DAGS and a net metering agreement has been executed with HECO. The system has been fully operational since February 2012 and has reduced electrical consumption by 47% (20,800 kWh per month) and cost by 42% (\$6,000 per month).

DOT Highways installed solar water heating systems at the Maui District Baseyard as well as PV systems at the Kaua'i District Office and Moloka'i Baseyard facilities. DOT Highways is also in the process of installing photovoltaic (PV) systems at the Hawai'i District Office, Maui District Office, and Ke'anae Baseyard facilities.

NELHA received a \$412,562 reimbursable federal grant for the development and deployment of distributed energy systems at NELHA and to update NELHA's strategy as a demonstration site for Distributed Energy Resources (DER).

A PV system was installed on DLNR's Kure Bunkhouse. The system creates 1020 watts of power and will be capable of producing 4,080 watts per day and with 8 Full River 6 volt golf-cart batteries the system will provide 10,000 watts of storage capacity.

The Science and Technology building at UH-Hilo uses a heat recovery system for domestic hot water and dehumidification of the building. Also, Kaua'i CC produces electricity through an 82.3 kWh PV system installed on the roof of the One Stop Center building.

The Edmondson Hall and Gartley Hall projects at UH-Mānoa presently under construction will employ a solar water reheating system for the central HVAC systems. Solar water re-heating will also be employed in planned new construction and renovation projects where economically feasible.

Transportation

Not all state agencies have vehicle fleets. Those that do must comply with federal and state regulations relating to the purchase of efficient vehicles, and to purchase the most fuel-efficient vehicles that meet the needs of their programs.

State vehicles are already utilizing E-10 Unleaded gasoline, which contains 10% ethanol. State law requires its sale. Many state vehicles are also flexible-fuel capable, and are capable of using higher percentages of ethanol if they become available. UH has a small fleet of alternatively-fueled and hybrid vehicles.

Act 156, signed into law in 2009, requires all state and county agencies, when purchasing new vehicles, to seek vehicles with reduced dependence on petroleum-based

fuels that meet the needs of the agency. The act provides a priority list with highest priority going to electric or plug-in hybrid electric vehicles, then hydrogen or fuel cell vehicles, other alternative fuel vehicles, hybrid electric vehicles, and vehicles identified by the EPA as “Fuel Economy Leaders.”

Electrical utility vehicles, as an option to fossil fueled service vehicles and trucks, are being used in Wai‘anapanapa State Park, Maui, at various park areas on O‘ahu, and is planned for park use on Hawai‘i by the DLNR.

Kaua‘i CC purchased a 2011 Toyota Prius Hybrid vehicle to reduce gasoline consumption.

UH-Hilo has a hybrid gas/electric, an electric vehicle, and owns and operates one vehicle on O‘ahu and that vehicle runs on Flex Fuel, which complies with the Federal regulations.

NELHA owns a Nissan Leaf EV.

Kapi‘olani CC has a small scale program to produce bio-diesel from waste oil for use in gas carts operated on campus. The project is conducted with the cooperation of the food services and science faculty together with students enrolled in their classes.

Electric Vehicle charging stations have been installed at the DAGS motor pool (3), Central Services (1), and UH motor pool. Also, three Public Stations have been installed and operating at the State Capitol, Circuit Court and Kapolei Judiciary. The SPO, DAGS-AMD, and DBEDT have developed guidelines for the purchase of vehicles including energy-efficient vehicles. These guidelines are available on the DBEDT website.

Purchasing Practices

Most departments already utilize life-cycle cost analyses, purchase efficient equipment (such as those with the ENERGY STAR® label), and take advantage of utility rebates. DAGS already requires the projects which it manages to use highly efficient mechanical equipment. Utility rebates have typically been used to help offset the cost of purchasing and installing energy-efficient equipment.

The State Procurement Office (SPO) continues to provide price and vendor listings, which include ENERGY STAR®, recycled, or environmentally preferred products. For products and supplies not included on the SPO price lists, purchasing agencies are still required to preferentially order recycled products, oil products with greater recycled content, and biofuels.

Information on recycled and environmentally preferable products (EPP) has been prepared by DBEDT and is available to state agencies. This includes lists of EPP available in Hawai‘i, a case study of successful EPP efforts, an evaluation of procurement

practices, and recommendations for specifications and bid requests to address EPP concerns.

Most departments already use life-cycle cost analyses, purchase efficient equipment such as those with the ENERGY STAR® label, and take advantage of utility rebates. The State Procurement Office (SPO) continues to provide price and vendor listings which include ENERGY STAR®, recycled, or environmentally preferred products. Information on recycled and environmentally preferable products (EPP) has been prepared by DBEDT. Lead By Example, in partnership with the SPO, also has hosted trainings on EPP that are available to state employees.

The DOE has increased its application of environmentally preferable purchasing in a number of ways. As part of 'Ewa Makai Middle School's sustainability efforts, the custodial staff has embraced the use of green cleaning products and uses them exclusively. This includes the use of dispensing systems for cleaners, which allows the school to buy in bulk - with less packaging and therefore less waste. Mop buckets can be filled directly and spray bottles can be reused rather than end up in the land fill after one use. In 2012 Waikiki Elementary School was the site of a "Green Classroom Professional Training +Toolkit" event which included training on the use of environmentally preferable cleaning products.

HHFDC has mandated that all janitorial and associated products used in cleaning operations will be environmentally friendly products. At the HHFDC headquarters, all commercial single-sheet pull down hand towel dispensers have been changed out with touchless roll paper dispensers, which has led to an overall reduction of paper towel waste, and costs.

DOT Highway, Maui District, used 22,000 gallons of biodiesel that was purchased at a cost of \$88,946.00 in fiscal year 2011.

DAGS Central Services Division procures environmentally preferable products, whenever possible. The CSD's Custodial Program uses Green Seal or other certified environmentally friendly products to clean their buildings.

The SPO, DAGS-AMD, and DBEDT have developed guidelines for the purchase of vehicles including energy-efficient vehicles. These guidelines are available on the DBEDT website: <http://Hawaii.gov/dbedt/info/energy/efficiency/state/>

Biodiesel purchases by DAGS, limited to Maui, for the period July 1, 2011 to June 30, 2012 was 26,963 gallons for \$111,056.00; the average cost per gallon is \$4.12.

HCDA has followed DAGS procurement price lists and has purchased environmentally friendly products such as paper, paper towels and light bulbs.

NELHA continues to replace all its less efficient incandescent bulbs throughout the facility with energy-efficient CFL bulbs as its budget allows and has as its goal to have all energy-efficient CFL bulbs in place by FY 2014.

NELHA purchases all paper products to include copy and bond paper, paper towels, toilet paper, etc. through the State Bid List that contain the recommended content. It also replaced its old Xerox photo copy machine with a new ENERGY STAR® rated Richo.

The FTZ has upgraded seven new, energy efficient computer systems and monitors over the past few years and also recently replaced two copier/printer units with newer, more energy efficient models.

Kaua'i CC utilizes bio-diesel from Kaua'i Farm Fuels, Inc. to operate the college's tractor mower.

HHFDC replaces all fans with "ENERGY STAR®" rated models and equips one of its apartment buildings with "ENERGY STAR®" rated window air conditioners coupled with ceiling fans for an increase in comfort. Also, all washers & dryers need to be "ENERGY STAR®" rated at many of HHFDC affordable housing projects. HHFDC installed five (5) XEROX copier business centers and deactivated sixteen (16) personal or decentralized small, inefficient, old copiers. Leased equipment and purchased computers are ENERGY STAR® products.

An annual survey designed to track the environmentally preferable purchasing practices of state agencies is coordinated by the Department of Health's Office of Solid Waste Management. The results show that state agency EPP in 2010 lead to greenhouse gas (GHG) savings equivalent to removing approximately 93 passenger vehicles from roadways for one year and energy savings equal to conserving about 17,188 gallons of gasoline in a year.

The Operations and Maintenance Department at UH-Maui College uses organic fertilizers and environmentally friendly cleaning solutions. College perimeter fencing and parking lot curbs are made out of recycled plastic and parking lot planters were filled with rounded recycled glass chips.

Plans for Future LBE Activities

Continued Efficiency Efforts

Continued improvements in efficiency and the use of renewable energy in state facilities are expected. Building on the solid foundation of assessments, training, benchmarking, energy performance contracts, and other activities undertaken in the past several decades, the administration will maintain its focus on modifying agency operations to improve efficiency. Gathering and assessing data, training staff, developing additional reference materials, enhancing inter-agency communications, identifying needs for additional skills and tools, and setting efficiency targets are all on the LBE agenda.

Need for Adequate Implementation Resources

State agencies are committed to the LBE effort, but future results depend on securing adequate implementation resources. Funds for capital improvements, maintenance, and retrofits must be appropriated for energy efficiency and renewable energy goals to be reached. High-priority projects include performance contracting, efficient lighting, LEED commissioning/retrocommissioning, and energy management controls, and, after energy efficiency measures are completed, the installation of renewable energy as appropriate.

Agency Goals and Plans

As part of the LBE initiative, state agencies have clarified and prioritized their plans for future energy improvements. These plans include new construction, as well as retrofits and operations/maintenance programs. LBE Working Groups will be addressing the following tasks:

1) Data Collection:

- Develop a standardized data collection system to establish and refine baselines for various target areas: buildings, transportation, environmental practices and procurement.
- Develop standardized documents/formats for various data requirements.
- Train personnel to use the data tools; collect data for the various target areas.

2) Training and Education Activities:

- Conduct training/education for the various Working Group members (e.g., speakers, selected discussion topics, inter-Working Group meetings to promote information/idea exchanges.)
- Develop an education/promotional campaign for state personnel to implement and practice increased efficiency.
- Continue technical training and education efforts to support LBE.

3) Technical Assistance:

- Develop LEED projects and identify pilot projects.
- Develop commissioning and retro-commissioning projects.

- Conduct building assessments, including walk-through audits.
- Identify and certify ENERGY STAR® state buildings.

4) Evaluation:

- Continue assessment and discussion process to identify future tasks, such as development of evaluation criteria, data requirements, and training needs.
- Develop evaluation tools, quantitative and qualitative, such as conducting post-occupancy evaluations (objective and subjective) of LEED Silver Buildings or buildings with selected technology installations for energy efficiency improvements.

5) Policy Review and Recommendations:

- Continue discussion on energy-efficiency-only budget requests to improve the request process and information provided.
- Continue examination of potential policy recommendations from the Leadership Group, Buildings Working Group, Transportation Working Group, and the Environmental Practices and Procurement Working Group.

Individual Agency Responses

A compilation of the responses from most State of Hawai‘i executive agencies may be found in the following section. Agencies were asked to report on their specific activities relating to Act 96 and Act 160, SLH 2006. Selected details from specific responses, such as vehicle fleet data, are attached as appendices.

DBEDT issued invitations to participate in this compiled report to all state executive branch departments, including attached agencies.

The following agencies did not respond:

B&F: Department of Budget and Finance
HTA-CC: Hawai‘i Tourism Authority, Convention Center

The departments and offices that responded this year include:

AG: Department of the Attorney General
DAGS: Department of Accounting and General Services
DBEDT: Department of Business, Economic Development & Tourism
DCCA: Department of Commerce and Consumer Affairs
DHHL: Department of Hawai‘ian Home Lands
DHRD: Department of Human Resource Development
DHS: Department of Human Services
DLIR: Department of Labor and Industrial Relations
DLNR: Department of Land and Natural Resources
DOA: Department of Agriculture
DOD: Department of Defense
DOE: Department of Education
DOH: Department of Health
DOT-Airports: Department of Transportation, Airports Division
DOT-Harbors: Department of Transportation, Harbors Division
DOT-Highways: Department of Transportation, Highways Division
DOTAX: Department of Taxation
FTZ: Foreign Trade Zone
HCDA: Hawai‘i Community Development Agency
HHFDC: Hawai‘i Housing Finance and Development Corporation
HHSC: Hawai‘i Health Systems Corporation
HPHA: Hawai‘i Public Housing Authority
HSPLS: Hawai‘i State Public Library System
NELHA: Natural Energy Laboratory of Hawai‘i Authority
PSD: Department of Public Safety
UH: University of Hawai‘i system

**Consolidated LBE Reports from State of Hawai'i Executive Agencies
Fiscal Year 2009-2010
Relating to the Statutory Requirements of Act 96 and Act 160 of 2006**

Act 96 SLH 2006: Buildings and Facilities

- (1) Design and construct buildings meeting the Leadership in Energy and Environmental Design (LEED) silver or two green globes rating system or another comparable state-approved, nationally recognized, and consensus-based guideline, standard, or system, except when the guideline, standard, or system interferes or conflicts with the use of the building or facility as an emergency shelter.

This section does not apply to the following agencies: AG, DCCA, DHRD, DOA, DOTAX, FTZ, HCDA, NELHA

DAGS:

ASSESSMENT:

The Public Works Division (PWD) is currently working on a total of seven designated projects to achieve a LEED Silver rating for the Hawai'i State Public Library System (HSPLS), Hawai'i State Department of Defense (DOD), the Department of Public Safety (PSD), and DAGS. The projects are:

1. Mānoa Public Library - Expansion and Site Improvements, DAGS Job No. 12-36-6364
The project's building permit approvals were delayed, but were finally approved in July 2009 and construction started in October 2009. The new library opened its doors to the public in June 2012. It is anticipated that the project will achieve a LEED Silver rating. The construction contract award amount for this project was \$8,159,000.
2. New Kohala Public Library, DAGS Job No. 11-36-6367
The project is complete and the facility occupied since November 2010. It is anticipated that the project will achieve a LEED Gold rating. The construction contract award amount for this project was \$6,895,900.
3. Keaukaha Military Reservation - Joint Military Center, Phase 1, DAGS Job No. 21-14-7292
The project is complete and the facility has been occupied since June 2011. The project has achieved a LEED Silver rating in March 2011. This may be upgraded to a Gold rating, pending evaluation of additional construction phase points. The design-build contract award amount for this project was \$50,768,000.
4. Maui Regional Public Safety Complex, DAGS Job No. 15-27-5562
This project is currently striving for a LEED Silver rating. The cost of the project is substantial with possibility the project may need to value engineer some of the sustainable design elements out, but strives to use as many sustainable design elements as possible. The project is now planned to be issued as a design-build request for proposal, which is scheduled to be issued in March/April 2012. Subject to funding and permit approval, the construction is estimated to start in April 2013. The current total estimated construction cost, including furnishing and equipment is \$225 million.

5. DAGS Hawai'i District Office, Kona Baseyard, DAGS Job No. 61-10-0634
This project is currently under construction, and the goal is to achieve a LEED Silver rating. The construction contract award amount is \$4,073,368. Construction started in June 2012 and the current contract completion date is in June 2013.
6. DAGS Hawai'i District Office, Hilo Baseyard, DAGS Job No. 61-10-0633
This project opened bids for construction on April 26, 2012, and a construction contract award was made on May 11, 2012 for \$5,189,350. The project is pending building permit approvals, and it is anticipated to start construction in late 2012. The goal is to achieve a LEED Silver rating.
7. New 'Aiea Public Library, DAGS Job No. 12-36-6152
This project opened bids for construction on April 5, 2012, and a construction contract award was made on April 23, 2012 for \$8,722,544. The project is pending building permit approvals and it is anticipated to start construction in late 2012. The goal is to achieve a LEED Silver rating.
8. Kamāmalu Building Renovation DAGS Job No. 12-10-0464
This project has restarted and is currently under design. The project includes renovation of the building interior and refurbishment of exterior. The estimated construction cost is approximately \$27 million. We anticipate completing design in mid-2013 and completing construction in late 2015. The goal is to achieve a LEED Silver rating.
9. New Nānākuli Public Library, DAGS Job No. 12-36-6513
This project is currently under design. We anticipate completing design in early to mid-2013. Subject to funding being appropriated for construction, we anticipate opening construction bids in late 2013.
10. Kaua'i Community Correctional Center, New Segregation Housing, DAGS Job No. 14-27-5638
This project is currently in the scope assessment phase, and we will be considering a LEED Silver rating as a goal, to the extent it is possible. The current anticipated construction cost for this project is approximately \$1,665,000.
11. Former Līhu'e Courthouse Renovations, DAGS Job No. 64-10-0697
This project is currently in the scope assessment phase and we will be considering a LEED Silver rating as a goal, to the extent it is possible. It is noted that this is a historic building and will be subject to review and approval by the State Historic Preservation Division. The current anticipated construction budget for this project is approximately \$7.5 million.

STRATEGY:

The previously described projects are part of developing a long term strategy. For the immediate strategy, the Division of Public Works will implement projects in accordance with Act 96, SLH 2006 "to the extent possible."

The DAGS-PWD general strategy in defining and applying "to the extent possible" is to take the following steps:

- 1st level: Look for and implement sustainable design practices that PWD does already; thus, no impact on operation/function and cost.

- 2nd level: Look for and implement sustainable design practices that PWD may not have normally done, but can do without negative impact to cost and to operation/function of the facility.
- 3rd level: Look for and possibly implement sustainable design practices that PWD may not currently do that are not very costly and improve operation/function of the facility. Associated costs, benefits, budget and maybe even schedule will start to become factors in deciding whether to implement.
- 4th level: Look for and possibly implement requirements that PWD may not currently do; how will impact cost and will improve operation/function of the facility. Associated costs, benefits, budget and schedule will be factors in deciding whether to implement.

Strategy also includes knowing what we to omit:

PWD should not implement sustainable design practices and elements that do not offer any real value. PWD does not want to implement sustainable design requirements to get LEED points just to achieve a rating that does not provide a real value; regardless, if the project budget would allow it.

As PWD gains the experience and knowledge from the projects that will occur over the year, PWD intends to develop a LEED or generically-stated, Sustainable Design and Commissioning application guideline; along with programmatic support for PWD and possibly other State agencies.

DBEDT: DBEDT has been active in promoting green buildings, offering Leadership in Energy and Environmental Design (LEED) training and technical assistance for LEED projects to other state agencies and the public sector, and the adoption of energy efficient building codes.

DAGS and DBEDT worked together on the first state building project to pursue LEED Existing Buildings: Operations and Maintenance (EB: O&M) certification. The goal was to achieve LEED Gold and elements of the effort include an educational/outreach program for tenants of the building, a waste stream audit, energy and water tracking through ENERGY STAR® Portfolio Manager, as well as a number of upgrades in equipment, cleaning materials, and operations. The performance period ran from August 1 to December 31, 2011. The project achieved LEED Gold for EB: O&M certification in 2012.

DBEDT sponsored and coordinated a number of LEED activities: Credential Maintenance Program, Green Associate Training, LEED EB O&M Training, and Building Assessments for State of Hawai'i agency representatives. The speakers and topics were well-received by over 20 State of Hawai'i representatives from over 6 State of Hawai'i agencies. Trainees received training manuals and discussed their progress toward achieving LEED certification for existing facilities. Opportunities and challenges were discussed for future capital improvements and policy and program development in support of the pursuit of more energy efficient and greener new and existing State of Hawai'i facilities.

DBEDT provided green building and LEED-related documentation and technical assistance through a consultant to the State of Hawai'i and DAGS, for a LEED EB O&M Project at the State of Hawai'i's State Office Tower and at the Honolulu International Airport (HIA). The HIA project achieved LEED-Commercial Interior (LEED-CI) Silver level this fiscal year. This is the first state agency LEED-CI Silver level project in the state.

DBEDT continued work under an EPA Pollution Prevention Grant awarded in 2011 to hire paid interns to work on the Hawai'i Green Business Program and the Lead By Example Resource Efficiency Program. These programs seek to drive efficient and green operations into some of the largest businesses and government agencies across the hotel/resort, food service/restaurant, office/retail, and government sectors. To date 55 businesses and government agencies have participated in the program. Seven interns were hired, with two additional interns to be hired in Fall 2012, to expand the program and double the number of participants during the grant period ending December 2012. Their work has included energy efficiency, water conservation, and resource recovery while working at DBEDT, DOH, and the City and County of Honolulu Board of Water Supply. These interns have helped work with an additional 15 businesses and government agencies which were recognized in a March 2012 ceremony in the Governor's Chambers. 15 more businesses are anticipated for a 2013 ceremony.

On April 3, 2012 DBEDT co-sponsored the 12th Annual Build and Buy Green Conf. and Expo at the Hawai'i Convention Center, with case studies and the latest in the following areas: LEED building rating system and green affordable housing projects, green community development, financing, energy efficiency and renewable energy initiatives, and best practices in green business. Three concurrent tracks covered: (Track A) Residential Green Communities, (Track B) Green Building and Clean Energy in Hawai'i, and (Track C) Sustainable Business Strategies for Today's Economy.

Over 30 dynamic professionals and local experts presented to over 300 attendees. This year's featured speakers include: Cameron Sinclair from Architecture for Humanity; Dana Bourland from Enterprise Community Partners, Inc.; David Levine from the American Sustainable Business Council; and Jessian Choy, from the City of San Francisco.

DBEDT conducted 10 LEED EB: O&M Assessments on public and private buildings in the State of Hawai'i and also submitted an application for LEED EB: O&M gold level certification for the State Office Tower. A presentation on this project was given at the 12th Annual Build and Buy Green Conference and Expo. Additional green building-related training and assessments will be done to complete the remainder of this technical assistance contract.

On behalf of the State of Hawai'i, DBEDT renewed its membership with the US Green Building Council (USGBC). DBEDT continues to cosponsor a variety of LEED-related training sessions, from one-hour brown bag seminars at the American Institute of Architects (AIA)-Honolulu to full-day workshops co-sponsored by the USGBC Hawai'i Chapter on LEED Green Building Design & Construction and LEED Green Building Operations & Maintenance. DBEDT serves on the USGBC Hawai'i Chapter's Education and Green Schools Committees. DBEDT has helped coordinate and co-sponsor LEED workshops to prepare state personnel and others to take the USGBC's, now the Green Building Certification Institute's Green Associate, and other accredited professional examinations such as the Green Classroom Professional Certificate, to become LEED Green Associates, Green Classroom Professionals, and LEED Accredited Professionals. In 2012 training sessions were held and over 100 state employees attended.

DBEDT staff participated in monthly or quarterly meetings of the US Green Building Council's Education and Green Schools Committees, the AIA-Honolulu's Committee on the Environment, the Urban Land Institute's Sustainability Committee, and the General Contractor's Association of Hawai'i invited DBEDT to be co-Chair of the new Sustainable Construction and Renewable Energy Committee. Through participation in these committees and networks, DBEDT is able to leverage developing additional LEED and green building related educational opportunities for

both public and private sector participants to raise the bar in educating project managers and consultants as well as building owners, managers, and facilities managers in the value of going green in new and existing facilities in the State of Hawai‘i.

DBEDT has also used State Energy Program American Recovery and Reinvestment Act funding in support of developing additional green building technical assistance to continue some of the work initiated under the previous State of Hawai‘i General funded contracts.

DHHL: The Hawai‘ian Homes Commission adopted the Department’s Ho‘omaluo Energy Policy in January 2009. This policy enables native Hawai‘ians and the broader community working together to lead Hawai‘i’s effort to achieve energy self-sufficiency and sustainability. The Hawai‘ian Homes Commission is working to update this energy policy to further enhance the spirit of Act 96.

Land Development Division continues to design and develop residential projects with BuiltGreen and ENERGY STAR® programs.

Land Management Division continues to work with and encourage our general lessees and licensees to plan, design, and construct their facilities to meet the same energy efficiency programs. The Kalealoa Solar Two project in Kalaeloa is under construction and will be providing 5MW of power to Hawai‘ian Electric. Two more solar projects are in the permitting process and will be in construction by end of 2013.

DHS: The Department of Human Services (DHS) will continue to coordinate all building and facility projects with the Department of Accounting and General Services (DAGS) to ensure that all construction and repairs and alterations projects are in compliance with the applicable standards and guidelines.

DLIR: The Department of Labor and Industrial Relations (DLIR) does not own or manage any buildings. The majority of DLIR personnel are housed in building facilities constructed and managed by the Department of Accounting and General Services (DAGS). The remaining DLIR personnel are located in privately-owned buildings of which the DAGS Leasing branch secures all rental lease agreements. DLIR does not have any plans to design or construct any new buildings or facilities at this time.

DLNR: DLNR’s facility portfolio is limited. Most buildings owned by DLNR are composed of base yards, harbor facilities, and park restrooms. DLNR incorporates energy saving concepts into all of its owned facilities as appropriate. Energy saving concepts includes the use of solar water heaters, natural ventilation and lighting, use of energy efficient lights, and water savings using waterless urinals or low flush toilets. Additionally, DLNR has begun to incorporate energy savings practices into design projects such as recycling existing asphalt and concrete pavement into backfill material. DLNR evaluates the feasibility of implementing energy conservation measures when capital improvement projects are designed. As DLNR staff learn more about energy efficiency and environmental design, they will incorporate these concepts into building and facility design and renovations.

DLNR continues to work with the Department of Business, Economic Development, and Tourism (DBEDT) in a statewide collaboration on energy efficiency, as a member of DBEDT’s Lead by Example Leadership Group. DLNR will continue to work with the Leadership Group on ideas to

implement energy savings across the state. As department staff learns more about such initiatives, they will incorporate such guidelines into DLNR standards.

DLNR continues to work with the Department of Business, Economic Development, and Tourism (DBEDT) in a statewide collaboration on energy efficiency, as a member of DBEDT's Lead by Example Leadership Group. DLNR will continue to work with the Leadership Group on ideas to implement energy savings across the state. As department staff learns more about such initiatives, they will incorporate such guidelines into DLNR standards.

DOD: The Hawai'i Army National Guard follow federal military construction mandates, key energy directives include: EPL05, Executive Order 13423, EISA07, Executive Order 13514. All new building construction is to meet or exceed LEED Silver standards. Local State of Hawai'i, Department of Defense guidance, the Adjutant General's initiative (dated 13JULY2012): Reduce departments' energy consumption by 5% every year and 25% by 2017.

DOE: In November 2011, 'Ewa Makai Middle School, the DOE's newest school, received a LEED Gold Level certification. As of August 31, 2012, the new library at Baldwin High School is in the final review for its LEED certification and while a Silver level rating is guaranteed there is the possibility of achieving a higher Gold rating.

Campbell High School's new science building (completed SY 2011-12), Lahainaluna High's new Cafeteria (completed SY 2012-12) and Waialua Elementary's Library (under construction) are built to LEED Silver Equivalent. Pu'u Kukui Elementary, the new school under construction on Maui, is going through the formal LEED certification process for Silver or higher.

In addition to using the LEED rating system for new buildings, the Facilities Development Branch spent the last year working on a Hawai'i specific version of the nationally recognized CHPS (Collaborative for High Performance Schools) criteria. This is a rating system specific to K-12 schools that identifies strategies to achieving energy efficient, environmentally sensitive (both indoor and campus wide), high performing schools similar to LEED. The HI-CHPS criteria was developed with input from various stakeholders including DBEDT, professional architects (AIA), mechanical and electrical engineers (ACECH), contractors (GIA), facility managers (USGBC-Hawai'i Chapter), private schools (HAIS) and the DOE. It sets a high standard for all new projects going forward, not only for the initial sustainable design of the building, but it includes a pre-requisite to monitor the building's energy and water use for the first 12 months of operation to ensure that it operates to its fullest potential in terms of resource conservation and providing a healthy environment for students and staff.

DOH: The DOH is not constructing any new buildings; however, any renovations will incorporate these standards.

DOT-Airports: Any new projects will be planned for LEED Silver - new construction.

DOT-Harbors: DOT-Harbors trains staff on LEED methodology, requiring design consultants and construction contractors to be knowledgeable of and able to comply with Act 96 SLH 2006. Also, DOT-Harbors ensures that all designs for new construction meet LEED silver certification, as applicable.

DOT-Highways: The Highways Division requires design consultants to comply with ACT 96, SLH 2006 and ensures that all new design work meets LEED silver certification.

HHFDC: As a normal standard of doing business Hawai'i Housing Finance and Development Corporation (HHFDC) and its associates are expected to look at all maintenance functions (preventive or corrective) with respect to how it will affect the entire sustainability of the projects.

Given the age of the nine (9) affordable family housing developments controlled by HHFDC, the department is in a continual renovation mode. The department looks at all the different phases of rejuvenation and insures it is doing the right things to increase the longevity of the buildings, as well as increasing the sustainable posture for Hawai'i and the World.

HHFDC is constantly monitoring its utilities. The agency continues to monitor the Electrical Kilo Watt Hours, Natural Gas and Water consumptions. The monitoring of these items is not only because of budgetary concerns, but these have a direct relation on non-renewable resources.

HHFDC staff had Hawai'i Energy conduct an energy audit in May-June 2012 on the Pohulani Elderly building. The department is waiting for the results and will be applying as much of their recommendation information into Pohulani Elderly's capital improvements budget as possible. That same information, as applicable, will be applied to two (2) other high rise buildings; Kauhale Kaka'ako and Kamake'e Vista.

HHSC:

- O'ahu Region - For all new construction, the O'ahu Region of HHSC will assess the cost of LEED building criteria. If the cost for LEED design exceeds the budget of the project, then the project will incorporate as many energy conservation measures as possible. For long range planning, the O'ahu Region will try to include LEED design costs whenever possible.

HPHA: Agency project engineers ask design consultants to include LEED design principles in all work products. New staff has been hired who are familiar with the LEED Certification or who are LEED-accredited.

HSPLS: DAGS-Public Works Division (PWD) has or is currently working on a total of four (4) designated projects to achieve a LEED Silver rating or better for the Hawai'i State Public Library System (HSPLS). The four (4) projects are:

Mānoa Public Library, Expansion and Site Improvements, DAGS Job No. 12-36-6364. The project's building permit approvals were delayed, but finally approved in July 2009 and construction started in October 2009. The new library finally opened its doors to the public in June 2012. It is anticipated that the project will achieve a LEED Silver rating. The construction contract award amount for this project was \$8,159,000.

New Kohala Public Library, DAGS Job No. 11-36-6367. The construction of this project has been completed and facility occupied since November 2010. It is anticipated that the project will achieve a LEED Gold rating. The construction contract award amount for this project was \$6,895,900.

'Aiea Public Library - Replacement Facility, DAGS Job No. 12-36-6152. This project opened bids for construction on April 5, 2012 and a construction contract award was made on April 23, 2012 for \$7,22,544. The project is pending building permit approvals and it is anticipated to start construction in late 2012. The goal is to achieve a LEED Silver rating.

New Nānākuli Public Library, DAGS Job No. 12-36-6513. This project is currently under design. We anticipate completing design in early to mid-2013. Subject to funding being appropriated for construction, we anticipate opening construction bids in late 2013.

STRATEGY

The previously described projects are part of our developing long term strategy. For the immediate strategy, the Division of Public Works on behalf of the HSPLS, will implement projects in accordance with Act 96, SLH 2006 “to the extent possible.”

The DAGS-PWD general strategy in defining and applying “to the extent possible” is to take the following steps:

- 1st level: Look for and implement sustainable design practices and elements that we do already, thus no impact on operation/function and cost.
- 2nd level: Look for and implement sustainable design practices and elements that we may not have normally done, but can do without negative impact to cost and negative impact to operation/function of the facility.
- 3rd level: Look for and possibly implement sustainable design practices and elements that we may not currently do that are not very costly and improve operation/function of the facility. Associated costs, benefits, budget and maybe even schedule will start to become factors in deciding whether to implement.
- 4th level: Look for and possibly implement requirements that we may not currently do and will impact cost and will improve operation/function of the facility. Associated costs, benefits, budget and schedule will be factors in deciding whether to implement.
- 5th level: And so forth...

Part of the strategy also includes knowing what we do not want to do:

We shouldn't implement sustainable design practices and elements that do not offer any real value. We definitely do not want to implement sustainable design requirements to get LEED points just to achieve a rating that does not provide a real value even if the project budget would allow it.

PSD: To the extent practicable, PSD intends to design and construct facilities that meet LEED Silver or higher. PSD has directed DAGS-Public Works Division to inform design professionals to, where practicable, design and ensure construction of any new facilities, based upon this LEED standard.

UH:

ASSESSMENT:

- UH-Mānoa - Campus Center Renovation and Addition currently under construction with goal for LEED Silver.
- UH-Mānoa - New Classroom Building currently under planning with goal for LEED Silver.
- UH-Mānoa - Cancer Research Center of Hawai'i currently under construction with a goal for LEED Gold.

- UH-Mānoa - New Dance Building currently under construction with goal for LEED Gold.
- UH-Mānoa - Clarence T.C. Ching Complex currently under construction with goal for LEED Silver.
- UH-Mānoa - Kuykendall Hall Renovation currently under design with goal for LEED Silver.
- UH-Mānoa - Edmondson Hall Renovation currently under construction with a goal for LEED Silver.
- UH-Mānoa - Snyder Hall Renovation currently under design with goal for LEED Silver.
- UH-Mānoa - Webster Hall Translational Health Science Simulation Center recently completed with LEED Silver under review.
- UH-Mānoa - Gartley Hall Renovation currently under construction with goal for LEED Silver.
- UH-Hilo - Hawai‘ian Language Building currently under construction with goal for LEED Silver.
- UH-Hilo - Sciences and Technology Building recently completed with LEED Certified under review.
- UH-Hilo - Student Services Building Addition and Renovation currently under construction with goal for LEED Silver.
- UH-Hilo - College of Pharmacy currently under planning and design with goal for LEED Silver.
- UH-Hilo - Living Learning Community Phase 2 currently under planning and design with goal for LEED Silver.
- UH-West O‘ahu - New campus development in Kapolei currently under construction with goal for LEED Silver.
- UH-Maui College - Science Facility currently under construction with goal for LEED Silver, but may achieve LEED Gold.
- Kapi‘olani CC - Culinary Institute of the Pacific facilities at the former Cannon Club site along Diamond Head currently under design with the goal of LEED Silver.
- Leeward CC - Education and Innovation Instructional Facility currently under construction with goal for LEED Silver.
- Windward CC - Library and Learning Center facility recently completed with LEED Silver under review..
- Honolulu CC - Advanced Technology Training Center design completed with goal for LEED Silver.
- HawCC - Hale Aloha (3383) currently under construction with goal for LEED Silver.
- HawCC - West Hawai‘i new campus development Phase 1A & 1B, designed with goal for LEED Silver.
- Systemwide - Information Technology Center currently under construction with goal for LEED Silver.

STRATEGY:

The University of Hawai‘i will continue to apply the LEED rating system in all Capital Improvement Program new and major renovation projects. Sustainability guidelines are being included in the development for all campus long range development plans and project development reports. In general, the goal is to reach LEED Silver rating certification. If the goal cannot be attained due to budget constraints, then other Sustainable design principles will be incorporated into the new or major renovation projects.

Act 96 SLH 2006: Buildings and Facilities

- (2) Incorporate energy-efficiency measures to prevent heat gain in residential facilities up to three stories in height to provide R-19 or equivalent on roofs, R-11 or equivalent in walls, and high-performance windows to minimize heat gain and, if air conditioned, minimize cool air loss. R-value is the constant time rate resistance to heat flow through a unit area of a body induced by a unit temperature difference between the surfaces. R-values measure the thermal resistance of building envelope components such as roof and walls. The higher the R-value, the greater the resistance to heat flow. Where possible, buildings shall be oriented to maximize natural ventilation and day-lighting without heat gain and to optimize solar for water heating. This provision shall apply to new residential facilities built using any portion of state funds or located on state lands.

This section does not apply to the following agencies: AG, DCCA, DHRD, DLNR, DLIR, DOA, DOE, DOH, DOT-Airports, DOT-Harbors, DOT-Highway, DOTAX, FTZ, HCDA, HSPLS, NELHA

DAGS:

ASSESSMENT

The PWD very rarely will be involved in residential facilities; however energy-efficiency measures to prevent heat gain can apply to any facility. These measures are already taken into design consideration when applicable.

STRATEGY

The strategy for PWD is finding ways to improve through raising awareness of energy-efficiency measures, enhancing the review of designs, and considering new products and technologies.

DBEDT: DBEDT was involved with a number of activities that sought to incorporate energy efficiency measures in facilities statewide and was recognized for its efforts.

DBEDT coordinated the 12th Annual Hawai'i Build & Buy Green Conference & Expo at the Hawai'i Convention Center, which was attended by over 300 participants, including many from state agencies. The topics were: greening affordable housing, green purchasing, greening existing facilities, (including many that are and will be Leadership in Energy and Environmental Design (LEED) certified, silver, gold and platinum levels) as well as net-zero energy homes and green and net zero energy communities. Hawai'i Clean Energy Initiative (HCEI) and related policies and projects were presented during a track of breakout sessions during the conference.

DBEDT sends out notices and incentives to the various Lead By Example (LBE) Working Groups to invite them to attend training and education opportunities such as for LEED, ENERGY STAR®, Build and Buy Green, and Rebuild Hawai'i Consortium meetings.

The State's LBE Program also was recognized by the Energy Services Coalition (ESC), a national organization supporting performance contracting, with ESC's Race to the Top Award, as first in the nation for per capita investment in performance contracting.

DHHL: DHHL will continue to promote, design, and build new affordable homes using the green technologies.

DHS: As applicable, DHS will continue to coordinate these activities with DAGS to effect energy-efficient measures.

DOD: DOD will be incorporating ASHRAE 90.1 and IECC standards and educating design personnel and A&E teams to include an insulation component to roof repair projects. Currently DOD is planning a pilot building with foam insulation, to include data loggers to measure & verify (Building 306, Ft. Ruger). In FY12, construction projects include Building 117 USPFO window replacement and U-rated window tinting (Hawai'i Energy standard), (SPHD approved replacement frames and windows). The Troop Command Roof Replacement and Building 621 Building Renovations are under design.

HHFDC: Whenever feasible it is required that all new housing developers build to the above standards of R-19 and R-11 insulation values in the ceilings and walls respectively and incorporate solar water heating strategies.

HHFDC's third high rise affordable apartment building Kauhale Kaka'ako located within the Kaka'ako Redevelopment District corridor is being pipelined for a major overhaul of physical and mechanical systems. The majority of the work will include a roofing system (replacement, recoating/resealing) and vertical side wall/widows (repair/repainting). During this evolution of applying "Cool Roof & Cool Wall" coating systems, HHFDC is expecting to increase the overall thermal efficiency of the building.

All nine (9) of HHFDC's apartment facilities are fitted with jalousie, awning or horizontal sliding windows in sufficient numbers to adequately optimize the natural ventilation produced by the commonly occurring trade winds.

HHFDC's three (3) high rise buildings located in Honolulu are all fitted with ceiling fans to help make the internal environment much more habitable. Ceiling Fans are a definite contributor to the low vacancy rate and overall successful operation status. All new replacement fans are ENERGY STAR® rated. The positive response from tenants in these buildings has prompted HHFDC to consider installing ceiling fans in all remaining apartment buildings.

One of HHFDC's affordable rent high rise apartment buildings is equipped with ENERGY STAR® rated window air conditioners coupled with ceiling fans for an increase in comfort. This also allows HHFDC to maintain at a 0-2% vacancy rate.

HHSC: When any renovations to existing residential facilities are planned, HHSC will incorporate energy efficiency measures to prevent heat gain whenever possible.

HSPLS:

ASSESSMENT

The HSPLS has no residential facilities. However, energy-efficiency measures to prevent heat gain can apply to any library facility. These measures are already taken into design consideration when applicable.

STRATEGY

The DAGS-PWD strategy on behalf of the HSPLS for these measures is to find ways to improve, starting just simply by being more aware of these energy-efficiency measures, doing better review of designs, and considering new products and technologies.

PSD: PSD has directed DAGS-Public Works to require design professionals to meet the aforementioned R-Values for roofing systems, walls and windows. Moreover, design professionals working on PSD projects have been made aware of citing requirements called herein for new, naturally-ventilated structures.

UH:

- UH-Hilo - Existing resident halls are not air conditioned. The Student Life Center has a heat pump water heating system with a natural gas backup system. Data logs show the natural gas backup system was activated only one time for two hours in a year's time frame.

HPHA: Currently, HPHA have a consultant selected and are obtaining internal approvals to begin negotiations to provide a facility-wide green assessment and report, or Green Physical Needs Assessment (GPNA). The report will include electronic drawings, site surveys, building assessments, etc., to include recommendations for potential energy-savings and environmental strategies for our existing projects statewide. Estimated completion of this study is October 2013. We will use this report to schedule a plan of action for the next five years. Current consultants are including energy-efficiency measures in all work-product.

Act 96 SLH 2006: Buildings and Facilities

- (3) Install solar water heating systems where it is cost-effective, based on a comparative analysis to determine the cost-benefit of using a conventional water heating system or a solar water heating system. The analysis shall be based on the projected life cycle costs to purchase and operate the water heating system. If the life cycle analysis is positive, the facility shall incorporate solar water heating. If water heating entirely by solar is not cost-effective, the analysis shall evaluate the life cycle, cost-benefit of solar water heating for preheating water. If a multi-story building is centrally air conditioned, heat recovery shall be employed as the primary water heating system. Single family residential clients of the Department of Hawai'ian Home Lands and any agency or program that can take advantage of utility rebates shall be exempted from the requirements of this paragraph so they may continue to qualify for utility rebates for solar water heating.

This section does not apply to the following agencies: AG, DHRD, DLIR, DOTAX, DCCA, DOE, DOH, DOT-Airports, DOT-Harbors, FTZ, HCDA, HSPLS, NELHA

DAGS:

ASSESSMENT

Typical DAGS managed State Office Buildings do not utilize enough hot water to make installation of solar water heating systems "cost-effective".

STRATEGY

The DAGS overall strategy is to continue encouraging our "clients (other State agencies that seek technical support and assistance from DAGS)" to consider using solar water heating systems in their projects, whenever feasible or advantageous to the State.

DBEDT: While DBEDT does not design, construct or operate any facilities, DBEDT continues to provide technical assistance to State of Hawai'i agencies. This includes assistance on solar water heating, to entities such as the Department of Hawai'ian Home Lands (DHHL) on projects

such as work done through a Memorandum of Understanding with DHHL for the use of ARRA funding to the State of Hawai'i to install solar water heaters in 400 DHHL homes.

DHHL: DHHL will encourage, whenever possible, our homestead lessees to take advantage of utility rebates to install solar water heating systems. DHHL residential development projects have already incorporate solar water systems as part of the package.

DHS: As applicable, DHS will continue to coordinate these activities with DAGS to maximize energy efficiency and cost effectiveness.

DLNR: DLNR's facility portfolio is limited. Most buildings owned by DLNR are composed of baseyards, harbor facilities, park cabin, restrooms and picnic facilities. DLNR incorporates energy saving concepts into all of its owned facilities as appropriate. Energy saving concepts includes the use of solar water heaters and the retrofit and replacement of lighting and electrical systems. DLNR evaluates the feasibility of implementing energy conservation measures such as use of solar water heaters when capital improvement projects are designed. As DLNR staff learns more about energy efficiency and solar water heating design, they will incorporate these concepts into building and facility design and renovations.

Kure Bunkhouse Project: A system utilizing 4 SolarWorld 255 watt/24 volt PV modules was installed on the Kure Bunkhouse during the months of June and July, 2012. A pre-fabricated UniRac racking system was used to mount the panels in an awning-style on the South-side of the building. This system creates 1020 watts of power and will be capable of producing 4,080 watts per day. With 8 Full River 6 volt golf-cart batteries the system will provide 10,000 watts of storage capacity. A Midnite Solar Maximum Power Point Tracking Charge Controller is used to account for dissimilar voltages of the PV modules and the battery system. A DC Breaker box delivers 4 DC loads, one for the DC Sundanzer freezer, another for a VHF radio, one as a spare and the last goes directly to an inverter. The inverter converts the DC current to an AC current for other household electronics. A digital volt meter will be installed to the unit in order to monitor the batteries.

DOA: Very few HDOA facilities have a need for water heating systems, however, for certain appropriate retro-commissioning projects; HDOA will consider the cost-benefit of incorporating a solar water heating system.

DOD: All new construction projects have life cycle cost analysis done to verify whether or not solar water heating systems payback period is feasible. In FY12 a solar water heating system was installed at the Regional Training Institute in Waimānalo. It included four panels and two 120 gallon tanks. A six panel and three 120 gallon tank project is planned for construction at the Wahiawa Armory. For existing water heaters, being replaced, life cycle cost analysis is done for a solar water heating alternative. Due to daily staffing, many armory buildings do not have enough usage to payback within a period of time.

DOT-Highways: The Highways Division will perform life cycle cost analysis when replacing water heating systems. The Kaua'i District Office has installed an "on-demand" propane water heating system. The Maui District Office installed solar water heating systems at their Maui District Baseyard.

HHFDC: HHFDC is continuing to replace failing solar water heating system collection panels, circulator pumps and reservoir tanks on the Big Island of Hawai'i at the La'ilani Apartments

(200) in Kona. Over the past years HHFDC has replaced/renewed 29 units with the expectation of replacing at least 20 systems per year.

As funds become available HHFDC is planning on retrofitting our other low rise projects ($184 + 128 + 80 + 56 + 32 = 480$). HHFDC realizes these will be installed to supply individual apartments with hot water and it is not a direct budgetary cost savings, but it will have an indirect relationship on the sustainability of facilities and the rentability factor.

Presently, HHFDC has incorporated a heat recovery system in the Air Conditioning Plants that cool the commercial spaces in several of its high rise buildings. This recovery system is designed to pre-heat the cold water entering the circulating system thus reducing the burden on the natural gas boilers and conversely cooling the air conditioning system.

HHSC: HHSC shall evaluate the benefit of solar water heating for their facilities whenever improvements are planned or funded.

HPHA: Design consultants are including solar water heating systems with gas-powered backups where cost-effective.

NELHA: Does not apply to NELHA. However, all of NELHA's administrative buildings are centrally cool by a seawater air conditioning system.

PSD: Over the last few years PSD has entered into energy savings performance contracts based upon the findings of an Investment-Grade Energy Audit at the O'ahu CCC and Halawa CF facilities. Neither O'ahu CCC nor Halawa CF was found to be cost-effective candidates; however, PSD and the vendor adopted an alternative strategy of significantly reducing water consumption, via low-flow fixtures, etc., by 60%. Additionally, PSD and the vendor, NORESKO, have installed a wash water recycling system that enables laundering to take advantage of recycled water at approx. 120 degrees Fahrenheit to be reheated with a much lower temperature change. Lastly, PSD has taken advantage, via the ESPC with NORESKO, of the HECO rebates totaling approx. \$100,000.

UH:

ASSESSMENT:

- Honolulu CC - pending solar water heating installation at Cafeteria and Cosmetology with performance contract
- Leeward CC - pending solar water heating installation with performance contract
- UH Maui College - The College executed an Energy Service Company to install a wide range of energy efficiency systems, one of which is to install a solar water heating system at the Culinary Building. The solar system is scheduled to be installed in a few months.
- Hawai'i CC - new Model home 2012-2013, under design with solar water system.
- Kaua'i CC - pending solar water heating installation at demonstration kitchen
- Kapi'olani CC - Solar water heating was considered as a replacement for a gas water heater used in the food service operations. The size of the solar heating system for the amount of hot water needed for the operations would be too large for the roof area. The new gas water heater was installed in December 2011.
- UH-Hilo - the Student Life Center has a heat pump water heating system with a natural gas backup system. Data logs show the natural gas back up system was activated only one time for two hours in a year's time frame.

- UH-Hilo - the Science and Technology building also uses a heat recovery system for the domestic hot water and also for the dehumidification of the building.
- UH-Mānoa - The Edmondson Hall and Gartley Hall projects presently under construction will employ a solar water reheating system for the central HVAC systems. Solar water re-heating will also be employed in planned new construction and renovation projects where economically feasible.

STRATEGY:

The University of Hawai‘i system wide will continue to apply the LEED rating system in all Capital Improvement Program new and major renovation projects. The design principles for solar water heating systems where it is cost effective will be incorporated into the building to the extent possible

Act 96 SLH 2006: Buildings and Facilities

(4) Implement water and energy efficiency practices in operations to reduce waste and increase conservation.

This section does not apply to the following agencies: NELHA

AG: All departmental staff has been provided tips on energy-efficient practices and information on the benefits of energy efficiency. Reminders of the benefits of energy-efficient practices are sent out several times a year. With the assistance of DAGS, signs have been posted to remind staff to turn off computers, lights, and other equipment when exiting. Water leaks are to be reported to the Administrative Services Office immediately, including sprinkler systems and outdoor faucets.

DAGS: As funding has become available, the department has initiated various energy conservation/efficiency projects for DAGS facilities, Statewide. The projects are in various stages of design and construction. These projects include: the replacement of aging air conditioning and elevator equipment; retrofitting with energy-efficient electronic ballasts and super T-8 lamps; delamping; the installation of protective tinting on building windows to reduce heat gain; the installation of low-flow plumbing fixtures; the installation of electric hand dryers; and installation of photovoltaic (PV) systems.

DAGS-PWD is currently working on the following photovoltaic system projects to lower energy bills:

1. Central Services Division, New Photovoltaic System, DAGS Job No. 52-10-0642

This project is currently in construction, and consists of the installation of a 100 kW PV system at the DAGS Central Services Division baseyard in Māpunapuna. A net metering agreement between the State and HECO will be executed.

2. Ke‘elikōlani Building, Install Photovoltaic System and Replace Upper Roof, DAGS Job No. 52-10-0659

This project is scheduled to bid for construction in late 2012. The project scope also includes, as a “pilot,” incorporating a green roof system into the re-roofing.

3. Queen Lili‘uokalani Building, Install Photovoltaic System and Reroof, DAGS Job No. 52-10-0658

This project bid opened on August 9, 2012. The apparent low bid amount is \$1,380,423. The award is currently pending bid evaluations.

4. Makai Parking Garage (Lot A), DAGS Job No. 22-10-0670

This project bid opened on May 3, 2012, and a construction contract award was made on June 4, 2012, for \$461,200. A notice to proceed to start construction is anticipated in August 2012.

5. Another innovative use of PV panels in architecture and art is the No. 1 Capitol District Building, Courtyard Revitalization and Other Improvements, DAGS Job No. 22-10-0613.

This project is completed and an innovative use of PV cells incorporated into a glass art canopy was included. This is a beautiful example of artistic integration of PV into building materials, and it will be an educational exhibit for all museum visitors.

In FY 2009, DAGS-PWD executed a contract for an Energy Savings Performance Contracting (ESPC) project involving 10 buildings in the State Capitol District, which includes the State Capitol building. The project has been substantially completed with some “fine tuning” still being done and has provided over \$34 million worth of improvements and services with a guaranteed annual savings of at least \$3 million in utility and operating costs over a 20 year period. The 10 buildings are currently seeing a reduction in consumption of over 880,000 kWh per month (\$275,000 reduction per month).

In FY 2011, an Invitation for Proposals solicitation for the DAGS Buildings, Statewide, ESPC project, which includes 32 facilities on five islands, was issued. This ESPC project will provide a minimum 20% reduction in utility costs of the baseline 2010 usage and have guaranteed savings over a 20-year period.

In addition to DAGS facilities, DAGS-Central Services Division (CSD) and DAGS-PWD staff have worked with the Hawai‘i State Public Library System (HSPLS) in implementing energy efficiency practices. The status of projects being accomplished by DAGS for the HSPLS is:

- Completed window tinting projects for certain libraries statewide;
- Constructing or completed construction of Photo Voltaic systems on the following Public Libraries: Waimea and Hanapepe on Kaua‘i; Wai‘anae and ‘Āina Haina on O‘ahu; Kahului on Maui and Kailua-Kona on Hawai‘i Island.
- Completing retro-commissioning studies at libraries statewide.

DAGS, on behalf of the Department of Public Safety (PSD), has initiated an Energy Savings Performance Contracting (ESPC) project for various PSD facilities on O‘ahu (Halawa Medium Security Correctional Facility; Halawa High Security Correctional Facility; O‘ahu Community Correctional Center; and the Laumaka Work Furlough Center)

DAGS on behalf of the Department of Health (DOH) is currently doing some minor energy savings projects

DAGS-CSD notes the following water and energy efficiency practices are currently being implemented for water conservation - As part of the ESPC project with NORESO LLC, WeatherTRAX, a satellite based irrigation control system has been installed at ten major state office buildings located in the Downtown, Honolulu, civic center area. The system monitors

weather conditions and shuts down landscape irrigation systems when there is sufficient rain. The system also monitors the operation of the irrigation systems and provides reports related to water consumption, leaks and other malfunctions in the system.

DBEDT: DBEDT encourages water and energy efficient practices in operations through the Hawai'i Green Business Program, a statewide certification and recognition program for entities that are implementing programs to reduce energy, water and waste in their offices and building operations. The program uses checklists which also serve as a tool to guide entities toward greener office practices. Checklists have been created for hotels and resorts, offices and retail, and restaurants and food service businesses. The program is jointly administered by DBEDT, the Department of Health, the City and County of Honolulu Recycling Office and Board of Water Supply. A significant portion of the certification programs are dedicated to water and energy efficiency as well as recycling and pollution prevention. In FY12 six (6) hotel/resort, eight (8) office/retail, and one (1) food service/restaurant were recognized in Spring 2012 under the Hawai'i Green Business Program.

With the Lead By Example Resource Efficiency Checklist, two (2) entities were recognized for their efforts - DBEDT and DAGS: As the state pursues LEED certification for the State Office Tower building downtown, high-efficiency lighting, lighting sensors, low-flush toilets, and low-flow faucets were installed. The savings were: 36,270 gallons of water a year and 100,000 kWh of electricity.

DBEDT also provides technical assistance to support labeling ENERGY STAR® State of Hawai'i buildings. DBEDT arranges and promotes training in ENERGY STAR® Portfolio Manager, an online tool for comparing building performance with similar buildings nationwide and provides building managers information that helps prioritize investment. To date 21 state facilities have received the ENERGY STAR® certification, which means the building ranks in the top 25% of similar buildings nationwide.

DCCA: Continued landscape watering schedule of 5 minutes at each station in the evening hours. Continued review and monitoring of cost and consumption data for air-conditioning usage on a monthly basis. Continued to monitor and adjust lighting sensors in our main office building for optimum levels of operation. Continued practice of using compact fluorescents for all exterior lighting. Continued monitoring of energy and other conservation measures by staff, e.g., ensure that lights are turned off in conference rooms and hallways when not in use. Worked cooperatively with DAGS in maintaining energy conservation efforts initiated in past years, such as the desktop power-management software for computers in offices located in the State Office Tower, low-flow toilets and fixtures, and retro-fitted lighting fixtures. Continued encouragement for the use of desk lamps or other forms of task lighting in lieu of overhead lighting in areas where there is adequate natural lighting.

The King Kalākaua Building has received the Environmental Protection Agency's (EPA) ENERGY STAR® Designation for the third year in a row.

DHHL: DHHL has and will continue to circulate educational pamphlets to our homesteaders and staff on water and energy efficiency practices to encourage waste minimization and increase conservation.

DHRD: The department continues to encourage all employees to implement energy conservation practices. Examples include turning off hallway and elevator lobby area lights at

the end of the day; and turning off copier machines and computers rather than leaving the equipment on sleep mode.

DAGS: DAGS implemented the following water and energy conservation initiatives for the Leiopapa A. Kamehameha (LAK) building, which this department occupies: (a) installed direct digital controls for the air conditioning system to improve air temperature and circulation in the building; and (b) installed a new revolving front door to conserve air conditioning loss.

DHS: DHS continues to issue water and energy conservation procedures for buildings and offices, in coordination with procedures issued by DAGS.

DLIR: DLIR has been actively participating in the State's "Green Champion" -iConserve Workshops with Hawai'i Energy. DLIR and the Department of Taxation will be jointly hosting an energy conservation workshop at the Princess Ke'elikōlani Building, extending an invitation to all employees. The workshop will be conducted by Hawai'i Energy on August 31, 2012 and will cover energy savings at work and home.

DLIR has worked with DAGS and has implemented the following water and energy savings measures:

- Replace old toilet fixtures with new water saving fixtures
- Installation of sensor-controlled restroom plumbing fixtures
- Replace light switches with motion sensors
- Lighting retrofit to energy efficient fluorescent lamps
- Window tinting to lower office temperature from sunlight; resulting in less consumption of a/c
- Air Conditioning: Installation of new a/c units with temperature controlled switches for energy savings
- Purchases of ENERGY STAR® efficient equipment

DLNR: The department installs low-flow fixtures (toilets and sink faucets) to replace older fixtures, which use more water, as department facilities are renovated. Additionally, some remote restrooms use composting toilets, which require very little water. The department has installed waterless urinals in some boat harbor improvements. Additionally in fall of 2010, the DLNR participated in DAGS' Energy Savings Performance Contract to generate utility savings through computer power management. This project was implemented through our IT office and installed desktop power management software in PCs in the Kalanimoku building.

Staff is reminded to turn off equipment when not in use, keep blinds closed, and report equipment malfunctions. Energy-efficient light bulbs are used where feasible and timed sensors have been installed to allow automatic shutoff of lights. Additionally, natural ventilation and lighting are used in most comfort stations/restrooms. When purchasing new equipment the department tries to purchase energy-efficient machines when available, such as energy-efficient copiers, etc. The department also tries to remind staff to turn off computers and other appliances that are not in use or at the end of the day.

DOA:

1. Continued to retrieve information electronically on gas consumption and odometer readings from DAGS Automotive Management Division, Tesoro and Hawai'i

Petroleum. Continue to use vehicle refueling log for programs that have vehicles that refuel at places other than DAGS, Tesoro and Hawai'i Petroleum.

2. Continued to retrieve information electronically on gas consumption and odometer readings for each vehicle from DAGS Automotive Management Division, Tesoro and Hawai'i Petroleum.
3. Monitored and compiled kWh consumption data and cost for electricity for FY11.
4. Distributed DAGS memo requesting employees to conserve energy and to report any water waste from open faucets, leaky plumbing fixtures, and broken and/or inefficiently run irrigation systems.
5. Developed spreadsheet to compare FY 2012 data to previous years on electricity kWh consumption and percentage increase/decrease from previous year and distributed to program managers for their review and information.

DOD: Building Energy Monitor program established in 2008. Staff to report leaks ASAP. FY11, Several Water Efficient Landscape designs to progress. RTI (Waimanālo) and Building 1898 (Kalaheo). Reviewing water efficient devices such as urinals, toilets, vanities, and showers.

DOE: As part of the Facilities Development Branch's turnover of the new 'Ewa Makai Middle School, an EPA Environmental Education grant was received to teach the teachers and staff about the sustainable features of their new school and how best to "live" in the building in a sustainable manner. In the words of Principal Edward Oshiro, "The Grant trainings were fantastic as it was the impetus that 'kick-started' our sustainability and green efforts at EMMS! This also gave us the opportunity for many of the staff to start bonding as a group and unify us under the sustainability and green flag." In April 2012 the school was awarded one of the first "Green Ribbon" Awards from the national Department of Education.

UH (Grant Sponsor) and DOE have partnered to execute a \$150,000 Grant from EPA that investigates Best Management Practices (BMPs) to reduce school irrigation water use. Current practice for most DOE schools is 1) schools use water alone to develop and enhance grass growth, 2) DOE does not provide fertilizer as done in the past, 3) weeds are the dominate species vs. grass at most DOE schools, 4) Facilities Maintenance Branch (FMB) has staff trained and directed to do lawn mowing on a schedule. The lack of quality turf has negative consequences for DOE schools. The only recourse or "tool" schools have to reverse dying off of any grass and to promote green lawn (whether grass or weeds) is to use more water. Water costs for DOE is \$5M a year and it is estimated that approximately 1/2 is used for irrigation use. The Grant investigates ways for DOE to take available resources such as school food waste and turn it into compost (high price commodity in Hawai'i) for use as soil amendment. Multiple studies have proven that adding organic amendment to depleted soil combined with addition of nutrients (compost or worm tea) to irrigation water can sustain very healthy grass that does not require as much water and can actually hold rain water (reducing runoff) for grass use over time.

DOH: The DOH continues to limit air conditioning operation in its buildings to only core work hours. The DOH continues to limit overhead lighting operation in its buildings to only core work hours. Desk lamps must be used outside of these hours.

DOT-Harbors:

Water efficiency:

- Check for and fix leaks as soon as possible.
- Install low-flow toilets, low-flow shower heads and faucet aerators as practical.

- Install timers or require staff to conduct irrigation and watering of plants during early morning or evenings to reduce water lost to evaporation. Adjust watering time down to the minimum required to keep green growth on landscape areas.

Energy efficiency:

- Install timers onto HVAC and/or motion detectors onto lighting systems and other equipment facilities as appropriate.
- Install tinting to windows and glass doors as appropriate.
- Monitor lighting levels and use natural window/skylight lighting when sufficient.
- Turn off lights in room not in use.

DOT-HWY:

Water Efficiency -

- The Highways Division designs new xeriscape landscaping where possible.

Energy Efficiency -

- Installed photovoltaic (“PV”) panels at our Kaua‘i District Office and Moloka‘i Baseyard. PV panels are also being constructed at our Hawai‘i District Office, Maui District Office and Ke‘anae Baseyard facilities.
- Replaced the interior lighting at our Kaua‘i District Office with new LED lights.
- Continues to install energy efficient traffic signal lamps in new installations or when traffic signals are modified.
- Programmed the replacement of computer equipment with ENERGY STAR® compliant equipment.
- Continues to encourage its employees to be energy efficient by turning off lights when not in use, shutting down or “hibernating” computers when not in use, unplugging personal appliances when not in use, and eliminating the use of personal space heaters and micro-refrigerators.

DOTAX: DAGS is currently implementing the following energy saving initiatives in the Ke‘elikōlani Building:

- Infrastructure work for air conditioning controls (routing DDC communication cables in ceilings and air handle rooms) is currently being performed. This is part of DAGS’ Energy Savings Performance Contract.

FTZ: The FTZ, in conjunction with DOT-Airports, has completed a solicitation and is in negotiations to install a 550-kW photovoltaic system on the roof of its five-acre facility. When completed, this PV system will provide approximately 70% of the Zone’s energy needs and effectively reduce the FTZ’s energy costs to zero for the following twenty (20) years.

The FTZ converted essential warehouse lighting over to CFL bulbs, which effectively reduced the necessary lighting down to just eight (8) high-efficiency CFL bulbs used for security purposes.

The FTZ installed two 40-ton chiller units and one 50-ton unit nine (9) and six (6) years ago, respectively. These units were purchased and installed based on a 2001 Energy Feasibility Study of the Foreign-Trade Zone’s needs prepared by Global Engineering & Construction, LLC. Approximately forty (40) new individual air conditioning units with high efficiency motors were purchased and installed in 2007 which were also based on the 2001 Energy Feasibility study for

the Foreign-Trade Zone. The FTZ uses only T8 fluorescent lights in its administrative and tenant offices.

HCDA: HCDA installed a surfactant injection system within Kaka‘ako Waterfront and Makai Gateway parks that should result in savings of water consumption of up to 60%.

HHFDC: As with each year that passes HHFDC and their Management Team Staff continue to preach the practices of conservation of both water and energy. Discussion is had with in-house staff and to the residents old and new.

All utility usages and cost data is being tracked at HHFDC headquarters for all nine (9) rental housing developments. HHFDC is monitoring water consumption & costs including sewer processing costs. It also monitors electrical Kilo Watt Hours (KWH) usage and end costs. The purpose is not only to monitor, but to manage the KWH totals thus managing the ultimate cost as much as possible.

Lastly, natural gas consumption which is used in several applications is monitored: As the heating source for kitchen ranges, for heating hot water for apartment resident use and for the heating elements in many of the laundry dryers (more economical than electric).

HHSC: O‘ahu Region has implemented water and energy efficiency practices in operations and construction work.

HPHA: Agency utilizes low-flow water closets and showerheads where cost-effective and requires the use of CFL light fixtures.

HSPLS: On behalf of the HSPLS, DAGS-Central Services Division (CSD) and DAGS-PWD staff has implemented energy efficiency practices. The status of projects being accomplished by DAGS for the HSPLS is:

1. Completed window tinting projects for certain libraries statewide;
2. Constructing or completed construction of Photo Voltaic systems on the following Public Libraries: Waimea and Hanapepe on Kaua‘i; Waianae and ‘Āina Haina on O‘ahu; Kahului on Maui and Kailua-Kona on Hawai‘i Island.
3. Completing retro-commissioning studies at libraries statewide.

PSD: Based on the current ESPC with NORESO, the total energy “cost avoidance” is projected to be approximately \$2.3 million, of which there is a guaranteed \$1.98 million in savings as per the contract for the OCCO and Halawa facilities.

UH:

ASSESSMENT

- UH-Hilo - New construction includes dual flush valves on the toilets (1-gallon for grey water, 3-gallon for brown solids). All the faucets and showers have low-flow heads. Existing facilities have been and are continuing to be converted to these same low use devices in campus restrooms, locker rooms and dormitory shower facilities. The campus does not irrigate the landscapes as Hilo’s rain forest climate average 140” rain a year. Only new installations are temporarily irrigated until the plants are well established. Toilets have dual flush 1 gallon for liquid waste and 3 gallon for solid waste. Pre-existing urinals have low volume one gallon

flush valves. Waterless urinals are in Science and Tech Building. Current construction includes minimal water urinals (1/8 gallon flush).

- UH-West O‘ahu - No new plans.
- Hawai‘i CC - The Cafeteria, replaced old walking refrigerators/freezer, installed new awning windows and an AC split system. Replaced old chiller with AC split system in the Electronics building. De-lamped light fixtures campus-wide. Sub-metered 4 shops and 2 portable buildings to monitor electrical costs.
- Honolulu CC - Completed sub-meter to irrigation system phase 1. Replaced toilets, urinals, and lavatory fixtures with low flow type valves and moderators.
- Kapi‘olani CC - Completed sub-meter to irrigation system. Replaced toilets, urinals, and lavatory fixtures with low flow type valves and moderators.
- Leeward CC - Currently in planning stages of a rainwater recovery system whereby the campus would convert an existing dive tank pool to a water catchment basin to irrigate the lower campus; and plans to sub-meter the irrigation system. Replace toilets, urinals, and lavatory fixtures with low-flow type valves and moderators.
- Kaua‘i CC - Plans to replace toilets, urinals, and lavatory fixtures with low-flow type valves and moderators.
- UH-Maui College - Installed waterless urinals in the Student Center building. Have installed dual flush toilets in its Nursing building. The College is in negotiation with an Energy Service Company to install a wide range of efficiency systems which include efficient plumbing fixtures, waterless urinals, etc., campus wide.
- Windward CC - Sub-metered cooling towers and campus irrigation system. Replaced toilets, urinals, and lavatory fixtures with low-flow type valves and moderators. Planning to upgrade and repair the Agriculture’s turf management program with more efficient irrigation systems.
- UH-Mānoa - Continues to perform between \$6 million and \$10 million in energy retrofits per fiscal biennium as funding permits. These retrofits have allowed UH Mānoa to achieve an average annual consumption reduction of 6% per year since FY 2006. Continues to operate the UH-Mānoa “Green Days” program which shuts down participating building HVAC systems during weekends and holidays which reduces the total annual usage by over 1%.

STRATEGY:

The University of Hawai‘i systemwide will continue to implement water conservation and energy efficiency practices in operations through its repairs and maintenance programs.

Act 96 SLH 2006: Buildings and Facilities

- (5) Incorporate principles of waste minimization and pollution prevention, such as reducing, revising, and recycling as a standard operating practice in programs. This includes programs for waste management in construction and demolition projects, and office paper and packaging recycling programs.

AG: All purchasing staff has been advised to first consider recycled materials, especially paper, when reviewing and processing purchase requisitions. AG’s offices continue to utilize the recycle bins in the copier rooms, and within each division boxes are provided for recycling paper. Staff has also been trained to save and transmit documents electronically, whenever possible. The department, along with Tax and Labor, hosted a recycling event to dispose of broken furniture and recycling materials at no cost to the State.

DAGS: DAGS has incorporated into its Design Consultant Criteria Manual boiler plate language for construction waste management for LEED projects. DAGS-CSD notes that for incorporation

of principles for waste minimization and pollution prevention, programs are in place at 13 state office buildings serviced by DAGS for the recycling of white paper and cardboard.

DBEDT: DBEDT promotes the Lead By Example Resource Efficiency Checklist to agencies that are implementing programs to reduce energy, water and waste in their offices and building operations. The program uses checklists which also serve as a tool to guide agencies toward greener office practices, systems and products.

DBEDT facilities in the Capitol District offer paper, newspaper, cardboard and beverage container recycling.

DCCA:

- Blue recycle bins are used to facilitate paper recycling in the department. Recycled paper is picked up weekly by a vendor contracted through DAGS.
- The department has disseminated information on e-waste recycling facilities and will take advantage of another disposal event sponsored by UH if available.
- Whenever practicable, electronic documents are generated in lieu of hardcopy documents; one of the department's program has embarked on a successful multi-year scanning project to convert documents to electronic files.

DHHL: DHHL has encouraged staff to recycle office paper and other recyclables whenever possible. Land Development Division is encouraged to incorporate waste management programs in their development/construction contracts to minimize waste and pollution prevention.

DHRD: The department recycles office paper, cardboard boxes, used printer cartridges, and telephone books. In April, DHRD participated in the Earth Day eWaste Recycling event for electronic waste and was able to safely dispose of broken equipment and old UPS batteries.

DHS: DHS continues to implement waste minimization and recycling procedures, consulting with the appropriate agencies such as DAGS and DOH.

DLIR:

- Divisions are making it a practice to schedule regular recycling of paper. DLIR will be coordinating a recycling event in mid-October to dispose old equipment. All proceeds from the recyclable waste will be deposited to the State Treasury.
- DLIR will continue to look for ways to reduce waste and recycle wherever possible.

DLNR: DLNR encourages its staff to implement office paper, computer equipment, printer ink cartridges recycling, and such a program as are in place. DLNR has begun to incorporate energy savings practices into design projects such as the recycling of existing asphalt and concrete pavement into backfill material.

DOA:

1. Continued to work with DAGS to have Island Recycling on O'ahu pick up two bins of white paper once a month that employees place in recycling bins.
2. Continued to collect empty soda cans for recycling.

DOD: Executive Order 13514 mandates increased waste diversion and pollution reduction. HIARNG's Integrated Solid Waste Management Plan was revised. A prior FY03 ISWMP is outdated. Recycle bins and areas are located at major sites. Increased solid waste pickup and reporting contracted with Goodwill.

DOE: In March of 2012 the DOE helped host the first SEAD (Student Energy Ambassador Development) training for high school students and mentors. These trainings are part of an education campaign sponsored by Hawai'i Energy and put on by the UH RISE intern program. Groups from Kalani, Mililani and Waipahu High Schools participated and learned how to do an energy audit at their schools, identify strategies for conserving energy and put together a plan to accomplish energy savings. The goal is to expand the program in the 2012-13 school year.

DOH: The DOH continues to promote recycling in all of its offices.

DOT-Airports: The Airports Division has implemented a statewide dedicated unit for environmental compliance. This consists of Environment Health Specialists located at the major airports (Honolulu International Airport, Kona International Airport at Keāhole, Kahului Airport and Līhu'e Airport) to ensure compliance with all environmental regulations and provide training to tenants and employees with regards to environmental regulations.

In most of the terminal renovation or maintenance projects specification has included Construction Waste Management Section 01524 as part of the General Requirement Standard Specification. This has been part of the contract requirement for contractor to recycle construction waste.

At all airports, we recycle white paper and cardboard and monitor the amount recycled. Glass, newspaper, plastic and aluminum recycling is made difficult by security regulations at airport locations but recycling programs are in place at all our major airports.

DOT-Harbors:

- Reduce printing emails, reduce faxes, reuse one-sided printings.
- Require double-sided printing from copiers and printers as practical.
- Recycle all recyclables as practical. Provide recycling bins for aluminum cans, bottles, plastic and papers where convenient.

DOT-Highways:

- Using electronic documents where possible to eliminate the need for paper.
- Working with the construction industry to incorporate the use of recycled products in pavement construction without losing pavement quality.
- Encouraging double-sided printing from copiers and printers as practical.
- Provisions for recycling white paper and corrugated cardboard at the main office building.

DOTAX: This past May DOTAX, along with Department of Labor and Attorney General, hosted an Aloha 'Āina recycling event to dispose of scrap metal from non-freon appliances, computers and monitor, printer cartridges, newspaper, telephone books, broken furniture and other recycling materials at no cost to the State. The recycler, Schnitzer Steel Hawai'i Corp., will submit a check, which will be deposited into general funds, to DOTAX for the value of metal and other materials recycled during the event.

FTZ: The FTZ recently began a cardboard recycling program where tenants and Zone users can place their cardboard boxes and shipping materials in a designated recycling area. This measure has effectively reduced the FTZ's solid waste refuse volume by forty (40) percent. The FTZ also recycles aluminum cans and newspapers. These recyclable products are captured in designated containers throughout the Zone and taken to the recycle center once a quarter.

HCDA: HCDA has incorporated recycling of bottles, cans, plastic and paper within its office. In demolition projects, contractor is encouraged to separate and recycle materials whenever practical. At Kewalo Basin harbor, HCDA has established protocol for spills that pose danger of entering the harbor and stenciled the storm drains.

HHFDC: In order to meet budgetary restraints several HHFDC project managers have solicited new trash/refuse collection contracts. Of course, all contracts are based on volume and the number of pick-ups per week. Not surprisingly, new contracts are at a substantially lower overall fee.

It must be noted that management teams and residents are aware of the impact that trash has as a part of the total sustainability of their individual homes. As explained to the residents at registration and at their Annual Unit Inspections (AUIs), their effort to minimize trash and reduce pollution is directly reflected to the common expenses that make up their rent today and subsequent rent increases.

Additionally, all branches of the HHFDC's structure are encouraged to have a recycle bin in common areas to divert as much material away from the landfills as possible. At present, tenant participation is purely a volunteer effort.

Again, all administrative and maintenance personnel are asked to take immediate action and report any waste and pollution occurrences. It is through close monitoring and swift corrective action that the program is a success.

HHSC:

- O'ahu Region - O'ahu Region has been recycling steel materials on a quarterly basis with a recycling firm.

HPHA: Provides monthly waste paper recycling program for central offices and has updated the bid process by providing electronic files rather than hard-copies for the bid packet.

HSPLS: HSPLS uses DAGS in its implementation of construction projects and DAGS has incorporated into their Design Consultant Criteria Manual boiler plate language for construction waste management for LEED projects.

NELHA: NELHA staff is required to consider purchases of recycled paper products. Available on site is recycling bins for aluminum cans and bottles for NELHA staff and NELHA Tenant staff. Recycled aluminum and bottles are taken to the recycle sort station in Kona.

PSD: PSD will work with DBEDT to formulate a strategy to address this requirement.

UH:

- UH-Hilo - The campus actively reuses waste paper for internal non-official communications. UH system has adopted a policy that all communication with student is by email, greatly

reducing the paper mail being generated and sent. The campus has a new and active MIXED recycling process, where all types of paper, plastic #1, 2, 5, clean metal cans, glass are all recycled versus taken to the landfill. The old program involved SORTED recycling, and the new mixed recycling process should more than double the amount of recycled to an estimated 132,000 cubic feet of waste now being diverted from the landfills. Also the campus has an active beverage redemption program where HI-5 containers are collected and managed by the student clubs and service organizations on campus. The University's practice is to buy recycled goods that meet the EPA's current guidelines, including reduction in packaging and buying in bulk quantities where practical. UH Hilo just completed another round of e-waste recycling, sending back 9 pallets of computers at an estimated weight of 4,500 pounds.

- UH-West O'ahu - The faculty, staff and students do an informal voluntary recycling of HI-5 aluminum cans and plastic bottles that are recycled by the janitorial staff. UHWO continues to recycle white and mixed color paper collected in the mailroom.
- UH-Maui College - College is working on becoming a member of ASHRAE. UH Maui College has installed recycling stations campus wide.
- Leeward CC - Campus-wide paper recycling program initiated during the 2009-10 academic year with the placement of paper recycling containers and bins in every office and classroom across campus. Also, a solid waste compactor will be installed to reduce construction and solid waste.
- Windward CC- In the new Library Learning Commons building, there will be a recycling station for materials on campus that can be recycled.
- Honolulu CC- HI-5 and paper container has been stationed on campus to minimize waste. Also, a solid waste compactor will be installed to reduce construction and solid waste.
- Kapi'olani CC- A solid waste compactor will be installed to reduce construction and solid waste.
- Hawai'i CC - Campus wide paper, cardboard, and HI recycling program.
- Kaua'i CC - Campus wide paper, cardboard, and HI recycling program.
- UH-Mānoa - On-going campus -wide recycling and program that recycles cans, plastics, paper products, and green waste reducing the total waste-stream by 37 to 39% annually.

Act 96 SLH 2006: Buildings and Facilities

- (6) Use life cycle cost-benefit analysis to purchase energy-efficient equipment such as ENERGY STAR® products and use utility rebates where available to reduce purchase and installation costs.

This following agencies did not provide an answer to this section: DOE

AG: All staff involved in purchasing equipment have been advised of the ENERGY STAR® program and must document reasons for not purchasing ENERGY STAR®, when available.

DAGS:

1. Mechanical equipment (i.e. A/C, pumps, etc.) have long been required by DAGS to be of the high efficiency type and utility rebates have been used to help offset installation and higher pricing costs for the energy-efficient products. In FY 2008, DAGS worked with HECO to improve internal procedures to insure utility rebates are not missed and currently have those procedures in place.
2. DAGS considers cost/benefit analysis for replacing existing A/C systems with new, more efficient, systems even prior to the existing systems reaching their expected life span.

3. ENERGY STAR® equipment, where available, is a standard requirement for all construction.

DBEDT: DBEDT has and continues to advocate for ENERGY STAR® Product Awareness and Procurement, which includes the following activities:

- Providing technical assistance to housing, local government, state and/or federal agency representatives in purchasing ENERGY STAR® products.
- Promoting other training opportunities such as on-line ENERGY STAR® webcasts in areas such as ENERGY STAR® Procurement and Products, and Computer Power Management.

DCCA: DCCA uses life cycle cost-benefit analysis to evaluate computer equipment purchases such as servers and PCs. The department continues its practice of purchasing ENERGY STAR® products for all available computer equipment, and as applicable will purchase ENERGY STAR® products when replacing office equipment.

DHHL: Fiscal Office and staff involved in purchasing equipment for the office and development projects are encouraged to look at ENERGY STAR® products and use rebates where available to reduce purchase and installation costs.

DHRD: The department uses the State Procurement Office price/vendor lists for procurement of most of its equipment. Multi-functional copiers that are leased and computers that are purchased are ENERGY STAR® products.

DHS: DHS procurement procedures include requirements for purchasing energy-efficient products such as ENERGY STAR®, and as applicable will utilize available utility rebates.

DLIR: The DLIR programs are required to purchase ENERGY STAR® products and will continue to check whether utility rebates are available and can be utilized in the purchase of the products as part of the procurement procedure/policy.

DLNR: DLNR uses life cycle cost-benefit analysis to purchase energy-efficient equipment such as ENERGY STAR® products, and uses utility rebates where available to reduce purchase and installation costs.

DOA: ASO sent reminder to staff of department's Energy and Water Conservation and Resource Efficiency Program which provides policies, guidelines, and practices with goal to minimize energy, fuel, and water consumption and implement resource-efficient operations including purchasing energy-efficient equipment such as ENERGY STAR® products and use utility rebates where available.

DOD: Per federal mandates, all equipment is specified ENERGY STAR® rated or energy efficiency equivalent, including appliances and computers.

DOH: The DOH only purchases ENERGY STAR® products in all of its construction projects.

DOT-Airports: Energy efficiency in equipment is always a requirement practice in Cooling Towers, Chillers and other HVAC, Elevators, Escalators, Mechanical and Electronic equipment at all airports. Construction projects which have mechanical and electrical equipment are required to be energy-efficient products.

All appliance specifications and purchases are required to be the energy-efficient type such as ENERGY STAR® products whenever it is available.

DOT-Harbors: Trains staff on life cycle cost-benefit analyses, ENERGY STAR® technologies and utility rebates where available. DOT-Harbors replaces existing equipment with comparable ENERGY STAR® equipment.

DOT-Highways: The Highways Division continues to install energy-efficient traffic signal lamps in new installations or when traffic signals are modified and has programmed the replacement of computer equipment with ENERGY STAR® compliant equipment.

DOTAX: DOTAX uses life cycle costs to evaluate equipment procurements and will use utility rebates where available to reduce purchase and installation costs.

FTZ: The FTZ purchased seven new energy-efficient computer systems over the past two years, replacing older, less efficient models. The FTZ recently replaced two older, less efficient, copier/printer units with newer, more energy efficient models.

HCDA: HCDA has instructed property manager in projects where HCDA is general partner to replace light fixtures, air conditioners, stoves and refrigerators with energy-efficient fixtures.

HHFDC: All HHFDC personnel, associated property management in-house staff and all sub-contracted vendors have been informed of the benefits of and the necessity of ENERGY STAR® products in the completion of tasks assigned. It has been HHFDC's practice and is a requirement that all appliances installed in residential apartments have an ENERGY STAR® rating.

Of a specific nature, HHFDC is presently looking at the operation of laundry concessions at many of the affordable housing projects. It has been stipulated that all laundry machines (washers & dryers) need to be ENERGY STAR® rated. This stipulation is especially necessary because each development pays for the utilities that supply water and produce hot water for the washers as well as producing the hot air for the dryers.

As previously stated, HHFDC's policy is that all office equipment changes/purchases are looked at for their ENERGY STAR® rating. In the last month of this fiscal year HHFDC completed a substantial effort to further its sustainability posture. This has been accomplished with the installation of five (5) XEROX copier business centers and deactivating sixteen (16) personal or decentralized small, inefficient, old copiers. A little more exercise, but a lot more savings.

HHSC:

- O'ahu Region - The O'ahu Region has incorporated in its procurement process the acquisition of ENERGY STAR® products and other energy saving equipment whenever possible.

HPHA: The Agency requires the use of ENERGY STAR® appliances. Currently, HPHA have a consultant selected and are obtaining internal approvals to begin negotiations to provide a facility-wide green assessment and report, or Green Physical Needs Assessment (GPNA). The report will include electronic drawings, site surveys, building assessments, etc., to include recommendations for potential energy-savings and environmental strategies for our existing projects statewide. Estimated completion of this study is October 2013. We will use this report to schedule a plan of action for the next five years.

HSPLS: HSPLS utilizes DAGS in its purchase of energy efficient equipment for construction projects.

1. Mechanical equipment (i.e. A/C, pumps, etc.) have long been required by DAGS to be of the high efficiency type and utility rebates have been used to help offset installation and higher pricing costs for the energy efficient products. In FY 2008, DAGS worked with HECO to improve internal procedures to insure utility rebates are not missed and currently have those procedures in place.
2. DAGS considers cost/benefit analysis for replacing existing A/C systems with new, more efficient, systems even prior to the existing systems reaching their expected life span.
3. ENERGY STAR® equipment, where available, will be a standard requirement for all construction.

NELHA: NELHA replaced its old Xerox photo copy machine with a new ENERGY STAR® rated Richo.

PSD: Although we have attempted to make certain improvements in our capital expenditures, PSD will, nevertheless seek to continue with making improvements in this area. Procurement of replacement equipment, where applicable will utilize ENERGY STAR® rated equipment.

UH:

- UH-Maui College - The College has implemented a campus policy that requires all programs to purchase ENERGY STAR® rated equipment or appliances. Re-lamping existing lighting throughout the campus to energy efficient lamps/bulbs with occupancy sensors and installing energy management controls to all AC equipment.
- Windward CC - Energy efficient equipment are being purchased to replace non-efficient ones. Rebates have been received as a result of this concerted effort. Completed re-lamping existing lighting throughout the campus to energy efficient lamps/bulbs with occupancy sensors and installing energy management controls to all AC equipment. PC monitor control software and vending machine controls.
- Kapi‘olani CC - Completed re-lamping existing lighting throughout the campus to energy efficient lamps/bulbs with occupancy sensors and installing energy management controls to all AC equipment. PC monitor control software and vending machine controls.
- Leeward CC - Completed re-lamping existing lighting throughout the campus to energy efficient lamps/bulbs with occupancy sensors and installing energy management controls to all AC equipment. PC monitor control software and vending machine controls.
- Honolulu CC - Completed re-lamping existing lighting throughout the campus to energy efficient lamps/bulbs with occupancy sensors and installing energy management controls to all AC equipment. PC monitor control software and vending machine controls.
- Kaua‘i CC - Completed re-lamping existing lighting throughout the campus to energy efficient lamps/bulbs with occupancy sensors and installing energy management controls to all AC equipment.
- UH-Hilo - Continue to work with Hawai‘i Energy in their rebate program to purchase energy efficient air-conditioning and lighting through the campuses repairs and maintenance programs. The campus practice is to decommission old inefficient refrigerators, air conditioners, ice makers, dehumidifiers, and replace these products with energy efficient models that meet the ENERGY STAR® criteria.
- UH-Mānoa - In FY 2012 UH Mānoa received over \$30,705 in HECO rebates from the

installation of energy-efficient HVAC and lighting equipment.

STRATEGY:

The University of Hawai‘i systemwide will continue to apply the LEED rating system in all Capital Improvement Program new and major renovation projects

Act 96 SLH 2006: Buildings and Facilities

(7) Procure environmentally preferable products, including recycled and recycled-content, bio-based, and other resource-efficient products and materials.

This section does not apply to the following agencies:

AG: Recycled paper is required, unless previously approved by the Administrative Services Office. Staff is aware of the policy to utilize environmentally friendly products; however, there is very minimal use of hazardous materials within the department.

DAGS: DAGS CSD procures environmentally preferable products, whenever possible. The CSD's Custodial Program uses Green Seal or other certified environmentally friendly products to clean their buildings. The State Procurement Office (SPO) continues to provide to Executive Departments, and other chief procurement officer (CPO) jurisdictions (DOE, OHA, HHSC, Judiciary, Legislature), including the counties, SPO Price and Vendor List contracts utilizing ENERGY STAR®, recycled, or environmentally preferred products (EPP). Prior to re-solicitation for new contract terms, assessments of current contract specifications and review of market availability are conducted to ensure energy-efficient products and supplies are made available through the SPO Price and Vendor lists such as:

- WSCA Facilities Maintenance Repair & Operation (MRO) - Statewide WSCA #1862, SPO Vendor List Contract #11-10 offering green products such as cleaning products with the Green Seal or equal certification;
- WSCA Multifunction Copiers & Related Software-Statewide WSCA#175, SPO Vendor List Contract #11-11 offering recyclable toner containers, organic photoreceptors, & environmentally preferred toner ink;
- SPO Price List #10-08 disposable polyethylene bags, including biodegradable bags;
- SPO Price/Vendor List #11-07, Office Supplies and Printer Cartridges offering recycled paper and paper products, remanufactured printer cartridges.

For products and supplies not covered by SPO Price and Vendor list, purchasing agencies are required to utilize the following preferences:

- Recycled Products, HRS §103D-1005
- Biofuel preference, HRS §103D-1012
- Preference for oil products with greater recycled content, HRS chapter 103D, Part XIII

DBEDT: DBEDT continues to encourage compliance with environmentally preferable purchasing guidelines set forth in Chp 196-9, HRS.

DBEDT procured office and copy paper with 30% post-consumer recycled content, and other office products with recycled content.

DBEDT worked with the UH-Mānoa in developing the 2011 Environmental Product Guide which was printed and distributed to State agencies, businesses, and at the 12th Annual Build and Buy Green Conference in Spring 2012. It is also posted online at: www.energy.Hawaii.gov/wp-content/uploads/2011/10/2011-EPG-FINAL_WEB.pdf

DBEDT disseminates the results of an Environmentally Preferable Purchasing (EPP) survey conducted annually by the Department of Health via the Lead By Example report to improve awareness of purchasing patterns between agencies. In 2010 the last year the survey was conducted, EPP among state agencies lead to greenhouse gas savings equivalent to removing approximately 93 passenger vehicles from roadways for one year and energy savings equal to conserving about 17,188 gallons of gasoline in a year.

DCCA: DCCA purchases energy-efficient ENERGY STAR®, recycled, or environmentally preferred products, and supplies available through the SPO Price and Vendor lists whenever possible including recycled-content paper and other non-paper goods.

DHHL: The Fiscal Office has been requested to look into buying environmentally preferred products and material whenever available.

DHRD: The department purchases environmentally preferable products as contained in the State Procurement Office price/vendor lists. Office paper and toner cartridges are examples of items purchased that are recycled content products.

DHS: DHS continues to coordinate with the State Procurement Office (SPO) to ensure that price list products satisfy environmentally preferable product requirements.

DLIR: The DLIR coordinates with the State Procurement Office in the purchase of environmentally preferable products including recycled and recycled-content, bio-based, and other resource-efficient products and materials.

DLNR: DLNR encourages the use of recycled products with contractors. DLNR also adheres to the allowed 10% price preference for bids using recycled products in accordance with Section 103D-1005, Hawai'i Revised Statutes.

Division of Aquatic Resources (DAR)

DAR purchases and uses biodegradable soaps. In particular, DAR uses these products in the Northwest Hawai'ian Islands, where there are strict policies on this and any other discharge of durable wastes.

DOA: ASO sent reminder to staff of department's Energy and Water Conservation and Resource Efficiency Program which provides policies, guidelines, and practices with goal to minimize energy, fuel, and water consumption and implement resource-efficient operations including promoting 4 Rs - reduce, recycle, reuse and re-buy, and encouraging use of the Department of Business, Economic Development and Tourism Environmental Product Guide for listing of environmentally preferred products. HDOA purchased only recycled copy paper.

DOD: Per federal and state mandates, environmental preferable products are specified.

DOE:

As part of 'Ewa Makai Middle School's sustainability efforts, the custodial staff has embraced the use of green cleaning products and uses them exclusively. This includes the use of dispensing systems for cleaners, which allows the school to buy in bulk - with less packaging and therefore less waste. Mop buckets can be filled directly and spray bottles can be reused rather than end up in the land fill after one use.

In November of 2012, Waikiki Elementary School will be the site of a "Green Classroom Professional Training +Toolkit" event which will include training on the use of environmentally preferable cleaning products and 'Ewa Makai Middle School will be presented as a case study for the benefit of green teams from other schools.

DOH: The DOH continues to promote this practice.

DOT-Airports: The Airports Division purchases their products through the State procurement system, but will consider the "Green Seal" products first.

DOT-Harbors: Implementing said procurement, including recycled copier paper.

DOT-Highways: The Highways Division has been working with the construction industry to incorporate the use of recycled products in pavement construction without losing pavement quality.

DOTAX: DOTAX coordinates with the State Procurement Office in the purchase of environmentally preferable products including recycled and recycled-content, bio-based, and other resource-efficient products and materials.

FTZ: All paper products to include copy and bond paper, paper towels, toilet paper, etc., are purchased through the State Bid List and contain the recommended post-consumer content.

HCDA: HCDA has followed DAGS procurement price lists and has purchased environmentally friendly products such as paper, paper towels and light bulbs.

HHFDC: It has been and continues to be the State's and HHFDC's standard practice that all paper products used are at the 30% recycled material content.

HHFDC has mandated that all janitorial and associated products used in cleaning operations will be environmentally friendly products. At the HHFDC headquarters at 677 Queen Street, all commercial single sheet pull down hand towel dispensers have been replaced with touchless roll paper dispensers. This has led to an overall reduction of paper towel waste thus a reduction in costs. An additional benefit may be a decrease in the personnel sick days as a result of a more sanitary means of dispensing paper towel to individuals. This same system will be installed at other locations as old paper towel supplies diminish.

HHSC:

- O'ahu Region - The O'ahu Region has incorporated in its procurement process the acquisition of environmentally preferable products whenever possible.

HPHA: Agency is developing language for all procurements to request environmentally preferable products.

HSPLS: HSPLS has tried and will continue to research environmentally preferable products for office use and custodial services of all our public libraries and offices.

NELHA: NELHA purchases all paper products to include copy and bond paper, paper towels, toilet paper, etc. through the State Bid List that contain the recommended content.

PSD: PSD utilizes the price lists issued by the State Procurement Office for its requirements for Office Supplies, Coarse Paper Products. These price lists do incorporate products that are environmentally preferable. The procurement of environmentally preferable products is under review for various commodities not addressed in a SPO price list.

UH:

- UH-Maui College - the Culinary Program uses biodegradable food cartons, forks, knives and spoons in its foodservice operation. The Operations and Maintenance Department uses organic fertilizers and environmentally friendly cleaning solutions. College perimeter fencing and parking lot curbs are made out of recycled plastic. College parking lot planters were filled with rounded recycled glass chips.
- Honolulu CC- pending construction of a PV shade structure
- Kaua'i CC- pending incorporation of a bio mass system; study and contract negotiation needed. Also, utilize bio-diesel from Kaua'i Farm Fuels, Inc. to operate the college's tractor mower and electricity produced by an 82.3 kwh photo-voltaic system installed on the roof of the One Stop Center building.
- UH-Hilo - The University purchases toilet paper and hand towels that meet the current EPA guidelines of 40% post-consumer recycled content; including plastic and picnic tables made from recycled plastic.
- UH-Mānoa - Continues to pursue an aggressive dining and food service recycling and bio-based program. Over 80% of the paper goods (toilet paper, paper towels, etc.) used by the Building Services group are from recycled paper products.

Act 96 SLH 2006: Transportation Vehicles and Fuel

(1) Comply with Title 10, Code of Federal Regulations, Part 490, Subpart C, "Mandatory State Fleet Program", if applicable.

This section does not apply to the following agencies because they do not have a fleet: AG, DBEDT, DCCA, DHRD, DLIR, DLNR, DOTAX, FTZ, HCDA, HHFDC, HPHA, HSPLS, NELHA

The following agencies are in compliance, with no additional comments necessary: DHHL, DOA, DOD, DOE, DOH, DOT-Airports, DOT-Harbors, DOT-Highways, HHSC

DAGS: Strategy: DAGS Automotive Management Division (AMD) has determined it is in compliance with federal requirement by purchasing only new alternative fuel vehicles. Vehicle purchases continue to comply with 10 CFR, Part 490, on alternative fuel E85 vehicles. Covered Fleet Vehicle purchases conducted by the State Procurement Office (SPO) continue to comply with 10 CFR, Part 490, on alternative fuel E85 vehicles and Non-Covered Fleet Act 96 Part IV,

HRS section 103D-412, Energy-Efficient Vehicles. DAGS plans are to continue to update and replace ageing fleet with energy-efficient vehicles. For FY2011 and 2012, DAGS AMD has a \$475,000 ARRA grant secured by DBEDT to expend for electric vehicles. Electric Vehicle charging station have been installed at the DAGS motor pool (3), Central Services (1), and UH motor pool. Three Public Stations have been installed and operating at the State Capitol, Circuit Court and Kapolei Judiciary. When SPO purchases any vehicles on behalf of departments, the vehicle specifications shall be in compliance with 10 CFR, Part 490, on alternative fuel E85 vehicles and Non-Covered Fleet Act 96 Part IV, HRS §103D-412.

DHS: DHS continues to coordinate with DAGS-Automotive Management Division (AMD) to ensure that vehicle purchases comply with the applicable requirements.

PSD: While PSD is a law enforcement entity that is exempt from Title 10, in past procurements has followed the intent of Act 96 (2006) where applicable. Examples are purchasing vehicles that are “Flex Fuel” capable - where they can run properly on either regular gas or E-85. For past four (4) fiscal years, the Department of Public Safety did not purchase any “new” vehicles for its facilities.

UH:

- UH-Mānoa - University of Hawai‘i Transportation Services fleet is a covered fleet and is currently in compliance with Title 10.
- Kaua‘i CC - purchased 2011 Toyota Prius Hybrid vehicle to reduce gasoline consumption.
- Windward CC - The College recently purchased two flexible fuel sedans and one cargo van replacing older vehicles that were not as energy efficient.
- UH-Hilo - Federal regulations are for Urban areas (O‘ahu and Honolulu), but don’t apply to vehicles on the outer islands. State regulation are followed on the Big Island of Hawai‘i. UH Hilo owns and operates 1 vehicle on O‘ahu (Student recruitment at O‘ahu High Schools) and that vehicle runs on Flex Fuel, which complies with the Federal Regulations.

Act 96 SLH 2006: Transportation Vehicles and Fuel

(2) [Comply with all applicable state laws regarding vehicle purchases.](#)

This section does not apply to the following agencies because they do not purchase vehicles: AG, DCCA, DHRD, FTZ, HHFDC, HPHA

This section does not apply to the following agencies because DAGS manages their vehicle purchases: HCDA

The following agencies are in compliance with no additional comments necessary: DHHL, DLNR, DOA, DOD, DOE, DOH, DOT-Airports, DOT-Harbors, DOT-Highways, DOTAX, HHSC, HSPLS, NELHA, PSD, UH

DAGS: Assessment: AMD and SPO review departmental request to purchase passenger vehicles.

Strategy: HAR Section 3-122-13, Development of specifications and HRS Section 103D-412, Energy-efficient vehicles, provides guidance to State and county purchasing agencies on the purchase and leasing of vehicles. The SPO, AMD, and DBEDT have developed guidelines for the purchase of vehicles including energy-efficient vehicles. These guidelines are available on

the DBEDT website: <http://energy.Hawaii.gov/programs/achieving-efficiency/lead-by-example/programsachieving-efficiencylead-by-examplevehicle-purchasing-guidelines>

DBEDT: DBEDT is aware of and complies with vehicle purchasing requirements. Amendments to vehicle purchasing requirements related to efficiency are disseminated to other agencies through the Lead By Example working groups.

DHS: DHS continues to coordinate with AMD to ensure that vehicle purchases comply with the applicable requirements.

DLIR: The DLIR owns the following vehicles:

1999 Ford Windstar
1994 Chevrolet Astrovan

The DLIR does not have immediate plans to purchase another vehicle in the near future; however, the department will adhere to the applicable state laws regarding vehicle purchases

Act 96 SLH 2006: Transportation Vehicles and Fuel

(3) Once federal and state vehicle purchase mandates have been satisfied, purchase the most fuel-efficient vehicles that meet the needs of their programs; provided that life cycle cost-benefit analysis of vehicle purchases shall include projected fuel costs.

This section does not apply to the following agencies: AG, DCCA, DHRD, DLNR, DOD, FTZ, HCDA, HHFDC, HPHA, HSPLS, and NELHA.

The following agencies are in compliance, with no additional comments necessary: DOE, DOH, DOT-Airports, DOT-Harbors, DOT-Highways, and HHSC.

DAGS: Assessment: The AMD and SPO review will provide opportunity to comply with the policy to procure the most fuel-efficient vehicles.

Strategy: This review will mandate agencies to be compliant with law.

DBEDT: DBEDT is aware of and complies with vehicle purchasing requirements and is seeking models to simplify life-cycle cost benefit analysis for purchasing purposes. EIA fuel cost projections researched by DBEDT for use in Life Cycle Cost analysis have been distributed to other agencies via the Lead by Example initiative.

DHHL: DHHL shall consider all aspects, such as fuel consumption, capacity, and need, in addition to price, to reach the decision on the purchase.

DHS: DHS continues to coordinate with AMD and SPO to ensure that vehicle purchases meet fuel efficiency requirements in relation to operational needs.

DLIR: Prior to purchasing a vehicle in the future, the department will insure that any vehicle purchase satisfies federal and state mandates and is the most fuel-efficient vehicle that meets the needs of our program.

DOA: ASO reminded staff of the department's Energy and Water Conservation and Resource Efficiency Program which provides policies, guidelines and practices with the goal to minimize energy, fuel and water consumption and implement resource-efficient operations including purchasing the most fuel-efficient vehicle that meets the needs of the program once federal and state vehicle purchase mandates have been met.

DOTAX: DOTAX will purchase the most fuel-efficient vehicle that meets the needs of its programs and will include a life cycle cost-benefit analysis, including projected fuel costs, in vehicle procurements.

NELHA: Does not apply to NELHA due to no fleet. However, NELHA does own a EV (Nissan Leaf)

PSD: PSD awards to the lowest responsive, responsible bidder for its agencies.

UH:

- UH Mānoa - UH Transportation Services records vehicle information in Asset Works. A life cycle/cost analysis is conducted to aid in the planning of fleet vehicle purchases.
- UH Hilo - Prior to purchasing any vehicle, a vehicle acquisition request is required, that ensures programs have considered other options, like public transportation, on campus mail service, vehicle sharing, renting/leasing, personal vehicle use w/ prescribed reimbursement, etc. In addition, new vehicle life cycle cost analysis is performed (assumption is ownership is for 10 years) that includes estimated fuel consumption, as well as maintenance costs, insurance, etc for a total of 10 years which also shows the annual cost.

Act 96 SLH 2006: Transportation Vehicles and Fuel

(4) Purchase alternative fuels and ethanol blended gasoline when available.

This section does not apply to the following agencies: AG, DCCA, DHRD, DOD, FTZ, HCDA, HHFDC, HPHA, and NELHA.

The following agencies are in compliance, with no additional comments necessary: DOE, DOH, DOT-Airports, DOTAX, HHSC, and UH.

DAGS: SPO Price List No. 07-20 Gasoline Fueling and Credit Card Services for Hawai‘i, Kaua‘i, Maui, and O‘ahu, includes the requirement to establish monthly reports from the vendors of purchases by each cardholder.

SPO Price List contract for Gasoline & Diesel Fuel, Bulk Delivery (09-16 Hawai‘i, 09-17 Maui, 09-18 O‘ahu, and 09-19 Kaua‘i) are for purchases of ethanol-blended gasoline, E-10, and ultra-low sulfur diesel fuel, by all agencies on a statewide basis. The available information will be used to determine total gasoline purchases and expenditures by each purchasing agency. In each contract, the State has the option to convert from petroleum diesel fuel to biodiesel blended fuel at one or more locations by providing ninety (90) days written notice to the Contractor. Prior to

re-solicitation, review of market availability of biodiesel fuels are conducted to ensure alternative fuels are made available through the SPO Price and Vendor lists contracts.

DBEDT: DBEDT intends to purchase alternative fuels when available. DBEDT currently uses an electric vehicle (EV) rented from DAGS Automotive Division.

DBEDT partnered with the state Department of Commerce & Consumer Affairs (DCCA) to manage the EV Ready Rebate Program, offering rebates up to \$4,500 for eligible EVs purchased in Hawai'i and up to \$500 for purchase and installation of EV charging equipment. Officially completed in May 2012, the program provided 453 rebates for electric vehicles and 274 rebates for public and private charging stations. At the end of 2012 there were 1,136 EVs registered in the state, compared to 162 when the program began. The program also resulted in the installation of over 230 Level 2 public EV charging sites and six DC fast chargers at more than 100 locations throughout Hawai'i.

DBEDT worked with Plug In America to produce the "EV Ready Guidebook for Commercial Electric Vehicle Charging Station Installations" available on the State Energy Office's website.

DHHL: DHHL shall continue to use gasoline from Tesoro to fuel our vehicles.

DHS: DHS continues to coordinate with SPO on purchasing alternative fuels from established price lists.

DLIR: DLIR purchases ethanol blended gasoline from DAGS Automotive.

DLNR: DLNR purchases fuel from vendors as selected by the State Procurement Office in compliance with the Procurement Code. This often includes gas stations that offer ethanol 10 blended gasoline. DLNR is not aware of adequate vehicles that operate on alternative fuel effectively for the type of performance needed. DLNR continues to seek the advice of other state agencies through DBEDT's Lead By Example Leadership Group and will implement internal procedures as appropriate.

DOA: No biodiesel fuel was purchased in FY12.

DOT-Harbors: DOT-Harbors purchases environmentally friendly fuels when available and practical. DOT-Harbors also need to purchase vehicles capable of using alternative fuels.

DOT-Highways: The Highways Division currently purchases propane as an alternative fuel.

HSPLS: HSPLS complies with E85 blended 87 octane fuel.

NELHA: Does not apply to NELHA as NELHA has no fleet, however NELHA purchases all its gasoline from the State Bid list which suffices the ethanol requirement.

PSD: Due to the nature of the correctional facilities and law enforcement divisions these vehicles are exempt from Title 10. When available vehicles capable of utilizing ethanol based fuels are specified.

[Fleet use of biodiesel \(gallons purchased\) and total cost \(\\$\):](#)

The following agencies did not reply to this section: AG, DBEDT, DHHL, DHS, DOE, DOH, DOTAX, FTZ, HPHA, and NELHA.

This section does not apply to the following agencies: DCCA, DHRD, DLIR, DOD, HCDA, and HHFDC.

The following agencies reported that no biodiesel fuel was purchased in FY12: DLNR, DOA, DOT-Harbors, HHSC, HSPLS, and PSD.

DAGS: Biodiesel purchases, limited to Maui, for the period July 1, 2011 to June 30, 2012 was 26,963 gallons for \$111,056.00; the average cost per gallon is \$4.12.

DOT-Airports: Not at this time. The Airports Division does not have a separate tank for storage.

DOT-Highways: The Highways Division, Maui District, voluntarily converted their diesel equipment to biodiesel in June 2011. Maui District used 22,000 gallons of biodiesel that was purchased at a cost of \$88,946.00 in fiscal year 2011.

UH: There is none known at this time for UH Hilo. No records available for the one vehicle used on O'ahu.

Act 96 SLH 2006: Transportation Vehicles and Fuel

[\(5\) Promote efficient operation of vehicles.](#)

This section does not apply to the following agencies because they do not own any vehicles: AG, DCCA, DHRD, FTZ, HHFDC, and HPHA.

The following agencies are in compliance, with no additional comments necessary: DOE, DOH, DOT-Airports, DOT-Highways, HHSC, and NELHA.

DAGS: Assessment: DAGS provides guidelines in the general operation of vehicles including a compressive Preventive Maintenance (PM) Schedule for its vehicles.

Strategy: DAGS Motor Pool offers PM services to all state vehicles under 8,500 GVW.

DBEDT: DBEDT distributes guidelines for energy-efficient vehicle operations to members of the department and to other agencies along with a mileage and fuel tracking log.

DHHL:

DHHL continues to remind drivers of the state vehicles to follow posted speed limit signs and practice safe driving. Driving and Vehicle Maintenance Tips are attached with the mileage log in each vehicle.

DHS: DHS continues to coordinate with AMD on the issuance of vehicle operation procedures.

DLIR: The DLIR vehicles are serviced by the DAGS Automotive Management Division Motor Pool on a regular basis. Both of the DLIR vehicles are in sound condition and operate at maximum efficiency.

DLNR: DLNR encourages maintenance and regular service of vehicles. DLNR continues to seek the advice of other state agencies through DBEDT's Lead By Example Leadership Group and will implement internal procedures as appropriate.

DOA: ASO reminded staff of department's Energy and Water Conservation and Resource Efficiency Program which provides policies, guidelines and practices with goal to minimize energy, fuel and water consumption and implement resource-efficient operations including tips on efficient operation of vehicles.

DOD: In new construction projects, preferred parking locations and charging stations located near entry of buildings.

DOT-Harbors: Trips are limited to what is required for safety and efficiency and are combined to save fuel. Vehicle trips from base yard to job sites are kept to a bare minimum by requiring job assignments to be clearly understood to ensure that all materials, tools, equipment, etc. to complete the job are on board prior to vehicles leaving the base yard.

DOTAX: DOTAX will promote efficient operation of vehicles through an educational campaign.

HCDA: HCDA encourages staff to walk to properties/appointments whenever possible.

HSPLS: HSPLS monitors servicing and maintenance of vehicles on an average of 3,000 miles or 3 months for preventive maintenance. O'ahu operations currently use a service repair vendor that has begun the use of bio-based engine oils.

HSPLS Electronic Support Section vehicles are serviced regularly for general maintenance using factory recommended guidelines.

NELHA: NELHA staff is required to keep mileage and fuel tracking logs. Administrative staff is required to use the agency's EV for running agency errands and attending local meetings, training, etc.

PSD: In an effort to comply with this Act, PSD has issued a department wide memorandum promoting the efficient use of vehicles.

UH:

- UH-Mānoa - Fleet Services is working on the development and distribution of information on the efficient operation of vehicles, through the dissemination of brochures and web postings.
- Windward CC - As part of the Library Learning Commons project, a certain number of parking stalls will be designated as "car pool" vehicles to encourage students, faculty, and staff to ride share to campus. Pending electric car charging station installation to encourage use of efficient operating vehicles.

- UH-Maui College - the College is the lead institution in the Maui Energy Vehicle Alliance which is tasked with developing a strategic implementation plan to develop the necessary island wide infrastructure to increase the use of electric vehicles County wide.
- Honolulu CC - An electric car charging station is planned to be installed to encourage use of efficient operating vehicles.
- Leeward CC - An electric car charging station is planned to be installed to encourage use of efficient operating vehicles.
- Kapi'olani CC - the campus has a small scale program to produce bio-diesel from waste oil for use in gas carts operated on campus. The project is conducted with the cooperation of the food services and science faculty together with students enrolled in their classes.
- UH-Hilo - recommends the monthly inspection and following the manufacture's preventative maintenance and tune up to achieve the maximum fuel efficiency.

Act 96 SLH 2006: Transportation Vehicles and Fuel

(6) Use the most appropriate minimum octane fuel; provided that vehicles shall use 87-octane fuel unless the owner's manual for the vehicle states otherwise or the engine experiences knocking or pinging.

This section does not apply to the following agencies: AG, DCCA, DHRD, DOD, FTZ, HHFDC, and HPHA.

The following agencies are in compliance, with no additional comments necessary: DBEDT, DLIR, DLNR, DOE, DOH, DOT-Airports, DOT-Highways, HCDA, and NELHA.

DAGS: Assessment: SPO Price List Contract No.11-05, Gasoline/Diesel Fueling and Credit Card Services on O'ahu, Hawai'i, Maui, and Kaua'i. Pursuant to State Comptroller's Memorandum 2010-34 agencies are required to purchase regular octane 87 grade gasoline for State vehicles. Strategy: Continue to monitor fuel purchases of all agencies

DBEDT: This instruction will be distributed department-wide.

DHHL: DHHL has 27 vehicles, 25 use 87-Octane Gasoline. The other two (cargo and dump truck) on Moloka'i require diesel fuel. DHHL will enforce this policy and ensure all vehicles use the 87-Octane Gasoline.

DHS: DHS continues the implementation of the present policy requiring the use of 87-octane fuel.

DOA: ASO reminded staff on department's Energy and Water Conservation and Resource Efficiency Program, which provides policies, guidelines and practices with the goal to minimize energy, fuel and water consumption and implement resource-efficient operations, including using the 87-octane fuel unless the owner's manual for the vehicle states otherwise or the engine experiences knocking or pinging.

UH:

- UH-Mānoa - UH Transportation Services is in compliance and purchases only 87-octane fuel.

- UH-Hilo - campus policy is to use 87 octane for all vehicles and equipment unless something different is specifically recommended by the manufacturer or their authorized agents.

DOT-Harbors: All vehicles are using 87-octane fuel unless owner's manual for the vehicle states otherwise. DOT-Harbors purchases environmentally friendly fuels when available and practical.

DOTAX: DOTAX uses the most appropriate minimum octane fuel, provided that vehicles shall use 87-octane fuel unless the owner's manual for the vehicle states otherwise or the engine experiences knocking and pinging.

HHSC: Under the State Contract, all our vehicles are filled with 87 octane, 10% ethanol blended gasoline.

HSPLS: HSPLS utilizes delivery vehicles that currently operate on 87-octane E85 fuel.

PSD: PSD follows Comptroller's Memo 2005-13, which prohibits the use of mid-grade or premium gasoline unless prior approval by the Comptroller's Office is received.

Act 96 SLH 2006: Transportation Vehicles and Fuel

(7) Beginning with fiscal year **2005-2006** as the baseline, collect and maintain, for the life of each vehicle acquired, the following data:

This section does not apply to the following agencies: AG, DCCA, DHRD, DOD, FTZ, HCDA, HHFDC, and HPHA.

The following agencies are working toward achieving compliance, or are in the process of creating a system to monitor this data: DOH and DLNR

The following agencies collect and maintain data on their own, and are in compliance: DAGS, DBEDT, DHS, DOA, DOTAX, NELHA, and UH.

The following agencies provided a spreadsheet that contains specific data: DHHL (Appendix 2), DOE (Appendix 1), DOT-Airports (Appendix 4), DOT-Harbors (Appendix 5), DOT-Highways (Appendix 6), HSPLS (Appendix 7), and PSD (Appendix 3).

(A) Vehicle acquisition cost:

DLIR: 1999 Ford Windstar acquired on 1-23-01 for \$17,500.00
1994 Chevrolet Astrovan acquired on 5-3-01 for \$5,900.00

HHSC:

Leahi Hospital

FY 07	2001 Gold Dodge Stratus - \$5,200
	2001 Blue Dodge Stratus - \$5,000
FY 08	2004 Chevy Malibu - \$8,200
	2001 Dodge Caravan - \$4,500

Maluhia

FY 05 1998 Chevy Astro Van - \$5,500
 FY 07 2000 Dodge Stratus - \$4,500
 FY 07 2002 Ford Taurus SE - \$6,500
 FY 08 1998 Ford Bus Handi-van - Donation
 FY 08 2001 Chevy Truck - \$13,044
 FY 09 2008 Chevy Silverado Flatbed - \$28,919
 FY 09 2002 Chevy Venture Van Blue - \$5,600
 FY 09 2002 Chevy Venture Van Green - \$5,600
 FY 09 2004 Chevy Classic - \$5,400

UH: Kaua'i CC-2005 Ford Ranger (purchased used in 1/25/10), \$9,392
 2007 GMC Sierra Pickup Truck (purchased 8/20/07), \$30,178
 2009 Dodge Journey (donated in 2010)
 2011 Toyota Prius (purchased 5/7/12), \$29,995

HSPLS: 2011 Chevrolet 3500 Express Cargo Van

[\(B\) United States Environmental Protection Agency rated fuel economy:](#)

DLIR: 1999 Ford Windstar: 17 mpg City and 23 mpg Highway
 1994 Chevrolet Astrovan: 17 mpg City and 22 mpg Highway

HHSC:**Leahi Hospital**

2001 Dodge Stratus - 20 to 28 MPG
 2001 Dodge Stratus - 20 to 28 MPG
 2004 Chevy Malibu - 22 to 30 MPG
 2001 Dodge Caravan - 16 to 23 MPG

Maluhia

1998 Chevy Astro Van - 14 to 18 MPG
 2000 Dodge Stratus - 19 to 27 MPG
 2002 Ford Taurus SE - 18 to 25 MPG
 1998 Ford Bus Handi-van - 16 to 23 MPG
 2001 Chevy Truck - 13 to 17 MPG
 2008 Chevy Silverado Flatbed - 15 to 20 MPG
 2002 Chevy Venture Van Blue - 16 to 22 MPG
 2002 Chevy Venture Van Green - 16 to 22 MPG
 2004 Chevy Classic - 21 to 31 MPG

UH: Kaua'i CC - 2005 Ford Ranger (21 mpg city/27 mpg hwy)
 2007 GMC Sierra Pickup Truck (14 mpg city/20 mpg hwy)
 2009 Dodge Journey (19 mpg city/25 mpg hwy)
 2011 Toyota Prius (51 mpg city/48 mpg hwy)

HSPLS: City- 8 Hwy- 12 (using E85 fuel)

(C) Vehicle fuel configuration, such as gasoline, diesel, flex-fuel gasoline/E85, and dedicated propane:

DLIR: 1999 Ford Windstar - Gasoline/E85
1994 Chevrolet Astrovan - Gasoline/E85

HHSC: Gasoline for all vehicles

HSPLS: Gasoline/E85

(D) Actual in-use vehicle mileage:

DLIR: FY 2006

- 1999 Ford Windstar - 2096.1 Miles
- 1994 Chevrolet Astrovan - 248.0 Miles

FY 2007

- 1999 Ford Windstar - 1616.6 Miles
- 1994 Chevrolet Astrovan - 166.3 Miles

FY 2008

- 1999 Ford Windstar - 1541.70 Miles
- 1994 Chevrolet Astrovan - 148.40 Miles

FY 2009

- 1999 Ford Windstar - 1190.2 Miles
- 1994 Chevrolet Astrovan - 504.0 Miles

FY 2010

- 1999 Ford Windstar - 2735.1 Miles
- 1994 Chevrolet Astrovan - 175.7 Miles

FY 2011

- 1999 Ford Windstar - 2288.3 Miles
- 1994 Chevrolet Astrovan - 507.9 Miles

FY 2012

- 1999 Ford Windstar - 1802.1 Miles
- 1994 Chevrolet Astrovan - 236.1 Miles

HSPLS: 10,645 (partial FY 2011-12)

(E) Actual in-use vehicle fuel consumption:

DLIR: FY 2006

- 1999 Ford Windstar - 226.7 Gallons
- 1994 Chevrolet Astrovan - 21.7 Gallons

FY 2007

- 1999 Ford Windstar - 176.4 Gallons
- 1994 Chevrolet Astrovan - 20.6 Gallons

FY 2008

- 1999 Ford Windstar - 169.00 Gallons
- 1994 Chevrolet Astrovan - 20.8 Gallons

FY 2009

- 1999 Ford Windstar - 129.00 Gallons

- 1994 Chevrolet Astrovan - 60.40 Gallons

FY 2010

- 1999 Ford Windstar - 167.9 Gallons
- 1994 Chevrolet Astrovan - 21.2 Gallons

FY 2011

- 1999 Ford Windstar - 265.5 Gallons
- 1994 Chevrolet Astrovan - 40.1 Gallons

FY 2012

- 1999 Ford Windstar - 160 Gallons
- 1994 Chevrolet Astrovan - 21.4 Gallons

HSPLS: 778.141 gallons

(F) Actual in-use annual average vehicle fuel economy:

DLIR:

FY 2006

- 1999 Ford Windstar - 9.25 Miles Per Gallon
- 1994 Chevrolet Astrovan - 11.43 Miles Per Gallon

FY 2007

- 1999 Ford Windstar - 9.16 Miles Per Gallon
- 1994 Chevrolet Astrovan - 8.07 Miles Per Gallon

Note: Decrease of 3.36 miles per gallon resulted from mechanical problems with the vehicle. The mechanical problems reduced the vehicle's total miles driven in FY07 by a total of 81.7 miles (248 miles in FY06 to 166.3 in FY07), a 33 percent reduction. The inability to drive the vehicle accounts for decrease in the miles per gallon of 33 percent. The mechanical problems which prohibited the use of vehicle have been repaired by the DAGS Automotive Division.

FY 2008

- 1999 Ford Windstar - 9.12 Miles Per Gallon
- 1994 Chevrolet Astrovan - 8.87 Miles Per Gallon

FY 2009

- 1999 Ford Windstar - 9.23 Miles Per Gallon
- 1994 Chevrolet Astrovan - 8.34 Miles Per Gallon

FY 2010

- 1999 Ford Windstar - 16.29 Miles Per Gallon
- 1994 Chevrolet Astrovan - 8.29 Miles Per Gallon

FY 2011

- 1999 Ford Windstar - 8.62 Miles Per Gallon
- 1994 Chevrolet Astrovan - 12.67 Miles Per Gallon

FY 2012

- 1999 Ford Windstar - 11.26 Miles Per Gallon
- 1994 Chevrolet Astrovan - 11.03 Miles Per Gallon

HSPLS: 13.68 MPG

Act 96 SLH 2006: Transportation Vehicles and Fuel

(8) Beginning with fiscal year **2005-2006** as the baseline with respect to each agency that operates a fleet of thirty or more vehicles, collect and maintain, in addition to the data in paragraph (7), the following:

This section does not apply to the following agencies: AG, DBEDT, DCCA, DHHL, DHRD, DHS, DLIR, DOD, DOTAX, FTZ, HCDA, HHFDC, HHSC, HPHA, HSPLS, and NELHA.

The following agencies collect and maintain data on their own, and are in compliance: DAGS, DLNR, DOA, DOE, DOT-Highways, and UH.

The following agency is in the process of implementing a system to collect and maintain data: DOH.

The following agencies provided a spreadsheet that contains specific data: DOT-Airports (Appendix 4), DOT-Harbors (Appendix 5), and PSD (Appendix 3).

(A) Information on the vehicles in the fleet, including vehicle year, make, model, gross vehicle weight rating, and vehicle fuel configuration:

See above

(B) Fleet fuel usage, by fuel:

UH:

- UH Mānoa - The fleet fuel usage is tracked in the fleet asset management program.

Fleet fuel consumption for FY 2012
87 Octane Gasoline` - 62,538.0 gallons
Diesel - 10,364.3 gallons

- UH Hilo - when available, UH Hilo utilizes the State's contract for purchasing fuel. That contract also provides annual quantities and mileage. When the State contract is not available for UH, then each department keeps track of the mileage and fuel consumption of their respective vehicles

(C) Fleet mileage:

UH:

- UH Mānoa - The fleet mileage is recorded in the fleet database. The average miles traveled by each group of fleet vehicles is as follows.

Sedans 7492.5 Miles
Vans 13852.4 Miles
Pickup Trucks 16554.2 Miles

- UH Hilo - has vehicle records from 2001 with the required vehicle acquisition requests that include the estimated fuel consumption and mileage. Older vehicles with less fuel efficiency are being retired/disposed, and new vehicles with more efficient fuel efficiency are replacing them as needed. UH Hilo also has a hybrid gas/electric and an electric vehicle.

(D) Overall annual average fleet fuel economy and average miles per gallon of gasoline and diesel:

UH:

- UH Mānoa - The fleet annual average fleet fuel economy is tracked in the asset management program. The annual average vehicle fuel economy for FY2012 for each group of fleet vehicles is as follows.

Sedans	18.62	MPG
Vans	12.48	MPG
Pickup Trucks	9.34	MPG

- UH Hilo - when available, UH Hilo utilizes the State's contract for purchasing fuel. That contract also provides annual quantities and mileage. When the State contract is not available for UH, then each department keeps track of the mileage and fuel consumption of their respective vehicles.

PSD: For vehicles with available information:

Gasoline: 16.63 mpg
Diesel: 4.17 mpg

Renewable Energy and Resource Development

All affected agencies and programs are directed to **review internal policies, rules, and practices regarding permitting requirements affecting renewable energy development**. To the extent possible, permitting policies and practices should be **streamlined to expedite implementation** of renewable energy projects. It is requested that agencies prepare a report to my office identifying the **specific steps they have taken to expedite** the approval of renewable energy projects.

(1) Energy consumption in kilowatt hours for the past year (July 1, 2010, to June 30, 2011) FY '11 (kWh consumption);

Data were received directly from the electric utilities and are presented in Table 2.

FY '11 (paid for kWh consumption);

Data were received directly from the electric utilities and are presented in Table 4.

(2) Steps taken to **inventory, investigate, plan, and implement** energy reduction efforts.

AG: The department continues to issue reminders to staff to “Switch it off,” keep blinds closed, and report equipment malfunctions. AG has also instituted a practice to leave off unnecessary hallway lights. All new equipment purchases must be ENERGY STAR® or approved by Administrative Services Office if not ENERGY STAR®.

The department will participate in the iConserve campaign, asking employees to shut down computers when leaving the office for 45 minutes or more and to remove or unplug personal devices.

DAGS: DAGS-PWD has initiated Energy Saving Performance Contracting (ESPC) projects, for the majority of DAGS-managed facilities.

DAGS-PWD, on behalf of the HSPLS implemented retro-commissioning on all libraries statewide during FY 2010, to the extent funding was available.

DAGS-PWD, on behalf of the Department of Public Safety (PSD), has initiated an ESPC project for various PSD facilities.

Under the ongoing “DAGS Capital District, Energy Savings Performance Contracting, Phase 1 Buildings, DAGS Job No. 52-10-0599” project, DAGS-PWD also initiated the iConserve program for State employees working in the ten (10) impacted State office buildings situated in Downtown, Honolulu. The overall intent of the iConserve program is to change State employee behavior patterns through actions that enlighten State employees about small behavior changes, such as turning off lights, closing doors, etc., which contribute to and help sustain energy savings.

DBEDT: DBEDT is active in inventorying major energy efficiency and renewable energy projects in the state and collecting state facility data. As of 2008 DBEDT obtained releases from the various agencies to receive their utility data direct from the utility to allow DBEDT to consolidate consumption and cost data and track agency progress. Using this data which went back to 2005, DBEDT established a baseline year and ran analysis for each additional year.

DBEDT set up an ENERGY STAR® Portfolio Manager master account that is linked to all agency sub-accounts to compile information and maintain data for facilities across the state. ENERGY STAR® Portfolio Manager is a free online tool for comparing building performance with similar buildings nationwide and provides building managers information that helps prioritize investment.

The Strategic Industries Division in collaboration with the Research Economic Analysis Division is developing a state facilities database with the goal of including all facility specs collected during benchmarking, utility (electricity and water) consumption and cost data, demand-side management rebates, indoor environmental quality data, and info on any improvement projects.

DBEDT also monitors the development of renewable energy and energy reduction projects in the state and their impact on our Renewable Energy and Energy Efficiency Portfolio Standards (HRS §269-96, Act 155). The project database is currently under development and will be maintained by DBEDT.

DBEDT applied for a \$350,000 grant from the US Department of Energy. The goal of the proposal is to strengthen, enhance, and expand the State's existing energy efficiency program by using ENERGY STAR® Portfolio Manager (PM) to benchmark appropriate State Executive Branch facilities (up to 275 buildings in the State Executive Branch Portfolio) and use the results to encourage state agencies to bundle facilities to pursue energy efficiency through energy savings performance contracts or other financing mechanisms. The State will document, analyze, and showcase a whole building retrofit and analyze 10 large State Office buildings that have already been retrofitted to provide information and documentation for best practices which could be replicable in the public and private sectors. The State will also identify, assess, and develop strategies to overcome barriers that hinder adoption of energy efficiency in buildings; partner to provide training that addresses building operations and management best practices; and address financing mechanisms and innovative programs to encourage energy efficiency in buildings.

DCCA: Continued to work with DAGS to monitor and review AC temperature data and made adjustments to air-conditioning system controls to correct areas of inefficiencies. DCCA monitored monthly energy consumption to ensure timely actions to address issues whenever necessary.

DHHL: DHHL will continue to keep an inventory of department electric meters, departmental operations and construction.

DHRD: The department continues to encourage all employees to implement energy conservation practices such as turning off hallway and elevator lobby area lights at the end of the day; as well as turning off copier machines and computers rather than leaving the equipment on sleep mode.

DAGS implemented the following energy conservation initiatives for the Leiopapa A. Kamehameha building, which this department occupies: (a) installed direct digital controls for the air conditioning system to improve air temperature and circulation in the building; and (b) installed a new revolving front door to conserve air conditioning loss.

DHS: DHS is a participating department in the State's Lead By Example program. As a part of this statewide project, DHS is developing a plan to implement energy reduction efforts.

DLIR: DLIR and Department of Taxation are planning a joint Energy Conservation Workshop open to all employees on August 31, 2012. DLIR will continue to evaluate current efforts to reduce energy usage by monitoring and reminding all offices of the need to adhere to energy efficiency practices such as turning off electrical lights, printers, copier machines, and computers when not in use. We will also continue to educate, encourage and promote energy reduction efforts to our employees via meetings and memorandums.

DLNR: DLNR continues to review internal policies, rules, and practices regarding permitting requirements affecting renewable energy development. To the extent possible, DLNR streamlines permitting policies and practices to expedite implementation of renewable energy projects. Three of these permitting processes are detailed below.

DLNR issuance of Conservation District Use Permits

The Office of Conservation and Coastal Lands (OCCL) oversees activities within the Conservation District. OCCL is proposing new rules state as follows: “Hydroelectric, wind generation, ocean thermal energy conversion, wave, solar, geothermal, and other renewable power generation facilities from natural resources; includes generation, conversion, transmission facilities and access roads. Renewable energy projects that are properly sited and minimize impacts to natural, cultural, and recreational resources shall be expedited in the application review and decision-making process.” Thus, renewable energy projects can be located within the Conservation District. Under the new proposed rules, renewable energy projects can be located within the Conservation District with approval by way of a Conservation District Use Permit. Language is also proposed that would require the Department to expedite projects that minimize impacts to natural, cultural, and recreational resources. OCCL initiated the rulemaking process in 2010 and therefore these proposed changes may take effect in the near future.

DLNR issuance of Incidental Take Licenses

In order to be in compliance with state and federal endangered species laws, energy and resource development projects that impact threatened and endangered species must be issued an Incidental Take License by both DLNR and the United States Fish and Wildlife Service (USFWS). Both agencies require that project proponents complete a Habitat Conservation Plan (HCP) prior to the issuance of the take licenses. In order to minimize procedural burdens on the applicants, DLNR works cooperatively with USFWS in concurrently processing the request for take licenses. After notice in the periodic bulletin of the Office of Environmental Quality Control, a public hearing is held on the islands affected, which is, whenever possible, held jointly with USFWS. The Board of Land and Natural Resources (BLNR) may approve the federal HCP without requiring a separate version if the federal HCP satisfies all the criteria of the state endangered species statutes. All state agencies, to the extent feasible, work cooperatively to process applications for HCPs on a consolidated basis including concurrent processing of any state land use permit application that may be required. In order to further streamline the process of approving an HCP and the issuance of an Incidental Take License, the state established the Endangered Species Recovery Committee that serves as a consultant to the BLNR by reviewing all HCPs and making recommendations regarding whether they should be approved.

DLNR Revised Application to Lease State Lands

For instances when Renewable Energy Producers are interested in leasing state lands, the Application Form has been revised to comply with Section 171-95 (a) (2)(3)(c), HRS. Land Division takes steps to process the request in a timely manner. Staff coordinates the Applicants' request for a lease with OCCL, DOFAW, OHA, and other government agencies. Then, staff obtains approval from the Land Board for the issuance of a direct lease.

Division of State Parks (SP)

SP continues its implementation of energy efficiency and conservation strategies started in FY 2009 for park facilities that include the retrofitting and replacement of existing lighting fixtures and systems; installation of new fixtures and ENERGY STAR® appliances; repairing and replacing electrical and water systems to reduce energy and water leakage and waste; and incorporating energy efficiency measures in the new heating, ventilation and air conditioning system (HVAC) in the 'Iolani Palace State Monument, anticipated to start in 2012.

In coordination with DLNR's Engineering Division, design for solar powered park facilities such as water, sewer, lighting and energy systems have begun. Statewide facilities include the well pumps and baseyard needs at Koke'e State Park and Polihale State Park on Kaua'i; tunnel lighting in Diamond Head State Monument on O'ahu; solar panels for the rental cabins at Wai'anapanapa State Park on Maui; and solar panels for the rental cabins and facilities at Hāpuna Beach State Recreation Area and Mauna Kea State Recreation Area on Hawai'i. Electrical utility vehicles are being used in Wai'anapanapa State Park, Maui as an option to fossil fueled service vehicles and trucks. Electrical utility vehicles, as an option to fossil fueled service vehicles and trucks, are being used in Wai'anapanapa State Park, Maui, at various park areas on O'ahu, and is planned for park use on Hawai'i.

DOA:

1. Continued to work with DAGS Central Services Division in identifying possible energy efficiency projects.
2. Continued to retrieve information electronically on gas consumption and odometer readings from DAGS Automotive Management Division, Tesoro and Hawai'i Petroleum for FY12.
3. Continued to use vehicle refueling log for program that have vehicles that refuel at places other than DAGS, Tesoro and Hawai'i Petroleum for FY12.
4. Continued to retrieve information electronically on gas consumption and odometer readings for each vehicle from DAGS Automotive Management Division, Tesoro and Hawai'i Petroleum for FY12.
5. Reminded staff of department's Energy and Water Conservation and Resource Efficiency Program which provides policies, guidelines and practices intended to minimize energy, fuel and water consumption and implement resource-efficient operations. Includes department's target consumption goals for electricity, fuel and environmentally preferred products.
6. Distributed DAGS memo requesting employees to conserve energy and to report any water waste from open faucets, leaky plumbing fixtures, and broken and/or inefficiently run irrigation system.
7. Developed spreadsheet to compare data in FY 2009, FY 2010, and FY 2011 on electricity kWh consumption and percentage increase/decrease from previous year and distributed to program managers for their review and information.
8. Provided guidelines for staff at each HDOA facility regarding AC hours of operation and to turn off lights and equipment when not in use.

DOD: Per Federal mandates: Building energy audits to be performed on 25% of buildings annually or all buildings every 4 years. Projects in FY12 include Kalaeloa Utilities Infrastructure repairs, Achieving the Energy Independence Mission (AEIM)[SEAD consultants], Level I energy audits, Energy audits performed by department staff, HIENG Reviewing ENERGY STAR® Portfolio Manager, and Reviewing UESC energy assessment. Projects reviewed for energy efficiency efforts: HVAC, controls, lighting, and data centers.

DOE: The DOE is about to implement our Energy Efficiency and Sustainability Master Plan (EESMP). A component of the master plan requires energy efficient auditing and metering for each DOE facility statewide. These audits will determine what energy efficiency measures (EEM) should be implemented for the facilities as well as the size of the facilities' renewable energy generation systems. The EEM projects would be constructed in parallel with the sustainable energy generation projects and both will be funded through PPA agreements.

DOH: The DOH is aware of energy saving measures. DOH implements and initiates these measures whenever possible.

DOT-Harbors: In conjunction with increased staff awareness/knowledge of LEED methodology, other energy conservation technologies, and compliance with Acts 96 and 160, our CIP and special maintenance projects are the steps taken to inventory, investigate, plan, and implement energy reduction efforts.

All energy dependent equipment is on inventory. Energy usage has been investigated. Plans are regularly evaluated and subject to continuous improvement for reducing energy usage. Implementation efforts include reducing, re-using and recycling supplies and making vehicular trips as productive as possible by combining purposes of trips.

DOT-Highways: The Highways Division has an inventory of equipment and a baseline of energy consumption. We have also started the replacement of our traditional traffic signal lamps with the new LED lamps, as well as a systematic replacement of older computer equipment with ENERGY STAR® compliant equipment with LCD screens and variable speed CPUs. The interior lighting at our Kaua'i District Office has also been replaced with new LED lights. PV systems were also installed at our Kaua'i District Office and Moloka'i Baseyard facilities.

DOTAX:

- DOTAX continues to follow Energy Conservation best practices as outlined by the Director of Taxation in his memorandum dated March 1, 2006.
- DOTAX continues to monitor and control usage of after hour and weekend air conditioning.

FTZ: The FTZ has replaced the less efficient 300 watt incandescent bulbs in the warehouse with just eight (8), energy-efficient 40-60 watt CFL bulbs. These bulbs are only used at night for security purposes.

HCDA: There are no plans to expedite approval processes as already HCDA has Administrative Rules that mandate decisions be made within a set amount of time or else permits are automatically approved; however HCDA is:

- Currently requiring, as a permit condition, private developers to consult with HECO, DBEDT Energy Division, and the Board of Water Supply on ways to conserve/preserve resources; and

- Considering, as part of its Mauka Area Plan & Rules incorporation of LEED standards as a requirement of all development - public or private - in its Kaka‘ako Community Development District. Same is true at Kalaeloa.
- In June 2011, HCDA installed and made available to the public an Electric Vehicle charging station at its “Piano Lot” parking lot located at 160 Ahui Street in Kaka‘ako.
- HCDA is negotiating with several companies to lease land in Kalaeloa for the development of photovoltaic energy farms that has the potential to generate up to 20 MW of electricity. Discussions are in the preliminary stages and development is subject to major infrastructure upgrades in the Kalaeloa Community Development District.

HHFDC: HHFDC has continued to make strides in implementing energy reduction efforts and has set in motion mini-projects that have shown to be effective in reducing overall carbon footprint.

A lighting inventory of the number and type of fixture/lamp has been conducted. Wherever possible all incandescent lighting has been replaced with more efficient fluorescent or LED. This is probably the leading contributor towards reduction in power usage.

As a result of the inventory of HVAC Systems, a fully implemented preventive maintenance program has been set in motion. This program not only improved overall reliability and performance of the systems, but has improved the air quality for all the employees and visitors to the business offices. The increased air flow has also been improved thus increasing the cooling efficiency of the HVAC Systems with less strain on the associated equipment.

HHFDC is continuing to use past Physical Need Assessments (PNA) and recent Capital Needs Assessments (CNA) as a guide to better monitor and plan for major equipment replacements within mixed use resident/commercial buildings.

HHFDC’s plan is to continue to review inventories and as new technologies become available, study the impact on the immediate environment and look for ways to implement them within the department’s housing system and better its sustainable posture.

HAWAII HOUSING FINANCE & DEVELOPMENT CORPORATION					FY 2008 vs. FY 2012		
AFFORDABLE HOUSING ELECTRICAL CONSUMPTION							
			KWHs Consumed	Percent Change		Electrical Cost	Percent Change
BASE LINE YEAR	FY08		4,781,493	20.93%		\$1,036,663.38	-14.89%
PRESENT YEAR	FY12		3,780,596			\$1,191,061.12	
OVERALL CHANGE			1,000,897			\$ (154,397.74)	

HSPLS: Retro-commissioning (RCx) projects, retrofitting to energy efficient light fixtures, tinting of window and photovoltaic system installations are being planned, implemented, or completed for various DAGS libraries statewide.

HHSC: Leahi Hospital currently has a contract with an electrical engineering firm to determine amount of photovoltaic panels that can be installed at each building. Leahi Hospital also has CIP funding to implement installation of photovoltaic panels to help reduce electricity usage.

HPHA: Currently, we have a consultant selected and are obtaining internal approvals to begin negotiations to provide a facility-wide green assessment and report, or Green Physical Needs Assessment (GPNA). The report will include electronic drawings, site surveys, building assessments, etc., to include recommendations for potential energy-savings and environmental strategies for our existing projects statewide. Estimated completion of this study is October 2013. We will use this report to schedule a plan of action for the next five years.

NELHA: Monitors energy usage to reduce seawater cost to clients and installed in FY 12 three new energy efficient variable frequency drives at its 55" seawater distribution system.

NELHA continues to replace all its less efficient incandescent bulbs throughout the facility with energy-efficient CFL bulbs as its budget allows and has as its goal to have all energy-efficient CFL bulbs in place by FY14.

PSD: PSD is currently in the process of initiating a second solicitation for the preparation of Investment Grade Energy Audits to be performed at all neighbor island correctional facilities as well as the Women's CCC and Waiawa CF on O'ahu. We anticipate that the IGAs will commence around May/June 2013 and be completed by January 2014. Funding would be sought from the 2014 Legislature and become available to award ESPC's by the beginning of FY 2015.

UH:

- UH-Maui College, Honolulu CC, Kapi'olani CC, Leeward CC, Windward CC, and Kaua'i CC all contracted with Johnson Controls Inc. for Energy Conservation/Performance Contract.
- UH-Hilo - working on an Energy Management Project that will re-commission all major facilities.
- UH-Hilo - the second phase of the campus wide sub-metering project is ready for IFB.
- UH-Hilo - Working on an Energy Strategic Energy Master Plan, that will put an emphasis on alternative energy production.
- UH-Mānoa - Is presently completing an RFP for the construction and installation of PV arrays on the top deck of the Parking Structure, the roof of the Law School, and over the parking lot 'Ewa of the Law School. It will be a PPA, and will, depending on which option is selected, generate 1.5 to 2.0 MW of electricity.

(3) A plan or alternatives to reduce energy consumption in the future.

AG: The department is working with DAGS to have air conditioning systems evaluated and updated, if deemed necessary. AG has also worked with DAGS to reduce lighting in lesser used areas and hallways and assisted them to replace lights with energy-efficient light bulbs and expand recycling efforts.

DAGS: Our plan includes:

1. Retro-commissioning (RCx) projects are being implemented for various DAGS facilities statewide (pending availability of funds); on-going training and partnering with HECO in conjunction with DBEDT; sub-metering where feasible and funds are available to more accurately monitor energy consumption; updating and implementing additional policies; and keeping abreast of the latest energy reducing innovations and practices.
2. PV installations are being planned and installed at facilities throughout the State.
3. Initiated development of a Statewide long-term energy plan for DAGS-managed facilities.

Under the ongoing “DAGS Capital District, Energy Savings Performance Contracting, Phase 1 Buildings, DAGS Job No. 52-10-0599” project, DAGS-PWD also initiated the iConserve program for State employees working in the ten (10) impacted State office buildings situated in Downtown, Honolulu. The overall intent of the iConserve program is to change State employee behavior patterns through actions that enlighten State employees about small behavior changes, such as turning off lights, closing doors, etc., that contribute to and help sustain energy savings.

DBEDT: Act 207, SLH 2008, gives DBEDT the authority to coordinate and facilitate the permitting for renewable energy projects with capacity to generate 5MW or more or 100K (as amended in 2011) gallons of biofuel per year. DBEDT is required to create a "Permit Plan" for qualified renewable energy facilities, coordinate with all permitting agencies to address permitting hurdles, approve the required environmental review document upon compliance with HRS 343, and approve all permits if not approved or denied by the appropriate state or county permitting agency within 12 to 18 months after acceptance of the final environmental review document. DBEDT is currently working with developers and the relevant state and county agencies to establish this process. DBEDT has assisted countless other renewable energy developers through the permitting process, including many projects online today. DBEDT's role is as a liaison between other state agencies and the private sector.

DBEDT, with the help of private contractors, has also developed a permitting guidebook identifying all the potential permits a renewable energy developer would need for a given technology and location. On the Hawai'i Clean Energy Initiative website, DBEDT has developed an automated permit identifying tool and has made available all the necessary permit applications and provides practical information to help guide developers through the permitting process. The State Energy Office and Office of Planning recently launched a GIS tool to identify renewable energy potential and permitting requirements for any given site in Hawai'i; Renewable EnerGIS. DBEDT also provided funding for the State of Hawai'i Department of Health (DOH) to put all DOH environmental permits online. All of these tools are currently available to the public.

DBEDT has developed, in coordination with Hawai'i Community Reinvestment Corporation, a loan loss reserve program called GreenSun Hawai'i for financing energy efficiency projects, one of the first of its kind. GreenSun Hawai'i makes energy improvements for homes, multi-family projects, nonprofit organizations and businesses affordable by partnering with local banks and credit unions statewide and providing participating lenders access to a loan loss reserve designed to absorb first losses on loans made to finance eligible energy efficiency and renewable energy system installations. As part of the Hawai'i Clean Energy Initiative, which aims to achieve 70% clean energy by 2030, GreenSun Hawai'i aims to increase the use of solar energy, decrease the state's dependence on imported fuel and lower overall energy costs throughout the islands. At the end of FY 2012 32 loans were approved. The aggregate loan amount exceeded \$799,000. Annual estimated savings in kWh totaled 231,910 with a corresponding reduction in CO2 emissions of 334,815 lbs. Utility cost savings were estimated to be close to \$95,000 a year.

Updated information on the US Green Building Council's LEED Program, Net Zero Energy Communities and Homes and High Performance Building was presented by DBEDT's consultant and others such as: representatives of the California Energy Commission, Lend Lease, Forest City, Gentry Homes and Armstrong Development, in addition to the Moana Surfrider during two breakout sessions at the Asia Pacific Clean Energy Symposium and Expo on September 14, 2011 at the Hawai'i Convention Center. Between both breakout sessions at least 100 participants total were exposed to the most up to date information on the programs, projects and processes involved to achieve ENERGY STAR®, net zero energy and high performance building in Hawai'i and beyond. A global perspective on green building initiatives and the need to pursue more aggressive pathways to energy and resource efficiency and help move toward net zero energy, water and waste in order to achieve the Hawai'i Clean Energy and other federal goals for clean energy and green building.

Green Building Technical Assistance was provided during the week of Sept 26-30, 2011 to the following agencies and entities: the State of Hawai'i Department of Accounting and General Services, NORESO, DBEDT, Hawai'i Public Libraries System, Department of Health, the Moana Surfrider and the Sheraton Waikiki and Royal Hawai'ian Complex. Over 20 individuals were involved in the meetings to discuss LEED for Existing Buildings: Operations and Maintenance Assessments for several potential projects. A waste audit of the State of Hawai'i's State Office Tower was conducted to determine the recycling rate and potential for the SOT during the three month LEED EB: O&M performance period.

As of April 30, 2012, there were 54 participating (11 on Maui, 5 on Kaua'i, 3 on Hawai'i, 2 on Lanai and 33 facilities on O'ahu) in the ENERGY STAR® Technical Assistance Program. There were a total of 23 ENERGY STAR® Building labels generated. Over 20 million square feet have been benchmarked under the ENERGY STAR® Portfolio Manager Program and the work done under the ENERGY STAR® contract between DBEDT & The Chong Group.

DCCA: The department will review energy conservation practices and if needed, send reminders and recommendations for energy conservation measures; continue to monitor air-conditioning usage; participate in state-sponsored conservation projects; and explore I.T. strategies in energy consumption reduction.

DHHL: DHHL conducts in-house energy programs to inform all staff to reduce energy consumption using guidelines and recommendations from the educational leaflet from the US Department of Energy.

DHRD: The department will continue to encourage all employees to implement energy conservation practices and will work with DAGS to identify energy efficiency initiatives.

DHS: DHS is a participating department in the State's Lead By Example program. As a part of this statewide project, DHS is developing a plan to reduce future energy consumption.

DLIR: DLIR plans to do the following to reduce energy consumption:

1. Continue to reinforce and insure adherence to the Conserve Energy Initiative guidelines set forth by the Administration. Continue to monitor and conduct self-audits of DLIR offices to identify and reduce energy consumers such as small appliances and electronic equipment. Share practical strategies and information with employees about everyday energy

conservation at work to strengthen their awareness of energy consumption through workshops and departmental correspondence.

DLNR: The 'Iolani Palace State Monument HVAC improvement project was revised due to cost constraints where the climate control equipment will be housed within the Palace. The energy efficiency measures that will be incorporated into the in-Palace system and those implemented through operational practices will address their annual energy expenditures of approximately \$252,000. This project is scheduled to start during July 2012 and completed by December 2013.

SP is continuing its energy reduction effort through the replacement of old and aging lighting and electrical systems and appliances statewide and incorporating conservation measures for staff and park users. Parks will look into developing solar and/or wind driven power sources that will be incorporated into power modules for park staff to recharge electrical utility vehicles and other energy needs. Funding has been appropriated for the design of these facilities. Also, with more park equipment and facilities utilizing solar power options, SP anticipates in reducing its annual energy expenditures including gas and oil through the replacement of electric utility and service equipment.

SP is considering the design and construction of a “green” State Park. The Mauna Kea State Recreation Area appears to be a likely candidate for a solar powered energy module that can power the park’s rental cabins, dining hall, barrack cabins, and water/sewer systems. The constant sunlight in this Pōhakuloa region and the vast open space provides the necessary amenities needed to develop this type of power source. This project is in the planning stages as all required permits and approvals are still needed as well as consultations.

DOA:

1. As funding allows, initiate lighting and window tinting operating projects and retro-commissioning CIP projects.
2. Send out reminders to employees to practice energy and water conservation measures.
3. As funding allows, replace air conditioning systems and units with energy-efficient ones.
4. As funding allows, upgrade to more efficient pumps and motors on irrigation systems.
5. As funding allows, install timers and other electronic controls on selected irrigation systems.
6. Promote car-pooling and bicycling.
7. Reduce operating hours of air conditioning system.

DOD: Some projects are per Command directed. Energy efficiency and reduction is a major concern. General repair and maintenance practices are reviewed for energy efficiency measures. Multiple HVAC designs are in process to replace old and inefficient systems. Energy Management Systems are being planned at several “energy hogs.” Lighting retrofits: replacing T12 with T8s, replacing HPS with CFL, MH or LED. Training schedules implemented to reduce A/C runtime.

Training schedules implemented to reduce A/C runtime. HVAC replacement projects in construction: Building 282, Building 306, Troop Command. HVAC controls projects: Building 117. Two PV projects completed. RTI (EST building) and Building 1898 (Kalaeloa).

DOE: The DOE has developed and about to implement its Energy Efficiency and Sustainability Master Plan (EESMP). The purpose of the EESMP is to develop and act on long range energy efficiency and energy revenue opportunities for the DOE. It links energy efficiency, water conservation, heating and cooling systems renewable generation, building management systems,

and other existing activities with future strategic geographic initiatives to take advantage of energy investment opportunities. The master plan contains seven overarching initiatives:

- Reduce the cost of energy at all DOE facilities;
- Inspire a diverse portfolio of new, clean, on-site energy generation;
- Harness the State's diverse energy portfolio to local electric grid needs;
- Aggressively implement energy efficiency and conservation measures;
- Engage dynamically with emerging clean transportation and power technologies;
- Support the goals of the State's Renewable Energy Portfolio Plan of 40% energy from renewable resources by 2030, and the DOE's goal of 90% clean energy by 2040;
- Leverage these transformational activities to create educational opportunities and stimulate the local economy by requiring the use of 100% local businesses for construction labor.

The DOE plans to issue a Request for Qualifications/Request for Proposal within the next month to select a vendor that will begin the implementation of this plan. The full plan will be implemented in the next five years.

DOH: The DOH will be implementing a number of projects, which include:

- Kona Health Center, Reroof and Other Improvements, DAGS Job No. 11-20-2658
 - Foil faced R30 batt insulation installed at new metal roof. Construction should be completed by March 2013.
- Hilo Environmental Health Center and Waiākea Health Center, Reroof and Other Improvements, DAGS Job No. 11-20-2684
 - In the laboratory building, replacing three older split air con units with new energy efficient units with a 14.5 SEER rating.
 - In the laboratory building, installing five new tankless water heaters to replace one large tank.
- Kamauleule Building (DOH Lab) Mechanical System Improvements, Phase I, DAGS Job No. 12-20-2686
 - Conduct an audit and study of the mechanical systems at the State Lab to identify various options for reducing energy. Final report scheduled for distribution in January 2013.
- Department of Health Facilities, Statewide Energy Efficiency Improvements, DAGS Job No. 16-20-2653
 - Installation of super T8 lamps and electronic ballasts at Diamond Head, Lanakila, Leeward, Windward Health Centers and Hale Complex.
- Diamond Head Health Center, Air Conditioning System Improvements, DAGS Job No. 12-20-2597
 - Installation of new energy efficient FCU and AHU at fourth floor. Construction to start March 2013.
- Waimano Ridge, Hale Complex, Reroof, DAGS Job No. 12-20-2649
 - R15 rigid insulation installed with new TPO roofing at 5 buildings in this complex. Completion scheduled for Feb 2013.

- Hanapepe Health Center. Building and Site Improvements, DAGS Job No. 14-20-2670
- Replacing older window air con units with 6 new energy efficient split units. 14.5 and 15 SEER.
- R19 rigid insulation installed at a new single ply roof. Construction to start Fall 2013.

DOT-Airports: The Airports Division will inform its employees and tenants about saving energy, educate its engineering staff regarding building green and using energy-efficient technology in order to implement whole-building design practices, and upgrade design and construction standards and guidelines according to the LEED standard.

DOT-Harbors: Harbors Division will continue its efforts towards increasing staff awareness/knowledge of LEED methodology and other energy conservation technologies.

DOT-Highways: All future building projects will be designed to meet LEED silver certification. All new traffic signals will use LED lamps, and all new computer equipment will be ENERGY STAR® compliant. We are also in the process of installing PV systems at our Hawai'i District Office, Maui District Office and Ke'anae Baseyard facilities. The Highways Division is also working on replacing our air conditioning systems statewide to reduce energy consumption.

DOTAX: DAGS is continuously working on energy savings measures for the Ke'elikōlani Building in which the DOTAX O'ahu District Office is located, and DOTAX will coordinate with DAGS on any projects related to the reduction of energy consumption in the future.

FTZ: The FTZ is participating with DOT-Airports in an RFP for solar electricity generation for its 5 acre roof in downtown Honolulu. When installed, this 550 kW system will provide energy for the FTZ effectively reducing its electric costs to zero for the next twenty (20) years.

HCDA: HCDA will incorporate energy savings devices and procedures in future developments as well as retrofit where appropriate. Also, HCDA is exploring installation of photovoltaic system on CFS3, Park Caretakers and Net Shed buildings.

HHFDC: HHFDC will continue to set the example for other State, County and City housing departments to follow in delivering a better and more sustainable environment in which to live.

Future plans are to continue to look for more advantageous methods for reducing carbon footprint, while affording tenants with the best of living conditions.

Sustainable Housing Energy Plan

- (1) Lighting - Inventory, Research Alternatives and Execute Change
 - a.) Exterior
 - 1.) Street / Parking Lot Lights
 - 2.) Wall Mounted Security Lights
 - b.) Interior - Residential & Commercial
 - 1.) Apartment Ceiling / Wall Sconces
 - 2.) Office / Warehouse Ceiling
 - 3.) All Hallways & Restrooms
- (2) Major Machinery - Large Energy Consumers

- a.) Elevators (3 Res / 2 Com per 3 Building) = 15 Total
 - b.) Air Condition (2 HVAC Plants)
 - c.) Hot Water Heating Boilers
 - d.) Emergency Diesel Generators (1 per 3 Building) = 3 Total
- (3) Minor Machinery - Small Appliances
- a.) Circulating / Booster Pumps and Motors
 - b.) Ventilation Fans and Motors
 - c.) Range / Oven (Electric & Gas) [1436 Units]
 - d.) Refrigerators [1436 Units]

At the recommendation of maintenance and repair vendors, when equipment has reached its expected life expectancy and economic cost efficiency we are replacing all lighting and machinery with better more efficient ENERGY STAR® equipment or the equivalent.

Past power consumption has indicated drastic reductions by just replacing outdated and inefficient equipment. The combination of mechanical and behavioral changes is allowing energy consumption to be reduced to a more manageable level.

HHSC: Both O‘ahu Region facilities have replaced lighting with energy efficient lighting and water closets with low flow fixtures. Leahi will be installing photovoltaic panels within one year and Maluhia is seeking funding to do the same.

HPHA: Once the above-referenced energy contracting consultant is engaged, the HPHA will receive a strategy and a plan from the consultant to reduce energy consumption at our properties. We will then obtain approvals and funding necessary to begin implementation of the recommendations.

HSPLS: Retro-commissioning (RCx) projects, retrofitting to energy efficient light fixtures, tinting of window and photovoltaic system installations are being planned, implemented, or completed for various DAGS libraries statewide.

NELHA: Received a \$412,562 reimbursable federal grant from Alliance for Sustainable Energy, LLC manager and operator of NREL. Funds are for the development and deployment of distributed energy systems at NELHA and to update NELHA's strategy as a demonstration site for Distributed Energy Resources (DER). RFP's will be issued in FY 13.

PSD: On the capital development side, PSD needs to ensure every effort, where practicable, is made to ensure new construction as well as renovations, alterations and improvements made at existing facilities to conform with LEED Silver and, additionally, the intent of Act 160. Moreover, every effort must also be made to make facility staff and residents aware of the need to be energy conscious.

UH:

- UH-Maui College - Installed a 12 KW PV system on its rooftop via student interns from its Sustainable Construction Program. Installed a 8 KW PV system on a rooftop of a new building; and installed a 1.2 KW wind turbine system. Pending installation of new PV system with PPA contract.
- Leeward CC - Pending installation of new PV system with new Education Building and PPA contract.

- Kapi'olani CC - Pending installation of new PV system with PPA contract.
- Honolulu CC - Pending installation of new PV system with PPA contract.
- Kaua'i CC - Installed 80 KW PV system to One Stop Center and pending installation of new PV system with PPA contract.
- UH-Hilo - A total of 1800 KW PV system been in operation. An estimated 462 KW PV system will be in the Student Services Building project. A 8 KW PV system will be on the Hawai'ian Language College.
- UH-Hilo - working with DBEDT on a campus wide energy performance contract to find all opportunities to reduce energy consumption.
- UH-Mānoa - Depending on the outcome of the PPA arrangement described in Act 160 (2) above, installation of more such arrays will be considered. Student sustainability organizations are forming into the "Sustainability Group," and are promoting competitions in student dorms to determine the dorm floors who consume the least amount of energy. A major Storm Drainage Master Plan being developed by R.M. Towill Ltd. will identify ways to capture, retain, and reuse storm water runoff from buildings.

Benchmarking Requirement

(1) Each state department shall benchmark every existing public building that is either larger than five thousand square feet or uses more than eight thousand kilowatt-hours of electricity or energy per year and shall use the benchmark as a basis for determining the State's investment in improving the efficiency of its own building stock. Benchmarking shall be conducted using the ENERGY STAR® portfolio management or equivalent tool.

The following agencies did not reply to this section: HCDA and NELHA.

This section does not apply to the following agencies because DAGS manages their facilities: AG, DCCA, DHRD, DHS, DLIR, and DOTAX.

DAGS: 19 O'ahu Facilities were analyzed. 8 facilities were certified and received an ENERGY STAR® Plaque, 1 facility's score was too low to qualify as an ENERGY STAR® Facility and 9 facilities were not eligible to be benchmarked since they did not fall into one of the ENERGY STAR® categories or had multiple buildings on one electric meter.

The ENERGY STAR® program does not allow benchmarking for campuses (having one electric meter for multiple buildings), parking structures and when a building has a large percentage used as computer rooms.

As the department works to improve the energy efficiency of its facilities, DAGS will continue to benchmark facilities with the ENERGY STAR® Program. Currently, 13 O'ahu Facilities are certified with the ENERGY STAR® Program.

Benchmarking for Neighbor Island DAGS facilities is currently underway.

DBEDT: DBEDT has been active in helping other agencies comply with these requirements through the following activities:

Arranging and promoting a number of online trainings on using the ENERGY STAR® Portfolio Manager online tool and distributing information on benchmarking to other agencies.

Assisting other agencies to meet the benchmarking requirements of Act 155 (SLH 2009) by collecting data for input into ENERGY STAR® Portfolio Manager. This data included square footage, occupancy, number of computers, space classifications, percentage of area air-conditioned, hours of operation, and indoor environmental quality measures. To date 277 facilities have been benchmarked and 21 buildings have received the ENERGY STAR®.

If a benchmarked building received an ENERGY STAR® score that qualified for certification, DBEDT assisted in completing the application for certification by conducting the necessary indoor environmental quality assessments. These include lighting measurements, CO2 levels, temperature, and humidity measurements.

Setting up and managing a master state ENERGY STAR® Portfolio Manager account. Agency accounts were linked into the master account so that all benchmarked state facilities' data could be accessed, extracted, and analyzed from a single account. The information collected through the master account is also used in the DBEDT state facility database mentioned above that includes not only Portfolio Manager data, but utility data, demand-side management information, improvement project details, and indoor environmental quality measurements.

DHHL: DHHL headquarter building constructed in 2008 uses ENERGY STAR® appliances and equivalent tool.

DLNR: DLNR had initiated the first steps to benchmarking by assessing the portfolio of properties. DLNR is in the stages of identifying public buildings that are larger than 5,000 sq. ft (under-roof) or uses more than 8,000 kwh of electricity per year. The qualifier of under-roof is used since many DLNR properties are baseyards that have large storage areas but relatively small office areas under-roof. DLNR will continue to gather information on its properties to determine which buildings to benchmark using the ENERGY STAR® portfolio management tool.

DLNR will work with DBEDT for assistance with benchmarking using the ENERGY STAR® portfolio management tool on the properties identified. See Appendix 8 for a table of building data collected so far under this effort.

DOA: Benchmarking study has not been performed due to lack of funding. Benchmarking will be performed when funding becomes available.

DOD: DOD is reviewing ENERGY STAR® Portfolio Management. Currently, HIARNG utilizes Utility Manager Pro, a NGB software, while some states do batch load data into Portfolio Manager. FY11, utility site accounts have been modified to reference per building usage versus prior per utility account usage. UMPRO, NGB software, is being phased out. Portfolio Manager needs multiple building profiles created.

DOE: About 100 schools have been added to Portfolio Manager (PM). Through the implementation of the DOE's EESMP, as well as the hiring of additional resources, the DOE plans to complete benchmarking for all 250 plus DOE facilities statewide within the next two years.

DOH: The Department of Health is in the process of addressing this.

DOT-Airports: The Airports Division has plans to benchmark the major airport terminal buildings. The project is in its planning phase and will inventory the existing facilities energy usage and conditions according to ENERGY STAR® portfolio.

DOT-Harbors: Harbors Division will be addressing this benchmarking through (1) staff training for ENERGY STAR® portfolio management or its equivalent; and, (2) implementation through identification and benchmarking its affected buildings.

DOT-Highways: One building (Ali'i'aimoku Building) owned by the Highways Division applies to Act 155, SLH 2009, and it was assessed in 2010.

FTZ: Will follow DBEDT's assessment strategy.

HPHA: The consultant, as stated above, that will provide a GPNA will provide the benchmark documentation for all our projects statewide as a basis of future design.

HHFDC: HHFDC has been using the FY 2008 as its benchmarking year. An ENERGY STAR® Data Collection Worksheet has been completed for each affordable housing

development. Additional data will be submitted in the coming months to better determine overall rating. This data collection includes both the residential and commercial aspects that apply to each property.

It is HHFDC's desire that with the analysis and close monitoring of this information HHFDC will be able to better implement the necessary changes that will further improve its sustainable posture. HHFDC stands committed to making every effort towards decreasing dependency on foreign oil. This can be accomplished by increasing use of solar, wind and wave sources which are readily available for power production, along with the conservation of other essential natural resources.

HHSC: At Leahi Hospital, it is not possible to benchmark any building because all the electricity usage goes back to one meter. When funding becomes available, we plan to install check meters for each building.

HSPLS: DAGS on behalf of the HSPLS, are benchmarking library facilities statewide through the Retro-Commissioning projects as funding becomes available.

PSD: PSD needs to seek technical assistance from DBEDT—Energy Management Division to implement Benchmarking at its correctional facilities in FY 2013.

UH: UH-Hilo has one main meter for the main campus. The campus wide sub-metering project is implemented in phases. After the sub-meters are installed, UH-Hilo can effectively measure energy usage of major buildings.

Department of Education Vehicle Fuel Report

Fuel Type: DIESEL

Make	Model	Year	License Plate #	VIN	GVWR	EPA Hwy Fuel Econ	EPA City Fuel Econ	Fuel Type	In-Use Mileage	In-Use Fuel Consum.	In-Use Avg Fuel Econ	Annual Mileage	Annual Fuel Consum	Annual Avg Fuel Econ
FORD	PICKUP	1995	SHA547	1FTEF15Y7SLB50326	6250			DIESEL	212	0.1	2120.0	0	0	0.0
FORD	PICKUP	2003	SHA899	1FTNF20P13ED82432	XXXX			DIESEL	585.1	47.7	12.3	0	0	0.0
FORD	PICKUP	2003	SHA900	1FTNF20PX3ED82431	XXXX			DIESEL	1756	150.3	11.7	0	0	0.0
FORD	PICKUP	2003	SHA901	1FTNF20D33ED82433	5556			DIESEL	3960	386.57	10.2	129	18.02	7.2
FORD	PICKUP	2005	SHB436	1FTSF20P85EA36576	9400			DIESEL	1319	55.4	23.8	0	0	0.0
FORD	PICKUP	2005	SHB437	1FTSF20PX5EA36577	9400			DIESEL	1215	118.67	10.2	0	0	0.0
FORD	PICKUP	2005	SHB438	1FTSF20P15EA36578	9400			DIESEL	2698	211.85	12.7	0	0	0.0
FORD	PICKUP	2005	SHB439	1FTSF20P35EA36579	9400			DIESEL	1571	89.07	17.6	0	0	0.0
FORD	PICKUP	2005	SHB440	1FTSF20PX5EA36580	9400			DIESEL	552	40.09	13.8	0	0	0.0
FORD	PICKUP	2005	SHB441	1FTWF32P65EA36581	9400			DIESEL	2761	189.96	14.5	0	0	0.0
FORD	PICKUP	2006	SHC196	1FTSF20P96EB12579	9400			DIESEL	1419	135.39	10.5	0	0	0.0
FORD	F-250	2006	SHC197	1FTSF20P56EB12580	9400			DIESEL	4380	395.14	11.1	0	0	0.0
FORD	PICKUP	2006	SHC198	1FTSF20P76EB12581	9400			DIESEL	637	68.15	9.3	0	0	0.0
FORD	FLATBED	2006	SHC344	1FDWF36P76EB24319	13000			DIESEL	4909	387.02	12.7	0	0	0.0
DODGE	UTILITY	1999	SHC451	3B6KC26Z3XM580714	8800			DIESEL	42	71.73	0.6	0	0	0.0
FORD	UTILITY	2008	SHC719	1FDSX20R78EA28953	8570			DIESEL	8061	627.02	12.9	0	0	0.0
FORD	UTILITY	2008	SHC741	1FDSX20R98EA28954	9800			DIESEL	50746	4071.85	12.5	8868	712.25	12.5
FORD	UTILITY	2007	SHC749	1FDSX20R38EA28951	XXXX			DIESEL	4358	324.1	13.4	0	0	0.0
FORD	UTILITY	2007	SHC762	1FDWX36R28EA24355	13000			DIESEL	25135	2449.37	10.3	5365	594.46	9.0
FORD	FLATBED	2008	SHD163	1FDXF46R98EA09249	12460			DIESEL	9803	1332.23	7.4	1906	285.5	6.7
CHEV	VAN	1999	SHD164	1GBHG31F3X1153760	9500			DIESEL	19402	1773.77	10.9	3713	343.9	10.8
DODGE	UTILITY	2001	SHD579	386KC25Z51M555191	8800			DIESEL	158	27.79	5.7	0	0	0.0
PTRB	XXXX	2009	SHD701	2NPRH8X79M787259	16000			DIESEL	12418	1230.15	10.1	2484	179.83	13.8
CHEV	PICKUP	2009	SHD705	1GCHC44649E109397	XXXX			DIESEL	3346	267.29	12.5	0	0	0.0
CHEV	PICKUP	2008	SHD706	1GCHC44689E107961	6100			DIESEL	343	25.71	13.3	0	0	0.0
CHEV	PICKUP	2009	SHD707	1GCHK73649F103700	9900			DIESEL	13675	1097.01	12.5	4255	338.17	12.6
FORD	UTILITY	2009	SHD789	1FDSF30R29EA00827	7440			DIESEL	13859	1250.7	11.1	5727	512.84	11.2
FORD	UTILITY	2009	SHD790	1FDSF30R49EA00828	10000			DIESEL	15484	1305.59	11.9	4101	344.16	11.9
FORD	UTILITY	2009	SHD791	1FDSF30R69EA00829	7300			DIESEL	18270	1321.75	13.8	6419	443.58	14.5
FORD	UTILITY	2009	SHD792	1FDSF30R29EA00830	10000			DIESEL	22817	1707.74	13.4	5211	412.58	12.6
FORD	FLATBED	2008	SHD804	1FDWF36R58EE58062	XXXX			DIESEL	7545	733.46	10.3	1195	147.1	8.1

Appendix 1: Department of Education Vehicle Data

Department of Education Vehicle Fuel Report

Make	Model	Year	License Plate #	VIN	GVWR	EPA		Acq. Cost	Fuel Type	In-Use Mileage	In-Use Fuel Consum.	In-use Avg Fuel Econ	Annual Mileage	Annual Fuel Consum	Annual Avg Fuel Econ
						Hwy Fuel Econ	City Fuel Econ								
Fuel Type: DIESEL															
FORD	F-350	2008	SHD806	1FDWVF36R08EE56154	XXXX			14632.96	DIESEL	10925	995.56	11.0	4907	420.97	11.7
FORD	UTILITY	2002	SHD961	1FTWF32F32EA37190	11000			0	DIESEL	1291	114.58	11.3	573	97.76	5.9
PTRB	XXXX	2009	SHE132	2NPLHM6X89M787192	XXXX			0	DIESEL	29379	3937.33	7.5	13041	1718.22	7.6
INTL	4400 DUMP	2011	SHE475	1HTMKAAAL2BH3900035	26000			111452.62	DIESEL	2610	400.97	6.5	2085	312.6	6.7
INTL	4400 HKLDR	2011	SHE476	1HTMKAZL4BH3900039	26000			145440.78	DIESEL	5493	879.16	6.2	5493	879.16	6.2
INTL	4400 DUMP	2011	SHE477	1HTMKAAL6BH3900037	26000			110250.32	DIESEL	1702	258.4	6.6	1702	258.4	6.6
INTL	4400 DUMP	2011	SHE478	1HTMKAAL4BH3900036	26000			110250.32	DIESEL	273	47.16	5.8	273	47.16	5.8
INTL	4300 BOOM	2011	SHE479	1HTMMAAL3BH389972	25999			152915.95	DIESEL	2127	421.85	5.0	2127	421.85	5.0
Fuel Type: GAS															
GMC	S14Z	1989	SH4107	1GT6CS14Z0K8528101	4900			0	GAS	492	24.7	19.9	0	0	0.0
CHEV	PICKUP	1990	SH4142	1GBGC24K4LE229709	8600			0	GAS	22646	1913.9	11.8	3266	290.19	11.3
GMC	PICKUP	1986	SH4153	1GTDCL14HXGJ525747	5200			0	GAS	1634	180	9.1	260	18.6	14.0
DODGE	STKE	1991	SH4207	1B6ME3656MS327606	10000			20268.46	GAS	6187	666.3	9.3	0	0	0.0
FORD	UTILITY	1988	SH4219	1FDJF37G1JKA14207	8800			0	GAS	8890	2043.6	4.4	1934	500.45	3.9
CHEV	PICKUP	1993	SH5946	1GCF24K6PE196757	7200			0	GAS	10187	938.4	10.9	4023	376.74	10.7
CHEV	PICKUP	1993	SH5947	1GCF24K1PE197377	7200			0	GAS	16006	1440.83	11.1	5247	465.5	11.3
CHEV	CHEYENNE	1993	SH5948	1GCF24K2PE196450	7200			0	GAS	6957	684.87	10.2	2348	254.69	9.2
GMC	PICKUP	1994	SH6968	1GDCDC14H3RZ207229	XXXX			0	GAS	1087	94.17	11.5	0	0	0.0
CHEV	PICKUP	1994	SH6976	1GSGC24K9RE237292	7200			0	GAS	2512	188.9	13.3	0	0	0.0
CHEV	VAN	1994	SH7033	1GBGP32K9R3304874	XXXX			0	GAS	4181	708.37	5.9	1269	143.79	8.8
CHEV	VAN	1994	SH7097	1GBGP32K7R3304775	XXXX			0	GAS	3803	397.13	9.6	1683	182.72	9.2
CHEV	VAN	1994	SH7098	1GBGP32K7R3305333	XXXX			0	GAS	2585	309.49	8.4	589	63.7	9.2
CHEV	VAN	1994	SH7099	1GBGP32KXR3305399	XXXX			0	GAS	5469	524.91	10.4	1435	106.79	13.4
CHEV	VAN	1994	SH7100	1GBGP32KOR3305427	XXXX			0	GAS	6907	830.24	8.3	2623	316.49	8.3
CHEV	VAN	1994	SH7101	1GBGP32K9R3305488	XXXX			0	GAS	7472	896.45	8.3	2274	268.55	8.5
CHEV	VAN	1994	SH7103	1GBGP32K7R3304842	XXXX			0	GAS	6217	896.72	6.9	1866	245.51	7.6
CHEV	VAN	1994	SH7104	1GBGP32K3R3305521	XXXX			0	GAS	5048	592.24	8.5	2346	183.94	12.8
CHEV	VAN	1994	SH7106	1GBGP32K4R3304927	XXXX			0	GAS	496	449.63	1.1	395	125.68	3.1
CHEV	FLATBED	2000	SH7741	1GBJC34RZYF475443	7200			0	GAS	5386	439.3	12.3	758	98.32	7.7
CHEV	UTILITY	1993	SH7750	1GCF24H2PZ139484	7200			0	GAS	39137	3309.56	11.8	6152	517.81	11.9
CHEV	SIERRA	1992	SH7759	1GCF24KXNE209619	7200			0	GAS	11477	924.47	12.4	2627	230.42	11.4

Appendix 1: Department of Education Vehicle Data

Department of Education Vehicle Fuel Report

Fuel Type: GAS

Make	Model	Year	License Plate #	VIN	GVWR	EPA Hwy Fuel Econ	EPA City Fuel Econ	Acq. Cost	Fuel Type	In-Use Mileage	In-Use Fuel Consum.	In-use Avg Fuel Econ	Annual Mileage	Annual Fuel Consum	Annual Avg Fuel Econ
CHEV	PICKUP	1992	SH7760	1GCF24K4NE212144	7200			0	GAS	9137	932.73	9.8	1617	149.8	10.8
CHEV	PICKUP	1991	SH7762	1GCF24H6MZ120707	7200			0	GAS	11191	772.33	14.5	2497	120.76	20.7
CHEV	PICKUP	1995	SH7763	1GCF24HXMZ120709	4340			0	GAS	4036	342.14	11.8	1666	134.6	12.4
CHEV	PICKUP	1991	SH7764	1GCF24H3MZ154880	7200			0	GAS	14795	1334.08	11.1	4035	374.6	10.8
CHEV	PICKUP	1991	SH7765	1GCF24H3MZ153499	7200			0	GAS	3325	195.89	17.0	1202	42.74	28.1
CHEV	VAN	1981	SH7806	1GCF22M9B3311297	XXXX			0	GAS	1770	456.53	3.9	729	106.59	6.8
GMC	VAN	1989	SH7808	1GTF22K1K3500637	XXXX			0	GAS	2883	488.05	5.9	1022	143.37	7.1
GMC	VAN	1989	SH7809	1GTF22K5K3500561	XXXX			0	GAS	2314	671.05	3.4	1021	91.01	11.2
CHEV	VAN	1989	SH7810	1GCHP32KKK3313315	XXXX			0	GAS	9022	1047.65	8.6	3891	407.14	9.6
CHEV	VAN	1990	SH7812	1GCGP32K0L3303812	XXXX			0	GAS	1370	290.32	4.7	709	122.61	5.8
CHEV	VAN	1984	SH7842	1GCF22M2E3338930	XXXX			0	GAS	447	51.51	8.7	0	0	0.0
CHEV	VAN	1990	SH7844	1GCGP32K5L3304065	XXXX			0	GAS	6154	748.68	8.2	2076	243.96	8.5
CHEV	VAN	1990	SH7845	1GCGP32K9L3304456	XXXX			0	GAS	2807	537.31	5.2	634	124.15	5.1
CHEV	VAN	1984	SH7879	1GCF22MXE3338934	XXXX			0	GAS	6101	559.76	10.9	1998	154.59	12.9
FORD	VAN	1982	SH7894	1FCHE30E1CHA77712	XXXX			0	GAS	3921	530.8	7.4	1360	181.25	7.5
FORD	Aerostar	1988	SH7896	1FTCA14U5JZB68145	4720			0	GAS	2252	126.11	17.9	0	0	0.0
FORD	VAN	1982	SH8012	1FCHE30E8CHA77710	XXXX			0	GAS	4101	293.53	14.0	1898	134.6	14.1
GMC	VAN	1989	SH8090	1GTF22K7K3500609	XXXX			0	GAS	448	54.92	8.2	448	54.92	8.2
CHEV	VAN	1989	SH8125	1GCHP32K9K3313371	XXXX			0	GAS	2140	303.6	7.0	768	82.9	9.3
CHEV	PICKUP	1995	SH8157	1GCF24H1SE282555	4340			0	GAS	13571	1119.76	12.1	4326	373.73	11.6
CHEV	PICKUP	1995	SH8158	1GCF24H8SE283332	7200			0	GAS	11730	954.57	12.3	2401	182.3	13.2
CHEV	PICKUP	1995	SH8159	1GCF24H4SE284641	7200			0	GAS	5224	452.11	11.6	2588	280.85	9.2
CHEV	VAN	1990	SH8198	1GCGP32K0L3303910	XXXX			0	GAS	1234	136.43	9.0	675	60.13	11.2
CHEV	PICKUP	1996	SH8289	1GCF24MXTE190844	7200			0	GAS	9425	860.18	11.0	465	43	10.8
CHEV	PICKUP	1996	SH8290	1GCF24M3TE189888	7200			0	GAS	1407	81.6	17.2	0	0	0.0
CHEV	PICKUP	1996	SH8291	1GCF24M8TE192804	7200			0	GAS	12108	1019.49	11.9	4127	342.47	12.1
CHEV	PICKUP	1996	SH8292	1GCF24M9TE189538	7200			0	GAS	9280	694.22	13.4	3514	292.56	12.0
CHEV	PICKUP	1996	SH8465	1GCF24M3VE125997	7200			18749	GAS	3761	346.51	10.9	597	29.46	20.3
CHEV	VAN	1996	SH8512	1GBH32R5V3300476	XXXX			0	GAS	4976	560.99	8.9	2399	233.32	10.3
CHEV	SEDAN	1993	SH8667	1G1BL537XPR133210	5258			0	GAS	4072	383.4	10.6	0	0	0.0
CHEV	PICKUP	1998	SH8778	1GCF24M5WZ127387	7200			19585	GAS	15011	1352.17	11.1	3724	321.29	11.6

Appendix 1: Department of Education Vehicle Data

Department of Education Vehicle Fuel Report

Fuel Type: GAS

Make	Model	Year	License Plate #	VIN	GVWR	EPA Hwy Fuel Econ	EPA City Fuel Econ	Acq. Cost	Fuel Type	In-Use Mileage	In-Use Fuel Consum.	In-use Avg Fuel Econ	Annual Mileage	Annual Fuel Consum	Annual Avg Fuel Econ
CHEV	PICKUP	1998	SH8830	1GCGK24R8WZ157129	8600			24840	GAS	1495	158.1	9.5	0	0	0.0
CHEV	PICKUP	1998	SH8864	1GBHC34R3WFO15798	7200			0	GAS	8323	708.4	11.7	3008	286.18	10.5
CHEV	UTILITY	1991	SH8870	1GCF24H1MZ162749	7200			0	GAS	22916	1674.73	13.7	978	48.66	20.1
HYUN	Elantra	1998	SH8964	KMHJF24M5WU693530	2830			0	GAS	1115	23.87	46.7	0	0	0.0
CHEV	UTILITY	1991	SH9042	1GCF24H6MZ163394	8600			0	GAS	14385	1202.54	12.0	904	39.17	23.1
GMC	STKE	1991	SH9069	1GDHC34K1ME5532840	10000			0	GAS	15308	1683.83	9.1	4123	457.9	9.0
CHEV	UTILITY	1999	SH9301	1GBHC34FOXFO14518	10000			0	GAS	5697	572.87	9.9	0	0	0.0
CHEV	PICKUP	1999	SH9458	1GCGC24R5XR716263	7200			0	GAS	9192	566.3	16.2	2739	211.7	12.9
CHEV	Cavalier	2000	SH9525	3G1JC5240YS117423	2700			0	GAS	1081	48.89	22.1	0	0	0.0
CHEV	Cavalier	2000	SH9535	3G1JC5249YS118117	2700			14063.94	GAS	10960	435.55	25.2	2089	68.8	30.4
CHEV	PICKUP	1994	SH9769	1GDCDC14Z2RZ236018	5600			0	GAS	1511	92.2	16.4	0	0	0.0
CHEV	UTILITY	1993	SH9770	1GCF24H3PZ139347	5060			0	GAS	31321	2820.1	11.1	541	23.9	22.6
CHEV	PICKUP	1994	SH9771	1GCF24Z5RZ245617	7200	22	16	8000	GAS	305	24.15	12.6	0	0	0.0
FORD	FLATBED	1992	SH9779	2FDLF47G5NCA63497	15000			0	GAS	706	67	10.5	0	0	0.0
CHEV	UTILITY	1994	SH9841	1GCF24H1RZ266816	7200			0	GAS	20452	1824.52	11.2	3665	334	11.0
DODGE	DAKOTA	1996	SH9842	1B7HL26X2TS682625	6150			0	GAS	15143	995.4	15.2	3631	238.9	15.2
FORD	PICKUP	1997	SH9843	1FTDF172XVKD55847	6000			0	GAS	20846	1737.3	12.0	1822	130.4	14.0
CHEV	S-10	1994	SH9921	1GCCS14Z9R8226557	5300			0	GAS	39363	2535.1	15.5	7247	445.8	16.3
CHEV	S-10	1994	SH9922	1GCCS19Z0R8226181	5300			0	GAS	22925	1482.8	15.5	4783	305.1	15.7
CHEV	PICKUP	1994	SH9923	1GDCDC14Z9RZ223993	5600			0	GAS	3635	265.3	13.7	0	0	0.0
CHEV	PICKUP	1994	SH9928	1GCEC14Z2RZ267791	6000			0	GAS	12751	855.01	14.9	1200	85.72	14.0
CHEV	PICKUP	1994	SHA120	1GCCS14Z9R8225523	5300			0	GAS	10316	560.6	18.4	3134	185.5	16.9
CHEV	PICKUP	1994	SHA121	1GCF24ZXRZ245435	7200	22	16	0	GAS	31290	2273.37	13.8	8005	584.71	13.7
FORD	Taurus	1997	SHA153	1FALP522OVG223163	4722			0	GAS	14223	645.8	22.0	1558	95.7	16.3
FORD	VAN	2001	SHA163	1FTNS24L81HB36606	XXXX			0	GAS	6423	454.78	14.1	2124	131.59	16.1
FORD	VAN	2001	SHA164	1TFTNS24L61HB36605	XXXX			0	GAS	6458	500.91	12.9	2222	199.78	11.1
FORD	VAN	2001	SHA165	1FTNS24L41HB36599	XXXX			0	GAS	5435	357.48	15.2	1104	70.61	15.6
FORD	VAN	2001	SHA166	1FTNS24L7AHB36600	XXXX			0	GAS	6738	565.48	11.9	2797	242.26	11.5
FORD	VAN	2001	SHA167	1FTNS24L91HB36601	XXXX			0	GAS	408	57	7.2	224	20	11.2
FORD	VAN	2001	SHA168	1FTNS24L01HB36602	XXXX			0	GAS	3969	231.42	17.2	1837	112.92	16.3
FORD	VAN	2001	SHA169	1FTNS24L21HB36603	XXXX			0	GAS	7442	465.08	16.0	1823	113.89	16.0

Department of Education Vehicle Fuel Report

Fuel Type: GAS

Make	Model	Year	License Plate #	VIN	GVWR	EPA Hwy Fuel Econ	EPA City Fuel Econ	Acq. Cost	Fuel Type	In-Use Mileage	In-Use Fuel Consum.	In-use Avg Fuel Econ	Annual Mileage	Annual Fuel Consum	Annual Avg Fuel Econ
FORD	VAN	2001	SHA170	1FTNS24L1HB36604	XXXX			0	GAS	2970	209.98	14.1	1300	73.59	17.7
FORD	VAN	2001	SHA172	1FTNS24L11HB36608	XXXX			0	GAS	7236	605.74	11.9	2002	174.95	11.4
FORD	Taurus	1997	SHA174	1FALP5226VG223166	4722			0	GAS	31614	1555.5	20.3	7250	370.3	19.6
FORD	Taurus	1997	SHA175	1FALP5222VG223164	4722			0	GAS	9971	471.8	21.1	4216	222.8	18.9
CHEV	VAN	1994	SHA203	1GBGP32K2R3305347	XXXX			0	GAS	6492	789.39	8.2	2156	285.45	7.6
CHEV	VAN	1993	SHA220	1GCGG35KOPF340875	8600			0	GAS	24567	2412.8	10.2	2527	231	10.9
CHEV	PICKUP	1994	SHA222	1GBGC24KORE260917	8600			0	GAS	31478	2947.95	10.7	6190	608.45	10.2
CHEV	UTILITY	1994	SHA229	1GBGC24K3RE261673	8600			0	GAS	23415	2136.85	11.0	2906	311.76	9.3
CHEV	UTILITY	2001	SHA249	1GFCF24H8PZ137190	7200			0	GAS	22871	1993.49	11.5	2820	248.62	11.3
CHEV	VAN	1994	SHA321	1GBGP32KXR3305449	XXXX			0	GAS	6466	992.92	6.5	1418	184.34	7.7
FORD	Taurus	2000	SHA329	1FAPP5326YA142204	3300			12493.99	GAS	9229	463.97	19.9	5750	318.7	18.0
CHEV	UTILITY	1994	SHA333	1GBHC34K2RE313546	8800			0	GAS	30986	3185.66	9.7	5402	581.56	9.3
CHEV	UTILITY	1994	SHA337	1GBHC34K5RE176621	10000			0	GAS	30792	3510.18	8.8	4776	571.13	8.4
CHEV	UTILITY	1994	SHA338	1GBGC24K6RE302619	8600			0	GAS	15591	1620.15	9.6	3476	405.04	8.6
CHEV	UTILITY	1994	SHA339	1GBHC34K3RE176973	10000			0	GAS	28080	2831.2	9.9	4406	422.5	10.4
CHEV	UTILITY	1994	SHA340	1GFCF24H6RZ267679	7200			0	GAS	22280	1791.63	12.4	2378	201.54	11.8
CHEV	STKE	1995	SHA342	1GBHC34K5SE239285	10000			0	GAS	1166	42.7	27.3	0	0	0.0
CHEV	PICKUP	1994	SHA343	1GBHC34K8RE174698	7200			0	GAS	2120	184.79	11.5	0	0	0.0
CHEV	UTILITY	1994	SHA344	1GFCF24HRZ267583	7200			0	GAS	6529	593.22	11.0	517	32.17	16.1
CHEV	UTILITY	1994	SHA352	1GFCF24H8RZ266579	7200			0	GAS	46884	3772.92	12.4	7805	608.52	12.8
TOYOTA	Corolla	2003	SHA362	1NXBR32E53Z000349	2700			0	GAS	3925	157.2	25.0	1693	71.27	23.8
TOYOTA	COROLLA	2003	SHA363	1NXBR32E93Z011046	2700			0	GAS	1734	74.65	23.2	245	11.35	21.6
GMC	PICKUP	1994	SHA368	1GTFC24H6RE550414	7200			0	GAS	2961	206.29	14.4	1535	70.16	21.9
GMC	UTILITY	1994	SHA383	1GTFC24H3RE549494	7200			0	GAS	15148	1538.81	9.8	2860	277.45	10.3
CHEV	UTILITY	1994	SHA384	1GBHC34KXRE177120	8600			0	GAS	32723	3519.2	9.3	1596	143.9	11.1
FORD	SEDAN	1998	SHA405	1FAPF6535WK269271	4078			0	GAS	2034	81.6	24.9	669	20.9	32.0
FORD	TAURUS	1998	SHA447	1FAPF5222WG216116	4722			0	GAS	26341	1362.6	19.3	4888	255.2	19.2
FORD	TAURUS	1998	SHA449	1FAPF5226WG216118	4722			0	GAS	33464	1638.6	20.4	10751	483	22.3
CHEV	Malibu	2002	SHA458	1G1NDS2JX2M645109	3090			0	GAS	14717	740.82	19.9	134	8.21	16.3
FORD	PICKUP	1995	SHA547	1FTEF15Y7SLB50326	6250			0	GAS	24363	1813.26	13.4	4031	301.19	13.4
FORD	PICKUP	1997	SHA548	1FTDF1721VKD55817	6000			0	GAS	8944	703.78	12.7	0	0	0.0

Appendix 1: Department of Education Vehicle Data

Department of Education Vehicle Fuel Report

Fuel Type: GAS

Make	Model	Year	License Plate #	VIN	GVWR	EPA Hwy Fuel Econ	EPA City Fuel Econ	Acq. Cost	Fuel Type	In-Use Mileage	In-Use Fuel Consum.	In-use Avg Fuel Econ	Annual Mileage	Annual Fuel Consum	Annual Avg Fuel Econ
CHEV	VAN	1995	SHA549	1CGCG35K2SF146082	8600			0	GAS	42148	3715.05	11.3	7580	692.55	10.9
CHEV	VAN	1995	SHA674	1CGCG35K1SF147496	8600			0	GAS	15532	1710	9.1	288	29	9.9
CHEV	STKE	1995	SHA675	1GBHC34K6SE240588	10000			0	GAS	16096	1793.34	9.0	4124	480.55	8.6
FORD	F-150	195	SHA676	1FTEF15YXSLB50319	6250			0	GAS	25795	1741.4	14.8	5075	298.2	17.0
FORD	UTILITY	2003	SHA794	1FDXF46P23EC13754	15000			0	GAS	19806	1603.13	12.4	6060	483.1	12.5
TOYOTA	Corolla	2003	SHA812	1NXBR32EX32178371	2700			0	GAS	928	45.32	20.5	0	0	0.0
CHEV	UTILITY	1995	SHA820	1GBHC34K4SE203233	10000			0	GAS	30812	2958.11	10.4	4098	407.65	10.1
CHEV	UTILITY	1994	SHA821	1GBHC34K9RE311406	5960			0	GAS	32624	3496.82	9.3	5914	663.77	8.9
CHEV	UTILITY	1995	SHA822	1GBHC34K8SE117729	10000			0	GAS	19977	2225.93	9.0	7058	794.23	8.9
CHEV	UTILITY	1995	SHA839	1GBHC34K2SE204476	10000			0	GAS	36021	3796.97	9.5	4932	576.94	8.5
CHEV	UTILITY	1991	SHA840	1GBHC34K7RE311047	5260			0	GAS	33880	4171.2	8.1	7136	955.7	7.5
CHEV	UTILITY	1995	SHA841	1GBHC34K8SE203428	10000			0	GAS	21454	2242.11	9.6	4472	483.88	9.2
FORD	TAURUS	1999	SHA869	1FAFP5220XG290362	4722			0	GAS	16083	771.1	20.9	4106	193.1	21.3
GMC	PICKUP	1999	SHA896	1GTGC33R3XF094531	9000			0	GAS	23973	2312.6	10.4	5183	486.6	10.7
FORD	PICKUP	1998	SHA897	1FTRF2729WK88228	6930			0	GAS	4879	390.2	12.5	0	0	0.0
FORD	PICKUP	2003	SHA901	1FTNF20D33ED82433	5556			0	GAS	15267	1524.01	10.0	5485	648.93	8.5
FORD	VAN	2001	SHA912	1FTN524LX1HB36607	XXXX			0	GAS	2983	151.43	19.7	918	31.4	29.2
CHEV	UTILITY	1996	SHA999	1GBGC24R5TE125582	8600			0	GAS	23360	2235.62	10.4	1419	120.02	11.8
TOYOTA	Corolla	2003	SHB125	1NXBR32E63Z183356	2700			0	GAS	21633	1460.73	14.8	5185	163.55	31.7
NISSAN	Sentra	2003	SHB130	3N1CB51D63L782093	2760			0	GAS	26420	1115.09	23.7	1112	36.35	30.6
NISSAN	Sentra	2003	SHB134	3N1CB51D03L712850	2760			0	GAS	5960	258.69	23.0	179	9.38	19.1
NISSAN	SENTRA	2003	SHB136	3N1CB51D23L775254	2760			0	GAS	2301	99.99	23.0	0	0	0.0
NISSAN	Sentra	2003	SHB137	3N1CB51D93L790222	2760			0	GAS	8636	358.05	24.1	0	0	0.0
NISSAN	Sentra	2003	SHB138	3N1CB51D63L795667	2760			0	GAS	15062	460.38	32.7	0	0	0.0
NISSAN	Sentra	2003	SHB140	3N1CB51D43L796722	2760			0	GAS	11878	438.4	27.1	0	0	0.0
NISSAN	Sentra	2003	SHB142	3N1CB51D63L796723	2760			0	GAS	5634	263.4	21.4	493	29.8	16.5
NISSAN	Sentra	2003	SHB144	3N1CB51D53L793246	2760			0	GAS	14682	575.73	25.5	538	29.5	18.2
CHEV	UTILITY	1996	SHB191	1GBGC24ROTE122590	8600			0	GAS	30909	3007.56	10.3	6004	615	9.8
CHEV	UTILITY	1996	SHB192	1GBGC24R5TE125033	8600			0	GAS	21885	1857.6	11.8	1548	96.9	16.0
FORD	UTILITY	1996	SHB197	1FDHF25H8TEB77037	5600			0	GAS	24265	2321.71	10.5	5708	608.34	9.4
CHEV	UTILITY	1996	SHB198	1GBGC24R9TE125648	9360			0	GAS	36659	3021.08	12.1	6262	560.45	11.2

Appendix 1: Department of Education Vehicle Data

Department of Education Vehicle Fuel Report

Fuel Type: GAS

Make	Model	Year	License Plate #	VIN	GVWR	EPA Hwy Fuel Econ	EPA City Fuel Econ	Acq. Cost	Fuel Type	In-Use Mileage	In-Use Fuel Consum.	In-use Avg Fuel Econ	Annual Mileage	Annual Fuel Consum	Annual Avg Fuel Econ
CHEV	UTILITY	1996	SHB200	1GBGC24R7TE130380	8600	19	15	0	GAS	21898	2083.98	10.5	5342	514.57	10.4
FORD	Taurus	2004	SHB226	1FAFP52U74G124840	3300			0	GAS	16051	687.93	23.3	0	0	0.0
FORD	UTILITY	1996	SHB305	1FDHF25H8TEB77040	5620			0	GAS	33602	3277.1	10.3	7356	680.8	10.8
CHEV	UTILITY	1996	SHB306	1GBJK34R3TE184368	10000			0	GAS	22183	2408.09	9.2	2521	245.38	10.3
CHEV	PICKUP	1997	SHB339	1GCCS14X8V8190112	4400			0	GAS	748	46.5	16.1	0	0	0.0
CHEV	PICKUP	1997	SHB397	1GCF24M9VE249787	7200			0	GAS	7618	680.38	11.2	4348	402.19	10.8
FORD	PICKUP	2005	SHB436	1FTSF20P85EA36576	9400			0	GAS	17335	1670.58	10.4	6094	590.83	10.3
FORD	PICKUP	2005	SHB437	1FTSF20PX5EA36577	9400			0	GAS	10128	933.78	10.8	3432	326.73	10.5
FORD	PICKUP	2005	SHB438	1FTSF20P15EA36578	9400			0	GAS	9438	926.13	10.2	2231	178.43	12.5
FORD	PICKUP	2005	SHB440	1FTSF20PX5EA36580	9400			0	GAS	8957	943.76	9.5	3924	435.3	9.0
FORD	PICKUP	2005	SHB441	1FTWF32P65EA36581	9400			0	GAS	848	45.65	18.6	0	0	0.0
FORD	VAN	1997	SHB473	1FTJE34L9VHC12562	9500			0	GAS	41583	3999.98	10.4	9176	818.41	11.2
PTRB	UTILITY	2005	SHB567	2NPLHX8X45M860594	36220			0	GAS	4370	480.12	9.1	3641	453.8	8.0
PTRB	UTILITY	2005	SHB568	2NPLHX8X25M860593	36220			0	GAS	14278	1034.41	13.8	5828	553.2	10.5
XXXX	XXXX	2005	SHB730	5B4HP42VX53405454	XXXX			0	GAS	4331	479.56	9.0	1099	88.06	12.5
XXXX	XXXX	2005	SHB731	5B4HP42V853405453	XXXX			0	GAS	8744	712.97	12.3	1763	190.19	9.3
XXXX	XXXX	2005	SHB732	5B4HP42V6534054	XXXX			0	GAS	3589	359.12	10.0	1799	182.15	9.9
XXXX	XXXX	2005	SHB733	5B4HP42V53405451	XXXX			0	GAS	2958	374.76	7.9	745	96.16	7.7
CHEV	PICKUP	1998	SHB764	1GCF24M6WZ128077	7200			19585	GAS	9324	754.98	12.3	4682	324.7	14.4
FORD	VAN	2005	SHB790	1FTNS24L25HA83505	XXXX			0	GAS	10762	683.03	15.8	3813	203.14	18.8
FORD	VAN	2005	SHB791	1FTNS24L45HA83506	XXXX			0	GAS	13269	752.93	17.6	3308	201.15	16.4
FORD	VAN	2005	SHB792	1FTNS24L65HA83507	XXXX			0	GAS	1532	129.87	11.8	428	24.7	17.3
FORD	VAN	2005	SHB793	1FTNS24L85HA83508	XXXX			0	GAS	4824	380.17	12.7	1728	125.87	13.7
FORD	VAN	2005	SHB794	1FTNS24LX5HA83509	XXXX			0	GAS	13079	930.79	14.1	2871	205.85	13.9
CHEV	VAN	1994	SHB895	1GBGP32K3R3305339	XXXX			0	GAS	3836	615.85	6.2	999	168.1	5.9
CHEV	Malibu	2004	SHB942	1G1Z154844F207241	3290			0	GAS	23321	1212.13	19.2	0	0	0.0
TOYOTA	Camry	2004	SHB943	JTD8F30K240157478	3420			0	GAS	13790	692.28	19.9	2714	125.57	21.6
TOYOTA	Camry	2004	SHB944	JTD8F30K140157942	3219			0	GAS	12297	614.87	20.0	816	44.64	18.3
TOYOTA	Camry	2004	SHB945	JTD8F30K740157184	3219			0	GAS	19229	945.5	20.3	1035	42.67	24.3
TOYOTA	Camry	2004	SHB946	JTD8F30K140157956	3420			0	GAS	7674	451.76	17.0	0	0	0.0
TOYOTA	Camry	2004	SHB947	JTD8F32K140157842	3219			0	GAS	8228	417.38	19.7	983	68.55	14.3

Appendix 1: Department of Education Vehicle Data

Department of Education Vehicle Fuel Report

Fuel Type: GAS

Make	Model	Year	License Plate #	VIN	GVWR	EPA Hwy Fuel Econ	EPA City Fuel Econ	Acq. Cost	Fuel Type	In-Use Mileage	In-Use Fuel Consum.	In-use Avg Fuel Econ	Annual Mileage	Annual Fuel Consum	Annual Avg Fuel Econ
TOYOTA	Camry	2004	SHB948	JTDBF30KX40157289	3219			0	GAS	15693	937.8	16.7	856	64.3	13.3
TOYOTA	Camry	2004	SHB949	JTDBF30KX40157230	3420			0	GAS	13863	687.88	20.2	1745	84.53	20.6
TOYOTA	Camry	2004	SHB950	JTDBF32K40157897	3219			0	GAS	52090	2066.95	25.2	8294	324.64	25.5
CHEV	Malibu	2004	SHB993	1G1ZS52F84F205738	3290			0	GAS	16160	666.4	24.2	0	0	0.0
PONT	Grand Am	2004	SHC154	1G2NGS52E94M517095	3200			0	GAS	12338	497.89	24.8	5167	191.76	26.9
FORD	PICKUP	2006	SHC196	1FTSF20P96EB12579	9400			0	GAS	7514	871.13	8.6	1576	143.1	11.0
FORD	F-250	2006	SHC197	1FTSF20P56EB12580	9400			0	GAS	9131	1125.8	8.1	1238	76.76	16.1
CHEV	VAN	1997	SHC243	1GBHP32RXV3300960	XXXX			0	GAS	971	112.46	8.6	971	112.46	8.6
TOYOTA	SEDAN	2005	SHC329	JTDBE32K753009892	XXXX			0	GAS	7150	304.08	23.5	0	0	0.0
TOYOTA	SEDAN	2005	SHC330	JTDBE32K653007292	XXXX			0	GAS	37820	1592.56	23.7	3979	152.68	26.1
TOYOTA	SEDAN	2005	SHC331	JTDBE32K553007557	XXXX			0	GAS	10533	422.81	24.9	350	13.97	25.1
TOYOTA	SEDAN	2005	SHC332	JTDBE32K753007852	XXXX			0	GAS	36536	1470.76	24.8	2213	71.15	31.1
TOYOTA	SEDAN	2005	SHC333	JTDBE32KX53010003	XXXX			0	GAS	5288	227.89	23.2	744	37.83	19.7
TOYOTA	SEDAN	2005	SHC334	JTDBE32K653003016	XXXX			0	GAS	18645	824.7	22.6	2366	92	25.7
TOYOTA	SEDAN	2005	SHC335	JTDBE32K253008228	XXXX			0	GAS	4665	215.2	21.7	1571	76.69	20.5
TOYOTA	SEDAN	2005	SHC336	JTDBE32K853009612	XXXX			0	GAS	13373	507.05	26.4	0	0	0.0
FORD	FLATBED	2006	SHC344	1FDWF36P76EB24319	13000			0	GAS	0	0	0.0	0	0	0.0
DODGE	UTILITY	1999	SHC350	3B6KC26Z0XM580704	8800			0	GAS	30079	3117.48	9.6	5611	549.68	10.2
DODGE	UTILITY	1999	SHC351	3B6KC26Z7XM580702	8800			0	GAS	23687	2631.3	9.0	3818	461.9	8.3
DODGE	UTILITY	1999	SHC352	3B6KC26Z8XM580708	8800			0	GAS	29857	2495.77	12.0	6093	527.18	11.6
DODGE	UTILITY	1999	SHC353	3B6KC26Z5XM580701	8800			0	GAS	22053	2100.12	10.5	2623	220.98	11.9
DODGE	UTILITY	1999	SHC354	3B6KC26Z2XM580705	8800			0	GAS	26788	2723.68	9.8	4018	437.39	9.2
BUICK	SEDAN	2005	SHC355	2G4WS52J651108024	XXXX			0	GAS	15029	590.8	25.4	0	0	0.0
CHEV	PICKUP	1997	SHC365	1GCCS14X6V8188441	XXXX			0	GAS	4709	213.56	22.1	1346	66.28	20.3
FORD	VAN	1999	SHC378	1FCJE9L8XHC01208	10000			0	GAS	23294	3017.9	7.7	2207	200	11.0
DODGE	RAM	1999	SHC383	3B6KC26Z6XM580707	8800			0	GAS	30129	2920.36	10.3	6627	659.89	10.0
CHEV	SEDAN	2005	SHC397	1FAHP53U65A265636	XXXX			0	GAS	17008	823.62	20.7	2152	124.07	17.3
DODGE	PICKUP	1999	SHC449	3B6KC26Z7XM580697	XXXX			0	GAS	20009	2042.97	9.8	2667	274.81	9.7
DODGE	UTILITY	1999	SHC450	3B6KC26Z6XM580710	8800			0	GAS	34445	3154.17	10.9	6262	590.44	10.6
DODGE	UTILITY	1999	SHC451	3B6KC26Z3XM580714	8800			0	GAS	13028	1186.8	11.0	2472	214.3	11.5
DODGE	RAM	1999	SHC452	3B6MF3654XM572026	XXXX			0	GAS	18478	2142.5	8.6	3286	415	7.9

Appendix 1: Department of Education Vehicle Data

Department of Education Vehicle Fuel Report

Fuel Type: GAS

Make	Model	Year	License Plate #	VIN	GVWR	EPA Hwy Fuel Econ	EPA City Fuel Econ	Acq. Cost	Fuel Type	In-Use Mileage	In-Use Fuel Consum.	In-use Avg Fuel Econ	Annual Mileage	Annual Fuel Consum	Annual Avg Fuel Econ
DODGE	UTILITY	1999	SHC453	3B6KC26Z9XM579034	8800			0	GAS	24708	2392.8	10.3	4131	388.7	10.6
DODGE	VAN	2000	SHC454	2B7KB31Y7YK147516	8700			0	GAS	34384	3149.08	10.9	5307	525.24	10.1
DODGE	XXXX	1998	SHC580	3B6KF26Z5WM269551	8800			0	GAS	35492	3479.4	10.2	4405	396.8	11.1
FORD	UTILITY	2008	SHC719	1FDSX20R78EA28953	8570			0	GAS	13235	1204.56	11.0	5459	569.5	9.6
FORD	UTILITY	2008	SHC741	1FDSX20R98EA28954	9800			0	GAS	1029	85.26	12.1	1029	85.26	12.1
FORD	F-250	2008	SHC742	1FDSX20R58EA28952	XXXX			0	GAS	25061	2119.86	11.8	3422	230.7	14.8
FORD	UTILITY	2007	SHC749	1FDSX20R38EA28951	XXXX			0	GAS	28855.2	2187.6	13.2	7372	549.3	13.4
FORD	F-150	2000	SHC761	2FTRF7Z5YCA40773	XXXX			0	GAS	27247	2194.7	12.4	3724	300.5	12.4
FORD	UTILITY	2007	SHC762	1FDWX36R28EA24355	13000			0	GAS	3003	281.67	10.7	0	0	0.0
FORD	RANGER	1999	SHC800	1FTYR10V5XPB66509	XXXX			0	GAS	30565	1588.7	19.2	6021	311.3	19.3
FORD	TAURUS	2002	SHC801	1FAPF53262A202988	XXXX			0	GAS	13443	735.4	18.3	2219	128.8	17.2
FORD	TAURUS	2002	SHC802	1FAPF53221A226171	XXXX			0	GAS	9480	623	15.2	1821	95.9	19.0
CHEV	S-10	2000	SHC876	1GDDSD1455Y8298268	XXXX			5000	GAS	14428	883.7	16.3	1856	115	16.1
CHEV	PICKUP	2000	SHC877	1GCHK33J0YF488233	9200			0	GAS	21160	2303.37	9.2	3323	388.57	8.6
CHEV	PICKUP	2000	SHC878	1GCCS1450Y8301593	4600			0	GAS	21603	1226.98	17.6	6320	362.82	17.4
CHRY	SEDAN	2007	SHC915	1C3LC46R17N676511	XXXX			0	GAS	10062	471.67	21.3	1087	42.31	25.7
CHRY	SEDAN	2007	SHC916	1C3LC46R17N676508	XXXX			0	GAS	16867	818.06	20.6	0	0	0.0
CHRY	SEDAN	2007	SHC917	1C3LC46R37N676512	XXXX			0	GAS	12297	548.37	22.4	1057	59.81	17.7
CHRY	SEDAN	2007	SHC918	1C3LC46R37N676509	XXXX			0	GAS	2939	153.14	19.2	619	39.02	15.9
CHRY	SEDAN	2007	SHC919	1C3LC46R77N676514	XXXX			0	GAS	16076	748.4	21.5	0	0	0.0
CHRY	SEDAN	2007	SHC920	1C3LC46R7N676510	XXXX			0	GAS	483	23.93	20.2	0	0	0.0
CHRY	SEDAN	2007	SHC921	1C3LC46R57N676513	XXXX			0	GAS	36487	1579.94	23.1	2572	121.04	21.2
CHEV	SEDAN	2007	SHC957	2G1WB58K089177391	XXXX			0	GAS	12115	655	18.5	721	13.37	53.9
CHEV	SEDAN	2007	SHC958	2G1WB58K489172498	XXXX			0	GAS	16153	951.6	17.0	1392	87.39	15.9
FORD	PICKUP	2008	SHD139	1FTSF20R08EC60401	XXXX			0	GAS	12704	1375.41	9.2	3169	365.3	8.7
FORD	PICKUP	2008	SHD160	1FTSF20R28EC60402	XXXX			0	GAS	13005	1436.43	9.1	4627	622.8	7.4
FORD	FLATBED	2008	SHD163	1FDXF46R98EA09249	12460			89400	GAS	2155	336.95	6.4	654	101.87	6.4
CHEV	VAN	1999	SHD164	1GBHG31F3X1153760	9500			0	GAS	612	25.01	24.5	0	0	0.0
CHEV	VAN	2000	SHD165	1GCHG35R5Y1270788	XXXX			0	GAS	22818	1976	11.5	4271	409.2	10.4
DODGE	UTILITY	2001	SHD166	3B6KC26Z31M558641	XXXX			0	GAS	27007	2569.8	10.5	4493	434.2	10.3
DODGE	STKE	1999	SHD307	3B6MC36S3XM579249	7100			0	GAS	9587	1414.28	6.8	2778	413.99	6.7

Appendix 1: Department of Education Vehicle Data

Department of Education Vehicle Fuel Report

Fuel Type: GAS

Make	Model	Year	License Plate #	VIN	GVWR	EPA Hwy Fuel Econ	EPA City Fuel Econ	Acq. Cost	Fuel Type	In-Use Mileage	In-Use Fuel Consum.	In-Use Avg Fuel Econ	Annual Mileage	Annual Fuel Consum	Annual Avg Fuel Econ
DODGE	SEDAN	2004	SHD352	1B3EL36T24N341619	XXXX			7200	GAS	15876	817.09	19.4	5638	307.2	18.4
DODGE	STRATUS	2004	SHD353	1B3EL36T94N341973	XXXX			7200	GAS	12144	555.5	21.9	1957	100.1	19.6
DODGE	STKE	2002	SHD433	3B6MC36552M303678	7520			0	GAS	22272	2395.35	9.3	4353	567.73	7.7
DODGE	UTILITY	2001	SHD434	2B7K831Y91K537877	8700			0	GAS	20472	2138.52	9.6	4721	480.73	9.8
CHEV	VAN	1999	SHD435	1GCGG25R8Y1118767	XXXX			6000	GAS	30158	2776.07	10.9	7159	701.67	10.2
CHEV	S-10	2001	SHD518	1GCC5145918211302	XXXX			0	GAS	17900	1075.35	16.6	3927	263.45	14.9
DODGE	PICKUP	2001	SHD519	3B6KC26231M271011	XXXX			0	GAS	13708	1269.88	10.8	3058	307.85	9.9
DODGE	UTILITY	2001	SHD520	3B6KC26291M271014	8800			0	GAS	15563	2207.52	7.0	2437	425.35	5.7
DODGE	UTILITY	2001	SHD521	3B6KC262X1M558636	8800			0	GAS	18406	1794.99	10.3	4444	418.59	10.6
CHEV	S-10	2001	SHD522	1GCC5145218206863	6000			0	GAS	27877	1623.51	17.2	6290	430.47	14.6
CHEV	S-10	2001	SHD523	1GCC5145518206114	6000			0	GAS	28125	1358.56	20.7	8267	437.88	18.9
DODGE	XXXX	2001	SHD524	3B6KC26Z6M271018	XXXX			0	GAS	12966	1386.7	9.4	3000	343.14	8.7
DODGE	UTILITY	2001	SHD579	3B6KC25Z51M555191	8800			0	GAS	8656	825.53	10.5	3864	359.05	10.8
CHEV	S-10	2000	SHD580	1GCC51458Y8299537	XXXX			0	GAS	617	18.8	32.8	617	18.8	32.8
DODGE	UTILITY	2001	SHD581	3B6KC26271M583901	XXXX			0	GAS	29770	3043.2	9.8	7604	691.5	11.0
DODGE	UTILITY	2001	SHD582	3B6KC26791M271000	8800			0	GAS	13902	1402.7	9.9	4448	428.5	10.4
DODGE	UTILITY	2001	SHD634	3B6KC26Z61M558603	XXXX			0	GAS	15675	1547.37	10.1	4053	428.55	9.5
DODGE	UTILITY	2001	SHD639	3B6KC26Z0117271D01	XXXX			0	GAS	34301	3411.4	10.1	9541	893.6	10.7
CHEV	SEDAN	2009	SHD670	1G1ZG57B89F132787	XXXX			0	GAS	3817	147.33	25.9	0	0	0.0
CHEV	SEDAN	2009	SHD671	1G1Z57B79F131081	XXXX			0	GAS	18672	799.18	23.4	797	25.19	31.6
CHEV	SEDAN	2009	SHD672	1G1ZG57B59F131550	XXXX			0	GAS	12199	520.78	23.4	2780	87.86	31.6
CHEV	SEDAN	2009	SHD673	1G1ZG57B29F129674	XXXX			0	GAS	16160	590.27	27.4	0	0	0.0
CHEV	SEDAN	2009	SHD674	1G1ZG57B69F128012	XXXX			0	GAS	9860	500.43	19.7	0	0	0.0
CHEV	SEDAN	2009	SHD675	1G1ZG57B19F30170	XXXX			0	GAS	11745	624.65	18.8	3946	193.88	20.4
PTRB	XXXX	2009	SHD701	2NPRH8X79M787259	16000			146199.61	GAS	1371	160.71	8.5	319	53.45	6.0
CHEV	PICKUP	2009	SHD702	1GCHC44609E108084	XXXX			33172	GAS	4752	347.93	13.7	2863	177.58	16.1
CHEV	PICKUP	2009	SHD703	1GCHC44639E108757	XXXX			33172	GAS	4069	262.61	15.5	4069	262.61	15.5
CHEV	PICKUP	2009	SHD704	1GCHC44649E109903	XXXX			0	GAS	10497	669.25	15.7	3241	184.2	17.6
CHEV	PICKUP	2009	SHD705	1GCHC44649E109397	XXXX			33172	GAS	21214	1649.55	12.9	9512	688.44	13.8
CHEV	PICKUP	2008	SHD706	1GCHC44689E107961	6100			0	GAS	13519	1053.97	12.8	5592	446.71	12.5
CHEV	TAHOE	2003	SHD715	1GNEK13V23J271404	5300			0	GAS	22130	1702.1	13.0	6310	488.2	12.9

Appendix 1: Department of Education Vehicle Data

Department of Education Vehicle Fuel Report

Fuel Type: GAS

Make	Model	Year	License Plate #	VIN	GVWR	EPA Hwy Fuel Econ	EPA City Fuel Econ	Acq. Cost	Fuel Type	In-Use Mileage	In-Use Fuel Consum.	In-use Avg Fuel Econ	Annual Mileage	Annual Fuel Consum	Annual Avg Fuel Econ
DODGE	STKE	2001	SHD740	3B6MC365X1M561192	7480			0	GAS	8403	923.99	9.1	1615	227.27	7.1
FORD	UTILITY	2009	SHD788	1FDSF30R09EA00826	7340			0	GAS	27910	2385	11.7	9494	866.7	11.0
FORD	UTILITY	2009	SHD789	1FDSF30R29EA00827	7440			0	GAS	327	29.9	10.9	327	29.9	10.9
FORD	UTILITY	2009	SHD790	1FDSF30R49EA00828	10000			0	GAS	404	32.39	12.5	404	32.39	12.5
FORD	UTILITY	2009	SHD791	1FDSF30R69EA00829	7300			0	GAS	2936	205.41	14.3	1099	82.98	13.2
FORD	UTILITY	2009	SHD792	1FDSF30R29EA00830	10000			0	GAS	1165	87.24	13.4	841	65.11	12.9
CHEV	XXXX	1990	SHD796	1GCGP32K1L3303768	6380			0	GAS	1841	134.28	13.7	1410	77.38	18.2
FORD	FLATBED	2008	SHD804	1FDWF36R58EE58062	XXXX			41632.96	GAS	26	18.12	1.4	0	0	0.0
FORD	FLATBED	2008	SHD805	1FDWF36R78EE58063	XXXX			41632.96	GAS	5658	671.6	8.4	1986	204	9.7
FORD	VAN	1999	SHD945	1FCJE39L6XHC01207	XXXX			0	GAS	5472	411.15	13.3	3085	232.15	13.3
FORD	VAN	2001	SHD946	1FCJE39L91HB28079	XXXX			0	GAS	6251	669.88	9.3	1962	257.51	7.6
FORD	UTILITY	2002	SHD961	1FTWF32F32EA37190	11000			0	GAS	170	16.73	10.2	0	0	0.0
CHEV	FLATBED	1990	SHD998	1GBHC34K1LE232934	10000			0	GAS	22718	2670.8	8.5	3695	447.7	8.3
PTRB	XXXX	2009	SHE132	2NPLHM6X89M787192	XXXX			0	GAS	308	40.37	7.6	0	0	0.0
CHEV	MALIBU	2003	SHE190	1GIND52J43M671688	XXXX			0	GAS	15937	766.26	20.8	2338	111.49	21.0
CHEV	XXXX	2010	SHE207	1G1ZA5E06AF191022	4376			21479	GAS	4589	204.45	22.4	674	38.48	17.5
CHEV	MALIBU	2010	SHE208	1G1ZA5E01AF191395	4376			21479	GAS	4799	207.95	23.1	1493	58.59	25.5
CHEV	XXXX	2010	SHE209	1G1ZA5E04AF192430	4376			21479	GAS	8040	393.12	20.5	1977	99.01	20.0
CHEV	XXXX	2010	SHE211	1G1ZA5E03AF192628	4376			21857	GAS	4345	177.71	24.4	0	0	0.0
CHEV	MALIBU	2010	SHE213	1G1ZA5E04AF190290	4376			21875	GAS	11897	546.75	21.8	2960	141.7	20.9
CHEV	MALIBU	2010	SHE214	1G1ZA5E05AF192341	4376			21875	GAS	12785	591.56	21.6	6058	275.37	22.0
CHEV	MALIBU	2010	SHE215	1G1ZA5E08AF191698	4376			21857	GAS	1401	90.84	15.4	1401	90.84	15.4
CHEV	MALIBU	2010	SHE216	1G1ZA5E01AF192661	4376			21990	GAS	4180	205.71	20.3	1844	112.12	16.4
DODGE	UTILITY	2001	SHE256	3B6KC26Z31M558638	8800			5600	GAS	13402	1230.28	10.9	6800	643.24	10.6
DODGE	UTILITY	2001	SHE257	3B6KC26Z21M558601	8800			5600	GAS	7216	723.09	10.0	3984	410.53	9.7
DODGE	UTILITY	2001	SHE258	3B6KC26Z01M583903	8800			5600	GAS	11901	1143.64	10.4	5757	554.98	10.4
CHEV	SEDAN	2010	SHE261	2G1WBS5EK6A1100260	3570			26793.09	GAS	15961	836.3	19.1	7685	401.6	19.1
CHEV	SEDAN	2010	SHE306	2G1WA5EK3A1245386	4547			0	GAS	12132	81251.66	0.1	7473	398.58	18.7
CHEV	SEDAN	2010	SHE307	2G1WA5EK7A1245651	4547			0	GAS	3477	226.28	15.4	1697	121.88	13.9
CHEV	SEDAN	2010	SHE308	2G1WA5EK1A1245824	4547			0	GAS	2654	176.35	15.0	2654	176.35	15.0
CHEV	SEDAN	2010	SHE309	2G1WA5EK2A1246352	4547			0	GAS	1727	80.26	21.5	1118	44	25.4

Appendix 1: Department of Education Vehicle Data

Department of Education Vehicle Fuel Report

Fuel Type: GAS

Make	Model	Year	License Plate #	GVWR	EPA Hwy Fuel Econ	EPA City Fuel Econ	Acq. Cost	Fuel Type	In-Use Mileage	In-Use Fuel Consum.	In-Use Avg Fuel Econ	Annual Mileage	Annual Fuel Consum	Annual Avg Fuel Econ
CHEV	SEDAN	2010	SHE311	4547	2G1WA5EK9A1245828		0	GAS	5061	319.08	15.9	720	45.53	15.8
CHEV	SEDAN	2010	SHE312	4547	2G1WA5EK1A1246259		0	GAS	10840	558.17	19.4	5820	299.1	19.5
CHEV	SEDAN	2010	SHE313	4547	2G1WA5EK8A1247618		0	GAS	3130	179.35	17.5	0	0	0.0
CHEV	SEDAN	2010	SHE314	4547	2G1WA5EK9A1247255		0	GAS	1763	80.83	21.8	980	58.54	16.7
CHEV	SEDAN	2010	SHE315	4547	2G1WA5EK0A1247337		0	GAS	7259	387.52	18.7	1949	107.43	18.1
CHEV	SEDAN	2010	SHE316	4547	2G1WA5EK4A1247471		0	GAS	1166	58.67	19.9	1166	58.67	19.9
CHEV	SEDAN	2010	SHE317	4547	2G1WA5EK3A1247235		0	GAS	502	40.96	12.3	502	40.96	12.3
CHEV	SEDAN	2010	SHE318	4547	2G1WA5EK7A1247254		0	GAS	873	24.53	35.6	0	0	0.0
CHEV	SEDAN	2010	SHE319	4547	2G1WA5EK2A1248425		0	GAS	1821	65.33	27.9	694	39.39	17.6
CHEV	SEDAN	2010	SHE320	4547	2G1WA5EK1A1248240		0	GAS	1466	70.35	20.8	75	5.82	12.9
CHEV	SEDAN	2010	SHE321	4547	2G1WA5EKXA1248348		0	GAS	2305	136.15	16.9	1867	103.33	18.1
CHEV	SEDAN	2010	SHE322	4547	2G1WA5EK1A1247945		0	GAS	3624	174.74	20.7	1798	97.9	18.4
CHEV	XXXX	2010	SHE323	4547	2G1WA5EK7A1248727		0	GAS	468	43.56	10.7	176	11.95	14.7
CHEV	SEDAN	2010	SHE324	4547	2G1WA5EK1A1248688		0	GAS	2162	79.76	27.1	2162	79.76	27.1
CHEV	SEDAN	2010	SHE326	4547	2G1WA5EK4A1247499		0	GAS	778	47.39	16.4	0	0	0.0
CHEV	SEDAN	2010	SHE327	4547	2G1WA5EK2A1247937		0	GAS	7283	373.78	19.5	4685	233.41	20.1
CHEV	SEDAN	2010	SHE328	4547	2G1WA5EK1A1249422		0	GAS	5718	283.34	20.2	0	0	0.0
CHEV	SEDAN	2010	SHE329	4547	2G1WA5EK4A1249530		0	GAS	1707	96.34	17.7	0	0	0.0
CHEV	SEDAN	2010	SHE330	4547	2G1WA5EK4A1247924		0	GAS	4098	216.72	18.9	2190	102.49	21.4
CHEV	SEDAN	2010	SHE331	4547	2G1WA5EKXA1248477		0	GAS	1477	59.2	24.9	570	24.16	23.6
CHEV	SEDAN	2010	SHE332	4547	2G1WA5EK5A1248922		0	GAS	2734	162.1	16.9	826	56.9	14.5
CHEV	SEDAN	2010	SHE336	4547	2G1WA5EK5A1247804		0	GAS	137	11.63	11.8	137	11.63	11.8
CHEV	SEDAN	2010	SHE337	4547	2G1WA5EK1A1249128		0	GAS	4651	211.09	22.0	2897	128.83	22.5
CHEV	SEDAN	2010	SHE341	4547	2G1WA5EK8A1248512		0	GAS	2855	175.43	16.3	2725	164.26	16.6
CHEV	SEDAN	2010	SHE342	4547	2G1WA5EK7A1249165		0	GAS	4191	253.42	16.5	3375	203.28	16.6
CHEV	SEDAN	2010	SHE343	4547	2G1WA5EK5A1249570		0	GAS	5598	300.98	18.6	4327	235.84	18.3
CHEV	PICKUP	2002	SHE400	9200	1GBHC24U62E273876		8000	GAS	7053	649.4	10.9	4121	341.2	12.1
DODGE	PICKUP	2002	SHE407	9200	3B6KC26Z42M303627		7000	GAS	4984	800.59	6.2	3626	577.64	6.3
CHEV	SILVERADO	2002	SHE431	9200	1GBGC24U02Z329069		7500	GAS	7970	866.4	9.2	6223	682.7	9.1
CHEV	SILVERADO	2002	SHE432	9200	1GBGC24U52Z327849		7500	GAS	5333	451.06	11.8	4150	358.6	11.6
CHEV	SILVERADO	2002	SHE433	9200	1GBGC24U42Z327549		7500	GAS	8003	766.58	10.4	5720	552.67	10.3

Department of Education Vehicle Fuel Report

Make	Model	Year	License Plate #	VIN	GVWR	EPA		Acq. Cost	Fuel Type	In-Use Mileage	In-Use Fuel Consum.	In-use Avg Fuel Econ	Annual Mileage	Annual Fuel Consum	Annual Avg Fuel Econ
						Hwy Fuel Econ	City Fuel Econ								
Fuel Type: GAS															
CHEV	SILVERADO	2002	SHE434	1GBGC24U22Z332717	9200			7500	GAS	6366	594.15	10.7	5008	480.33	10.4
INTL	4300 BOOM	2011	SHE479	1HTMMAAL3BH389972	25999			152915.95	GAS	568	137.9	4.1	568	137.9	4.1
CHEV	VAN	2000	SHE482	1GCHG35RXY1269278	8800			0	GAS	21087	1862.93	11.3	6738	659.82	10.2
HONDA	SEDAN	2011	SHE498	1HGCP2F30BA060509	4299			23936.31	GAS	2114	129.86	16.3	2114	129.86	16.3
CHEV	SILVERADO	2003	SHE664	1GBGC24U63Z324394	8600			8500	GAS	2954	227.7	13.0	2954	227.7	13.0
CHEV	SILVERADO	2003	SHE666	1GBGC24U43Z322305	8600			8500	GAS	2232	199.58	11.2	2232	199.58	11.2
CHEV	SILVERADO	2003	SHE667	1GBHC24U23E330026	9200			8500	GAS	4550	410.1	11.1	4550	410.1	11.1
CHEV	SILVERADO	2003	SHE668	1GBGC24U83Z323845	8600			8500	GAS	2471	233.93	10.6	2471	233.93	10.6
CHEV	PICKUP	2002	SHE677	1GBHK24UX2E290456	9200			9700	GAS	1427	138.91	10.3	1427	138.91	10.3
FORD	VAN	1997	SHE778	1FTJE34L7VHC12561	9500			0	GAS	25920	2312.48	11.2	0	0	0.0
Fuel Type: XXXX															
CHRY	SEDAN	2007	SHC915	1C3LC46R17N676511	XXXX			0	XXXX	259	10.05	25.8	0	0	0.0

Appendix 2: Department of Hawaiian Homelands' Vehicle Data

ISLAND: OAHU

	License Plate	Model	Vehicle Description	Serial Number	Model Year	Acquisition Cost	Mileage	As of Date	gallons per 100 miles (fuel economy)	average	actual fuel consum. (gal)	fuel
1	SH7297	Chevy	Van passenger - astro	2GNEG25H8N4132080	1992	\$17,053.04	187,387	12/4/2012	6.667/5	5.84	10943.40	gasoline87
2	SH9412	Chevy	Corsica	1G1L05MISY264061	1995	\$5,900.00	83,801	12/14/2012	4.762/3.448	4.11	3444.22	gasoline87
3	SH9110	Ford	Ranger	1FTCR10U2NU06502	1992	\$4,500.00	99,685	12/14/2012	5.882/4.762	5.32	5303.24	gasoline87
4	SHB577	Ford	Explorer 4x4 4WD 4door	1FMZU62K75ZA32343	2005	\$24,460.42	95,067	12/14/2012	7.143/5	6.07	5770.57	gasoline87
5	SHB268	Chevy	Tahoe	3GNEK18RXVG164830	1997	\$7,500.00	107,194	12/14/2012	7.692/5.882	6.79	7278.47	gasoline87
6	SHD 358	Dodge	Caravan	1B4GP25301B158589	2001	\$4,500.00	90,331	12/14/2012	5.556/4.167	4.86	4390.09	gasoline87
7	SHD 359	Dodge	Stratus	1B3EL36104N341974	2004	\$7,200	80,227	12/14/2012	4.545/3.333	3.94	3160.94	gasoline87
8	SHD 319	Ford	E-350 12psgr	1FBNE31L88DA59307	2008	\$27,996.23	55,695	12/14/2012	no fuel rating available on vehicle			gasoline87
9	SHD720	Chevy	Pick up Truck S-10	1GCCS145118204862	2001	\$4,500.00	63,616	12/14/2012	5.26/4	4.63	2945.4	gasoline

ISLAND: MAUI

	License Plate	Model	Vehicle Description	Serial No.	Model Year	Acquisition Cost	Mileage	As of date	gallons per 100 miles (fuel economy)	average	actual fuel consum. (gal)	fuel
1	SH8652	Jeep	Cherokee SUV 4-door	1J4FJ28S3VL578912	1997	\$23,812.35	88,950	12/14/2012	6.667/5	5.84	5,195	gasoline 87

ISLAND: KAUAI

	License Plate	Model	Vehicle Description	Serial Number	Model Year	Acquisition Cost	Mileage	As of Date	gallons per 100 miles (fuel economy)	average	fuel consum. (gal)	fuel
1	SH9218	Ford	Ford MPVH Explorer 4x4	1FMZU34X9XZA90464	1999	\$24,943.59	43,476	12/14/2012	6.667/5.263	5.97	2595.52	gasoline-87

ISLAND: MOLOKAI

	License Plate	Model	Description	Serial No.	Model Year	Acquisition Cost	Mileage	As of Date	gallons per 100 miles (fuel economy)	average	fuel consum. (gal)	fuel
2	SH8310	Ford	Explorer 4x4 4WD	1FMDU34X8SUC34215	1995	\$24,424.04	115,446	12/17/2012	6.667/5.263	5.97	6892.1	gasoline
3	SH8369	Chevy	Cargo truck 2dr	1GCGD34J4EF343955	1984	\$1,600.00			n/a		0.0	diesel
4	SH8558	GMC	GMC dump truck	1GDP7H1J0VJ501905	1997	\$55,434.00	33,764	12/17/2012	n/a		0.0	diesel
5	SHA305	Chevy	Silverado 4x4	1GBHK24U52E113017	2002	\$32,490.00	141,085	12/17/2012	7.143/5.882	6.52	9198.7	gasoline
6	SHA907	Ford	Explorer 4x4 4WD	1FMZU72K24ZA03031	2004	\$26,051.43	86,706	12/17/2012	5.263/5	5.13	4448.0	gasoline
7	SHC230	Ford	Ford pick up F250	1FTNF21566EC86474	2006	\$24,355.97	57,397	12/17/2012	6.667/5	5.84	3352.0	gasoline
8	SHD719	Chevy	Pick up Truck S-10	1GCCS145718206292	2001	\$4,500.00	47,656	12/17/2012	5.26/4	4.63	2206.5	gasoline

ISLAND: HAWAII-WEST

	License Plate	Model	Vehicle Description	Serial No.	Model Year	Acquisition Cost	Mileage	As of Date	gallons per 100 miles (fuel economy)	average	fuel consum. (gal)	fuel
1	SHC612	Ford	Escape	1FMCU93167KA15624	2007	\$24,999.95	21,119	12/18/2012	7.143/5.556	6.35	1341.0565	gasoline
2	SH9064	Chevy	4x4 pick up truck	1GCGK24R9WE252855	1998	\$25,088.95	124,646	12/18/2012	6.667/5	5.84	7279.3264	gasoline
3	SH9054	GMC	Dump truck auto car	1WBUCJF8GH	1986	\$13,166.04	74,277	12/18/2012	6.667/5	5.84	4337.7768	gasoline
4	SHB591	Chrysler	1500 Quad cab pickup	1D7HU18N45J516396	2005	\$26,568.59	145,888	12/18/2012	7.143/5.556	6.35	9263.888	gasoline
5	SH8514	Chevy	Flatbed truck	1GBHK34J4VF008123	1997	\$30,449.95	64,848	12/18/2012			0	gasoline
6	SH847	SnowBr	Trailer	2SWUW11456260072	2005		NO DATA		n/a		#VALUE!	gasoline

ISLAND: HAWAII-EAST

	License Plate	Model	Description	Serial No.	Model Year	Acquisition Cost	Mileage	As of Date	gallons per 100 miles (fuel economy)	average	fuel cons. (gal)	Fuel
1	SHA154	Mercury	Mountaineer	4M2ZU76E11UJ09823	2002	\$24,999.01	104,228	12/14/2012	6.667/5.263	5.97	6222.4116	gasoline -87
2	SHB897	Toyota	Tacoma 4x4 v6	5TEUU42N55Z122690	2005	\$24,778.06	54,334	12/14/2012	5.882/4.762	5.32	2890.5688	gasoline -87
3	SH 337	Dodge	Ram 1500	1D7HU18218J178398	2008	\$31,381.05	118,025	12/14/2012	7.692/5.882	6.79	8013.8975	gasoline -87

Appendix 3: Department of Public Safety Vehicle Data

STATE OF HAWAII

STATE AUTO INSURANCE PROGRAM - DAGS/RISK MANAGEMENT

DEPT: PUBLIC SAFETY

REPORT BY DEPT/LICENSE

VEHICLE DESCRIPTION	MODEL YEAR	GROSS VEHICLE WEIGHT RATING	VEHICLE FUEL CONFIGURATION	ACCUMULATED MILEAGE	CITY MPG	HWY MPG	ACQUISITION COST
FORD EXPLORER XLT	05	1	Gasoline	81,696	14	20	19,875.50
CHEVY IMPALA	07	1	Gasoline	52,925	18	28	15,846.64
DODGE CARAVAN	07	2	Gasoline	57,304	17	24	16,396.38
CHEVY IMPALA 4DSD	04	1	Gasoline	72,199	17	23	8,300.00
FORD TAURUS 4DSD	06	1	Gasoline	32,539	20	27	11,670.15
CHEVY IMPALA 4DSD	04	1	Gasoline	29,173	17	23	8,500.00
FORD CROWN VICTORIA	04	1	Gasoline	46,286	18	25	N/A
JEEP CHEROKEE	98	1	Gasoline	44,466	18	20	6,000.00
VAN CHEVY- 12 PASSENGER	08	2	Gasoline	61,696	16	20	18,644.00
CHEVY VAN - 7 PASSENGER	08	2	Gasoline	4,829	19	25	24,732.00
VAN CHEVY ALUM CUBE	93	1	Gasoline	130,875	18	24	N/A
VAN CHEVY ALUM HIGH CUBE	99	1	Gasoline	N/A	18	25	33,000.00
VAN CHEVY (15 PASSENGER)	06	2	Gasoline	37,846	16	20	38,737.08
VAN CHEVY (15 PASSENGER)	06	2	Gasoline	48,471	16	20	38,737.08
VAN FORD (15 PASSENGER)	99	2	Gasoline	114,830	14	19	5,500.00
VAN CHEVY (15 PASSENGER)	07	2	Gasoline	65,305	16	20	32,931.00
VAN FORD (15 PASSENGER)	01	2	Gasoline	96,090	14	19	9,500.00
VAN CHEVY (15 PASSENGER)	08	2	Gasoline	45,409	16	20	25,643.97
VAN DODGE (12 PASSENGER)	01	2	Gasoline	N/A	19	26	7,000.00
VAN DODGE (12 PASSENGER)	97	2	Gasoline	51,517	19	26	3,000.00
VAN FORD (7 PASSENGER)	03	2	Gasoline	92,534	14	19	5,800.00
VAN CHEVY (15 PASSENGER)	06	2	Gasoline	67,355	15	20	14,999.00
VAN CHEVY (7 PASSENGER)	05	2	Gasoline	98,294	16	20	8,200.00
VAN CHEVY (12 PASSENGER)	01	2	Gasoline	96,781	15	20	4,100.00
P/U CHEVY S-10	01	1	Gasoline	19,127	15	20	3,700.00
VAN GMC (15 PASSENGER)	01	2	Gasoline	42,037	16	20	N/A
VAN CHEVY (7 PASSENGER)	02	1	Gasoline	48,361	19	25	N/A
CHEVY SUBURBAN	96	1	Gasoline	N/A	12	16	1,275.24
CHEVY SUBURBAN	99	1	Gasoline	N/A	12	16	N/A
FORD BUS	94	4	Gasoline	N/A	N/A	N/A	10,000.00
VAN FORD 138 ECONOLINE	97	2	Gasoline	N/A	15	20	17,985.37
VAN FORD 138 ECONOLINE	97	2	Gasoline	N/A	15	20	N/A
VAN FORD ECONOLINE CARGO	99	2	Gasoline	N/A	15	20	22,654.64
VAN FORD	97	1	Gasoline	N/A	15	20	8,984.32
TRUCK CHEVY/VAN DIESEL	91	2	Diesel	N/A	16	21	2,000.00
P/U DODGE	98	2	Gasoline	N/A	13	17	N/A
VAN FORD	99	1	Gasoline	N/A	15	20	5,000.00
VAN FORD (15 PASSENGER)	97	2	Gasoline	N/A	15	20	4,000.00
VAN DODGE	00	2	Gasoline	N/A	19	26	N/A
VAN CHEVY	97	2	Gasoline	N/A	16	20	5,000.00
P/U FORD	08	1	Gasoline	N/A	14	20	20,560.00
VAN FORD	09	1	Gasoline	N/A	N/A	N/A	41,660.00
VAN FORD F-150	83	1	Gasoline	N/A	17	22	N/A
SDN BUICK 4DR	92	1	Gasoline	N/A	19	20	N/A

Appendix 3: Department of Public Safety Vehicle Data

STATE OF HAWAII

STATE AUTO INSURANCE PROGRAM - DAGS/RISK MANAGEMENT

DEPT: PUBLIC SAFETY

REPORT BY DEPT/LICENSE

SDN TOYOTA COROLLA 4DR	03	1	Gasoline	84,018	30	38	14,895.74
FORD TAURUS 4DR	05	1	Gasoline	31,724	19	25	15,338.34
VAN DODGE	90	1	Gasoline	85,697	19	26	800.00
SDN CHEVY CAPRICE	90	1	Gasoline	92,386	18	26	13,821.00
BUS CHEVY (60 PASSENGER)	87	N/A	N/A	12,506	N/A	N/A	22,000.00
SDN CHEVY CAPRICE	92	1	Gasoline	50,629	18	26	15,039.17
S/W CHEVY	94	1	Gasoline	169,151	23	30	24,990.83
SDN OLDS CIERA	96	1	Gasoline	66,811	17	26	14,720.06
VAN FORD AEROSTAR	97	1	Gasoline	152,027	17	23	17,232.72
SDN CHEVY CORSICA	95	1	Gasoline	103,408	24	31	6,300.00
TRUCK CHEVY S-10	94	1	Gasoline	22,640	15	20	5,000.00
P/U TRUCK CHEVY	94	1	Gasoline	65,902	15	20	5,000.00
VAN CHEVY	94	2	Gasoline	87,422	16	20	5,200.00
VAN CHEVY (15 PASSENGER)	03	3	Gasoline	201,112	13	16	28,925.00
P/U DODGE	96	1	Gasoline	89,411	13	17	4,200.00
VAN FORD 3 DR E-350 (15 PASSENGER)	03	2	Gasoline	217,226	N/A	N/A	22,739.23
P/U TRUCK CHEVY	91	1	Gasoline	160,131	15	20	61,817.70
CHEVY IMPALA 4DSD	07	1	Gasoline	45,385	18	28	21,300.00
VAN CHEVY	07	1	Gasoline	173,850	16	20	30,820.00
VAN CHEVY	07	2	Gasoline	181,952	16	21	30,820.00
VAN FORD	08	1	Gasoline	81,517	15	20	30,820.00
VAN FORD	08	1	Gasoline	80,117	15	20	30,820.00
VAN FORD (12 PASSENGER)	08	2	Gasoline	83,020	16	21	23,933.64
P/U CHEVY	82	1	Gasoline	80,063	20	26	2,500.00
P/U DODGE	86	1	Gasoline	145,085	13	17	750.00
P/U TRUCK DODGE	82	1	Gasoline	152,897	13	17	3,000.00
VAN CHEVY	98	2	Gasoline	181,895	16	21	N/A
VAN CHEVY	98	2	Gasoline	163,220	16	21	26,380.00
VAN GMC	89	2	Gasoline	110,072	13	15	5,000.00
P/U CHEVY	87	1	Gasoline	69,543	20	26	11,000.00
SDN CHEVY 4DR	87	1	Gasoline	87,952	23	32	12,000.00
CHEVY BUS (20 PASSENGER)	94	2	Gasoline	25,702	N/A	N/A	2,500.00
VAN FORD (7 PASSENGER)	97	1	Gasoline	88,909	17	22	N/A
FORD ECONOLINE VAN	98	2	Gasoline	74,684	15	20	N/A
CHEVY IMPALA	02	1	Gasoline	89,602	19	29	N/A
CHEVY IMPALA	03	1	Gasoline	117,203	21	32	N/A
CHEVY ASTRO VAN	98	2	Gasoline	126,570	16	21	N/A
VAN CHEVY - 12 PASSENGER	08	2	Gasoline	7,702	16	21	24,732.00
FORD FLAT BED	09	1	Gasoline	2,395	N/A	N/A	N/A
SUV CHEVY BLAZER SILVER	92	2	Gasoline	123,672	13	16	N/A
VAN DODGE RAM	89	2	Gasoline	N/A	13	17	N/A
MPVH CHEVY	91	1	Gasoline	117,656	16	20	N/A
OLDS ALERO	02	1	Gasoline	N/A	24	32	N/A
DODGE INTREPID	02	1	Gasoline	68,127	21	30	2,500.00
VAN CHEVY (12 PASSENGER)	97	2	Gasoline	45,464	16	20	28,344.00
TRUCK CHEVY CREW CAB	98	2	Gasoline	49,885	13	16	28,600.00

Appendix 3: Department of Public Safety Vehicle Data

STATE OF HAWAII

STATE AUTO INSURANCE PROGRAM - DAGS/RISK MANAGEMENT

DEPT: PUBLIC SAFETY

REPORT BY DEPT/LICENSE

VAN CHEVY (15 PASSENGER)	98	2	Gasoline	51,599	16	21	28,810.00
VAN CHEVY (12 PASSENGER)	97	2	Gasoline	31,350	16	21	28,344.00
VAN CHEVY (12 PASSENGER)	08	2	Gasoline	25,524	16	21	23,933.64
CHEVY MALIBU SDN	09	1	Gasoline	17,632	23	32	19,695.00
VAN TOYOTA SIENNA	05	1	Gasoline	11,688	18	24	24,036.31
TOYOTA CAMRY	07	1	Gasoline	11,050	24	34	21,821.69
VAN CHEVY EXPRESS (15 PASSENGER)	98	2	Gasoline	47,751	16	22	28,810.00
SDN CHEVY MALIBU	99	1	Gasoline	125,474	23	32	18,452.70
VAN CHEVY EXPRESS	99	2	Gasoline	60,392	16	20	29,432.28
SDN FORD MERCURY 4DR	99	1	Gasoline	28,925	25	34	18,373.00
VAN CHEVY (15 PASSENGER)	01	2	Gasoline	50,430	16	22	28,875.00
TOYOTA TACOMA	06	1	Gasoline	7,300	20	27	22,942.28
VAN CHEVY EXPRESS	08	1	Gasoline	18,927	15	20	N/A
VAN CHEVY EXPRESS	08	1	Gasoline	15,305	15	20	N/A
FORD PICK-UP	09	1	Gasoline	5,749	17	22	N/A
FORD PICK-UP	09	1	Gasoline	5,229	17	22	N/A
VAN FORD E-350 (15 PASSENGER)	10	2	Gasoline	11,305	17	22	N/A
VAN FORD E-350 (15 PASSENGER)	10	2	Gasoline	13,271	17	22	N/A
VAN FORD E-350 (15 PASSENGER)	10	2	Gasoline	13,526	17	22	N/A
SUV FORD EXPEDITION	98	1	Gasoline	116,908	11	15	30,042.48
FORD F-150 PKUP	02	1	Gasoline	107,416	17	22	12,965.00
INFINITI G35	03	1	Gasoline	82,013	19	26	3,177.77
HONDA ODYSSEY	07	2	Gasoline	35,080	16	23	32,240.00
MINI COOPER S	05	1	Gasoline	47,581	25	32	21,725.00
VAN TOYOTA SIENNA (7 PASSENGER)	04	1	Gasoline	76,339	19	27	26,000.00
PONTIAC SEDAN 4DR	02	1	Gasoline	59,587	15	22	N/A
ENVOY GMC	04	1	Gasoline	82,118	12	17	N/A
EXPLORER FORD	10	1	Gasoline	18,339	14	20	N/A
CROWN VICTORIA FORD	10	1	Gasoline	15,865	18	25	25,538.86
P/U FORD F-150	10	1	Gasoline	21,502	19	25	N/A
EXPLORER FORD	10	1	Gasoline	26,399	14	20	22,720.96
TAURUS FORD	10	1	Gasoline	15,469	19	25	N/A
FUSION HYBRID FORD	10	1	Gasoline	18,063	N/A	N/A	29,075.00
POLICE INTERCEPTER FORD	99	1	Gasoline	N/A	15	19	N/A
TOYOTA 4RUNNERMPVH	06	1	Gasoline	62,920	18	22	33,419.33
SUV CHEVY TAHOE	99	2	Gasoline	104,122	12	16	31,600.00
SDN TOYOTA COROLLA	03	1	Gasoline	19,988	30	38	14,895.74
FORD TAURUS	05	1	Gasoline	11,494	19	25	14,941.91
VAN CHEVY	92	2	Gasoline	N/A	16	20	16,737.50
S/W FORD	92	1	Gasoline	25,995	15	21	18,260.48
P/U TRUCK CHEVY 1/2	93	1	Gasoline	28,108	15	20	13,198.00
VAN FORD	90	1	Gasoline	80,157	15	20	35,617.82
SDN CHEVY CELEBRITY 4DR	89	1	Gasoline	47,377	23	30	4,850.00
SDN OLDS CIERA 4DR	94	1	Gasoline	48,480	17	26	13,436.50
VAN CHEVY ASTRO WHITE	92	2	Gasoline	178,994	15	20	14,629.87
P/U FORD	00	1	Gasoline	41,836	15	20	14,127.51

Appendix 3: Department of Public Safety Vehicle Data

STATE OF HAWAII

STATE AUTO INSURANCE PROGRAM - DAGS/RISK MANAGEMENT

DEPT: PUBLIC SAFETY

REPORT BY DEPT/LICENSE

P/U TRUCK FORD	88	1	Gasoline	52,409	15	20	13,763.00
OLDS SDN	95	1	Gasoline	37,176	19	25	16,539.95
VAN CHEVY ASTRO WHITE	88	2	Gasoline	86,313	18	20	13,495.00
P/U DODGE	91	2	Gasoline	27,131	13	17	5,600.00
VAN CHEVY (15 PASSENGER)	98	2	Gasoline	197,375	16	21	24,995.00
VAN GMC (15 PASSENGER)	00	2	Gasoline	169,395	N/A	N/A	24,999.84
VAN CHEVY (15 PASSENGER)	02	2	Gasoline	161,625	16	21	27,740.00
VAN FORD (7 PASSENGER)	95	2	Gasoline	54,680	16	21	N/A
VAN CHEVY (15 PASSENGER)	98	2	Gasoline	162,314	16	21	24,995.00
VAN FORD	90	1	Gasoline	23,776	15	20	N/A
CHEVY LUMINA	99	1	Gasoline	55,335	20	29	4,000.00
VAN CHEVY	97	2	Gasoline	120,987	16	20	5,000.00
VAN CHEVY (15 PASSENGER)	98	2	Gasoline	178,120	16	21	24,995.00
VAN FORD - 12 PASSENGER	08	2	Gasoline	690,698	14	19	23,933.64
VAN FORD - 12 PASSENGER	08	2	Gasoline	69,069	14	19	23,933.64
CHEVY BUS (20 PASSENGER)	94	N/A	N/A	533,312	N/A	N/A	2,500.00
SDN CHEVY CAPRICE 4DR	92	1	Gasoline	N/A	18	26	N/A
P/U TRUCK CHEVY 2500	88	1	Gasoline	N/A	20	26	N/A
P/U TRUCK CHEVY S-10	91	1	Gasoline	N/A	15	20	N/A
SUV CHEV BLAZER	93	2	Gasoline	N/A	13	16	N/A
CHEVY MPVH	03	1	Gasoline	N/A	N/A	N/A	N/A
CHEVY MPVH	04	1	Gasoline	N/A	N/A	N/A	N/A
FORD 4DR SDN	05	1	Gasoline	N/A	N/A	N/A	N/A
CHEVY PVAN	97	1	Gasoline	N/A	N/A	N/A	N/A
HONDA 2DR SDN	97	1	Gasoline	N/A	N/A	N/A	N/A
HUMMER H2	03	2	Gasoline	N/A	N/A	N/A	N/A
SDN CHEVY LUMINA 4DR	93	1	Gasoline	N/A	20	29	7,713.57
TOYOTA TACOMA PKUP TRUCK	98	1	Gasoline	N/A	20	27	7,100.00
FORD TAURUS 4DR SDN	05	1	Gasoline	N/A	19	25	14,941.91
BUICK LESABRE	01	1	Gasoline	N/A	19	30	N/A
P/U TOYOTA TACOMA	04	1	Gasoline	N/A	20	27	3,567.71
LINCOLN NAVIGATOR	03	2	Gasoline	N/A	12	17	N/A
NISSAN MAXIMA	03	1	Gasoline	N/A	19	26	N/A
SDN CHEVY 4DR	90	1	Gasoline	N/A	23	32	2,500.00
SDN CHEVY 4DR	90	1	Gasoline	N/A	23	32	2,500.00
SDN CHEVY 4DR	90	1	Gasoline	N/A	23	32	2,500.00
VAN CHEVY	83	2	Gasoline	N/A	16	20	7,383.42
FORD TAURUS	93	1	Gasoline	N/A	19	25	15,713.59
SDN PONTIAC GRAND PRIX 4DR	94	1	Gasoline	N/A	19	28	13,039.67
SDN PONTIAC GRAND PRIX 4DR	94	1	Gasoline	N/A	19	28	825.00
VAN CARGO FORD	86	2	Gasoline	N/A	15	20	1,283.54
SDN FORD CROWN VICTORIA	99	1	Gasoline	N/A	18	25	33,736.24
SDN FORD CROWN VICTORIA	99	1	Gasoline	N/A	18	25	33,736.24
SDN CHEVY CAPRICE 4DR	93	1	Gasoline	N/A	18	26	3,000.00
SDN DODGE DIPLOMAT FD	85	1	Gasoline	N/A	16	21	1,500.00
VAN CHEVY (12 PASSENGER)	01	2	Gasoline	N/A	16	21	27,865.00

Appendix 3: Department of Public Safety Vehicle Data

STATE OF HAWAII

STATE AUTO INSURANCE PROGRAM - DAGS/RISK MANAGEMENT

DEPT: PUBLIC SAFETY

REPORT BY DEPT/LICENSE

VAN CHEVY (12 PASSENGER)	01	2	Gasoline	N/A	16	21	27,865.00
VAN CHRYSLER VOYAGER	00	2	Gasoline	N/A	16	22	16,666.66
FORD TAURUS 4DSD	01	1	Gasoline	N/A	19	25	14,790.72
BUS FORD	96	N/A	N/A	N/A	N/A	N/A	55,617.00
SDN FORD CROWN VICTORIA	02	1	Gasoline	N/A	17	25	22,363.81
P/U TRUCK FORD RANGER	02	1	Gasoline	N/A	17	22	14,000.00
P/U TRUCK FORD RANGER	00	1	Gasoline	N/A	17	22	13,720.00
VAN CHEVY	03	2	Gasoline	N/A	16	20	37,770.42
CROWN VICTORIA FORD	03		Gasoline	N/A	18	25	23,716.16
FORD CROWN VICTORIA POLICE INTER	00	1	Gasoline	N/A	16	20	8,000.00
FORD 4DR SDN	00		Gasoline	N/A	19	25	N/A
SUV CHEVYY TAHOE	93	2	Gasoline	N/A	12	16	N/A
CHEVY CAPRICE SEDAN	93	1	Gasoline	N/A	18	26	300.00
VAN DODGE	98	2	Gasoline	N/A	19	26	N/A
VAN DODGE	00	2	Gasoline	N/A	19	26	N/A
VAN DODGE	00	2	Gasoline	N/A	13	16	N/A
VAN CHEVY	95	2	Gasoline	N/A	16	20	N/A
CHEVY IMPALA POLICE INTERCEPTOR	01	1	Gasoline	N/A	20	30	2,500.00
CHEVY IMPALA POLICE INTERCEPTOR	01	1	Gasoline	N/A	20	30	3,200.00
SDN FORD CROWN VICTORIA	02	1	Gasoline	N/A	18	25	N/A
OLDS ALERO 4DSD	02	1	Gasoline	N/A	24	32	N/A
CHEVY 4DSD IMPALA	02	1	Gasoline	N/A	21	32	N/A
CHEVY 4DSD IMPALA	02	1	Gasoline	N/A	21	32	N/A
SDN FORD CROWN VICTORIA	07	1	Gasoline	N/A	18	25	N/A
SDN FORD CROWN VICTORIA	07	1	Gasoline	N/A	18	25	N/A
SDN FORD CROWN VICTORIA	07	1	Gasoline	N/A	18	25	N/A
SDN FORD CROWN VICTORIA	07	1	Gasoline	N/A	18	25	N/A
SDN FORD CROWN VICTORIA	07	1	Gasoline	N/A	18	25	N/A
SDN FORD CROWN VICTORIA	07	1	Gasoline	N/A	18	25	N/A
SDN FORD CROWN VICTORIA	07	1	Gasoline	N/A	18	25	N/A
SUV TAHOE	02	2	Gasoline	N/A	12	16	N/A
OLDS ALERO	03	1	Gasoline	N/A	24	32	N/A
P/U FORD	99	1	Gasoline	N/A	15	20	N/A
VAN CHEVY	04	2	Gasoline	N/A	16	20	N/A
VAN CHEVY	03	2	Gasoline	N/A	16	20	N/A
SDS FORD 4DSD	99	1	Gasoline	N/A	19	25	N/A
SDN FORD CROWN VICTORIA	04	1	Gasoline	N/A	18	25	4,000.00
MPVH FORD	04	1	Gasoline	N/A	16	22	N/A
4DSD CHEVY	06	1	Gasoline	N/A	17	26	N/A
4DSD CHEVY	05	1	Gasoline	N/A	17	23	N/A
FORD EXPLORER	10	1	Gasoline	N/A	14	20	35,655.00
P/U CHEVY	11	1	Gasoline	N/A	15	20	28,855.00
FORD EXPLORER	10	1	Gasoline	N/A	14	20	35,655.00
FORD EXPLORER	10	1	Gasoline	N/A	14	20	35,655.00
DODGE VAN (7 PASSENGER)	10	1	Gasoline	N/A	17	24	28,545.00
DODGE VAN (7 PASSENGER)	10	1	Gasoline	N/A	17	24	28,545.00

Appendix 3: Department of Public Safety Vehicle Data

STATE OF HAWAII

STATE AUTO INSURANCE PROGRAM - DAGS/RISK MANAGEMENT

DEPT: PUBLIC SAFETY

REPORT BY DEPT/LICENSE

JEEP MPVH	95	1	Gasoline	N/A	18	20	17,593.82
SDN FORD CROWN VICTORIA	99	1	Gasoline	N/A	17	25	35,744.56
SUV CHEVY TAHOE	99	2	Gasoline	N/A	12	16	44,828.11
FORD ECONOLINE CLUB VAN	05	1	Gasoline	N/A	15	20	32,873.36
FORD ECONOLINE CLUB VAN	05	1	Gasoline	N/A	15	20	32,873.36
FORD CROWN VICTORIA	05	1	Gasoline	N/A	18	25	34,634.86
SDN FORD CROWN VICTORIA 4DR	04	1	Gasoline	N/A	18	25	N/A
SDN FORD CROWN VICTORIA	09	1	Gasoline	N/A	18	25	N/A
SDN FORD CROWN VICTORIA	03	1	Gasoline	N/A	18	25	4,000.00
FORD TAURUS 4DR SDN	05	1	Gasoline	N/A	19	25	14,941.91
FORD EXPLORER SUV 2WHEEL DR	05	1	Gasoline	N/A	14	20	22,184.80
SDN FORD CROWN VICTORIA	99	1	Gasoline	N/A	18	25	34,211.24
SDN FORD CROWN VICTORIA	03	1	Gasoline	N/A	18	25	30,238.05
FORD POLICE INTERCEPTOR	06	1	Gasoline	N/A	15	19	N/A
CHEVY IMPALA	03	1	Gasoline	N/A	21	32	3,500.00
P/U TRUCK DODGE RAMCHARGER	91	1	Gasoline	N/A	13	17	3,000.00
SDN FORD CROWN VICTORIA 4DR	00	1	Gasoline	N/A	18	25	31,876.88
CHEVY IMPALA POLICE INTERCEPTOR	01	1	Gasoline	N/A	16	20	7,500.00
FORD CROWN VICTORIA	05	1	Gasoline	N/A	18	25	38,773.77
FORD CROWN VICTORIA	05	1	Gasoline	N/A	18	25	38,773.77
SDN FORD CROWN VICTORIA	99	1	Gasoline	N/A	18	25	N/A
SDN FORD CROWN VICTORIA	00	1	Gasoline	N/A	18	25	N/A
SDN FORD CROWN VICTORIA	97	1	Gasoline	N/A	18	25	N/A
VAN FORD - 12 PASSENGER	08	2	Gasoline	N/A	16	21	N/A
VAN CHEVY ASTRO PASS	94	2	Gasoline	91,774	16	20	8,000.00
FORD BRONCO	92	1	Gasoline	130,700	14	18	11,000.00
SDN CHEVY IMPALA 4 DR	00	1	Gasoline	67,954	19	29	7,739.43
SDN CHEVY IMPALA 4 DR	00	1	Gasoline	64,999	19	29	7,739.43
CHEVY PVAN	99	1	Gasoline	52,098	16	20	4,000.00
FORD VAN - 7 PASSENGER	01	1	Gasoline	68,656	17	22	7,000.00
SDS OLDS 4DSD	02	1	Gasoline	21,242	19	25	4,500.00
SDS DODGE 4DSD	04	1	Gasoline	18,986	19	25	6,700.00
SDS DODGE 4DSD	04	1	Gasoline	23,745	19	25	6,700.00
P/U CHEVY	01	1	Gasoline	32,530	15	20	4,500.00
CHEVY VAN - 7 PASSENGER	01	1	Gasoline	7,606	19	25	24,732.00
SDS FORD 4DSD	99	1	Gasoline	122,160	19	25	28,542.00
SDS FORD 4DSD	99	1	Gasoline	125,722	19	25	28,542.00
SDS FORD 4DSD	00	1	Gasoline	112,335	19	25	25,858.00
SDN CHEVY CORSICA	90	1	Gasoline	67,941	24	31	5,550.00
VAN CHEVY ASTRO	88	2	Gasoline	86,180	18	20	5,400.00
BUS CHEVY (15 PASSENGER)	91	2	Gasoline	63,007	16	21	18,200.00
VAN FORD WINDSTAR	98	1	Gasoline	59,258	18	25	18,846.10
P/UP CHEVY	00	1	Gasoline	39,146	15	20	29,530.00
BUS FORD CHAMPION (14 PASSENGER)	97	2	Gasoline	147,359	N/A	N/A	3,500.00
ECONOLINE FORD 15 PASS CLUB WAGON	05	2	Gasoline	28,787	19	19	22,354.80
FORD TRUCK	06	1	Gasoline	9,367	21	26	13,898.31

Appendix 3: Department of Public Safety Vehicle Data

STATE OF HAWAII

STATE AUTO INSURANCE PROGRAM - DAGS/RISK MANAGEMENT

DEPT: PUBLIC SAFETY

REPORT BY DEPT/LICENSE

MAZDA TRUCK	00	1	Gasoline	66,743	15	19	11,101.00
VAN FORD	07	1	Gasoline	21,763	15	20	19,156.14
VAN CHEVY (7 PASSENGER)	09	1	Gasoline	32,731	19	25	29,373.00
VAN CHEVY (7 PASSENGER)	03	1	Gasoline	32,015	16	20	29,373.00
VAN CHEVY ASTRO	92	1	Gasoline	156,697	15	19	6,879.65
VAN FORD CLBWGN	86	2	Gasoline	N/A	15	19	N/A
SUV CHEVY (15 PASSENGER)	92	2	Gasoline	N/A	16	21	23,341.65
P/U DODGE	72	1	Gasoline	N/A	13	17	N/A
P/U CHEVY	80	1	Gasoline	N/A	15	20	N/A
SUV CHEVY S10 BLAZER	92	1	Gasoline	N/A	13	16	5,000.00
VAN CHEVY	92	1	Gasoline	N/A	16	20	7,000.00
P/U CHEVY	87	1	Gasoline	N/A	15	20	5,000.00
P/U TRUCK DODGE W/ CREWCAB D350	85	2	Gasoline	N/A	13	17	N/A
VAN CHEVY (12 PASSENGER)	93	2	Gasoline	N/A	16	20	N/A
VAN FORD AEROSTAR	94	1	Gasoline	N/A	17	23	N/A
P/U CHEVY	73	1	Gasoline	N/A	15	20	2,500.00
S/W GMC	86	1	Gasoline	N/A	15	21	2,500.00
VAN FORD (16 PASSENGER)	88	2	Gasoline	N/A	14	19	N/A
VAN FORD (16 PASSENGER)	88	2	Gasoline	N/A	14	19	N/A
P/U TRUCK DODGE RAM CHARGER	87	1	Gasoline	N/A	13	17	5,000.00
VAN CHEVY (7 PASSENGER)	95	1	Gasoline	N/A	15	20	30,932.39
P/U CHEVY TRUCK	80	1	Gasoline	N/A	15	20	N/A
SUV FORD BRONCO	88	2	Gasoline	N/A	14	18	15,000.00
P/U CHEVY K-20 4X4	98	1	Gasoline	N/A	15	20	24,185.20
P/U CHEVY K-20 4X4	98	1	Gasoline	N/A	15	20	24,185.20
P/U CHEVY S-10	98	1	Gasoline	N/A	15	20	15,439.95
P/U CHEVY S-10	98	1	Gasoline	N/A	15	20	15,439.95
P/U CHEVY S-10	98	1	Gasoline	N/A	15	20	15,439.95
VAN CHEVY EXPRESS	98	2	Gasoline	N/A	16	20	24,995.00
VAN CHEVY EXPRESS	98	2	Gasoline	N/A	16	20	24,995.00
TRUCK DODGE FLTBD	87	2	Gasoline	N/A	N/A	N/A	1,200.00
SDN CHEVY LUMINA 4DR	93	1	Gasoline	N/A	20	29	N/A
TOYOTA CAMRY	05	1	Gasoline	N/A	24	34	N/A
VAN DODGE (15 PASSENGER)	00	2	Gasoline	N/A	15	20	N/A
P/U FORD	08	1	Gasoline	N/A	14	20	20,560.00
FORD FLAT BED	09	1	Gasoline	N/A	N/A	N/A	N/A
P/U FORD F-150	98	1	Gasoline	N/A	14	20	N/A
FRHT FORD BUS (22 PASSENGER)	96	8	Gasoline	N/A	N/A	N/A	10,000.00
FORD BUS (28 PASSENGER)	99	8	Gasoline	N/A	N/A	N/A	15,000.00
P/U GMC	83	1	Gasoline	N/A	14	20	N/A
CHEVY 4DSD	01	1	Gasoline	N/A	19	25	N/A
CHEVY 4DSD	01	1	Gasoline	N/A	19	25	N/A
CHEVY 4DSD	01	1	Gasoline	N/A	19	25	N/A
VAN FORD (7 PASSENGER)	96	1	Gasoline	N/A	15	20	N/A
FORD BUS (HANDIVAN)	01	3	Gasoline	N/A	N/A	N/A	71,579.00
FORD BUS (HANDIVAN)	01	3	Gasoline	N/A	N/A	N/A	71,579.00

Appendix 3: Department of Public Safety Vehicle Data

STATE OF HAWAII

STATE AUTO INSURANCE PROGRAM - DAGS/RISK MANAGEMENT

DEPT: PUBLIC SAFETY

REPORT BY DEPT/LICENSE

FORD BUS (HANDIVAN)	01	3	Gasoline	N/A	N/A	N/A	71,579.00
FORD BUS (HANDIVAN)	01	3	Gasoline	N/A	N/A	N/A	71,579.00

Department of Public Safety FY12 Fuel Report

PROGRAM	FUEL (GAS) COST
HCCC	45,832.00
MCCC	6,846.00
OCCC	48,297.00
WCCC	12,312.00
Intake Service	2,774.00
Sheriff	150,774.00
Admin	20,264.00
HCF	59,643.00
WCF	35,761.00
KCCC	13,814.00
CSP	43,775.00
Health care	792.00
NED	12,399.00
Non-State Facilities	459.00
HPA	
Total	\$453,742.00

DOT-Airports Division
FY12 Fuel Report

Appendix 4: Department of Transportation - Airports Division Fuel Data

Location (Island)	Sub Unit	Vehicle Type	Year	Make Model-Vin	License Plate	GWR	Vehicle Acquisition Cost	Vehicle Acquisition Date	Fuel Config	Fuel Usage	EPA Rated MPG	Vehicle Mileage	Fuel Consumption	Average Vehicle MPG
HNL BSYD	2010	SEDANS - GENERAL	2006	DODGE STRATUS (183EL46T16N11280)	SHB992		\$ 18825.92		E10 E85	ETHANOL 10%		16182	249.0	65.0
HNL BSYD	2020	VANS - LIGHT DUTY	1998	FORD TAURUS (1FAFP52U1WG196328)	SH8906		\$ 0.00		E10	ETHANOL 10%		3053	78.0	39.1
HNL BSYD	2040	TRUCKS <8.5K GVW	1991	CHEVROLET S10 (1GCCS14Z3M8192740)	SH4884		\$ 0.00		E10	ETHANOL 10%		648	27.4	23.6
HNL BSYD	2040	VANS - LIGHT DUTY	1997	CHEVROLET ASTRO VAN (1GNDM19WXB139106)	SH8477		\$ 0.00		E10	ETHANOL 10%		916	35.6	25.7
HNL BSYD	2040	TRUCKS <8.5K GVW	2000	CHEVROLET S10 (1GCCS1453Y8302771)	SHC871		\$ 0.00		E10 E85	ETHANOL 10%		2288	92.8	24.7
HNL BSYD	2040	TRUCKS <8.5K GVW	2000	CHEVROLET S10 (1GCCS1450Y8276534)	SHC903		\$ 0.00		E10 E85	ETHANOL 10%		2030	40.0	50.8
HNL BSYD	2040	VANS - LIGHT DUTY	2003	DODGE CARAVAN (1D4GP253138101035)	SHA630		\$ 0.00		E10 E85	ETHANOL 10%		1225	93.4	13.1
HNL BSYD	2040	SUV 4X4	2008	DODGE DURANGO (1D8HD38N78F118291)	SHD293		\$ 0.00		E10 E85	ETHANOL 10%		4141	268.4	15.4
HNL BSYD	2040	TRUCKS 8.5K-10K GVW	2008	DODGE RAM 1500 (1D3HA18N08J174251)	SHD324		\$ 0.00		E10 E85	ETHANOL 10%		1760	168.6	10.4
HNL BSYD	2040	VANS - LIGHT DUTY	1998	FORD WINDSTAR (2FMDA51U8WBB57680)	SH8774		\$ 0.00		E10	ETHANOL 10%		2018	74.1	27.2
HNL BSYD	2040	VANS - LIGHT DUTY	1998	FORD WINDSTAR (2FMDA51UXWBB57681)	SH8776		\$ 0.00		E10	ETHANOL 10%		2804	66.6	42.1
HNL BSYD	2057	SUV 4X4	2004	FORD EXPEDITION (1FMPU16L24YL73437)	SHD176		\$ 0.00		E10	ETHANOL 10%		3165	108.6	29.1

Appendix 4: Department of Transportation - Airports Division Fuel Data

Location (Island)	Sub Unit	Vehicle Type	Year	Make Model-Vin	License Plate	GVWR	Vehicle Acquisition Cost	Vehicle Acquisition Date	Fuel Config	Fuel Usage	EPA Rated MPG	Vehicle Mileage	Fuel Consumption	Average Vehicle MPG
HNL BSYD	2058	SEDANS - GENERAL	1998	HYUNDAI ELANTRA (KMHJW24M3WU10 9447)	SH8926		\$ 0.00		E10	ETHANOL 10%		1586	39.6	40.1
HNL BSYD	2058	SEDANS - GENERAL	1993	CHEVROLET CAVALIER (1G1JC8449N73239 46)	SH4817		\$ 11310.90		E10	ETHANOL 10%		49212	53.8	914.7
HNL BSYD	2060	SEDANS - GENERAL	2004	DODGE STRATUS (1B3EL36T94N3416 20)	SHD414		\$ 0.00		E10 E85	ETHANOL 10%		3304	203.2	16.3
HNL BSYD	2060	SEDANS - GENERAL	2004	DODGE STRATUS (1B3EL36TX4N3416 26)	SHD416		\$ 0.00		E10 E85	ETHANOL 10%		2290	109.2	21.0
HNL BSYD	2105	SUV 4X4	2004	FORD EXPLORER (1FMZU73KX4ZA61 905)	SHC565		\$ 0.00		E10 E85	ETHANOL 10%		14221	754.2	18.9
A25 HNL BSYD	2105	TRUCKS <8.5K GVW	2007	FORD F150 (1FTPW14V07KC95 012)	SHC906		\$ 0.00		E10 E85	ETHANOL 10%		8708	1153.0	7.6
HNL BSYD	2105	TRUCKS <8.5K GVW	2009	DODGE DAKOTA (1D3HW38P39S725 234)	SHD925		\$ 0.00		E10 E85	ETHANOL 10%		51083	3960.2	12.9
HNL BSYD	2183	VANS - LIGHT DUTY	2002	CHEVROLET ASTRO VAN (1GCDM19XX2B150 662)	SHA500		\$ 0.00		E10	ETHANOL 10%		23243	935.3	24.9
HNL BSYD	2183	SUV 4X4	2002	CHEVROLET BLAZER (1GNDT13W02K191 433)	SHD926		\$ 0.00		E10	ETHANOL 10%		12096	423.8	28.5
HNL BSYD	2183	SUV 4X4	2002	CHEVROLET BLAZER (1GNDT13W22K202 531)	SHE148		\$ 0.00		E10	ETHANOL 10%		11909	154.4	77.1
HNL BSYD	2183	SUV 4X4	2000	FORD EXPLORER (1FMZU71X3YC23 782)	SHD650		\$ 0.00		E10	ETHANOL 10%		8078	192.9	41.9
HNL BSYD	2183	SUV 4X4	1998	JEEP CHEROKEE (1J4FJ28SOWL2396 41)	SHB972		\$ 0.00		E10	ETHANOL 10%		3338	149.3	22.4

Appendix 4: Department of Transportation - Airports Division Fuel Data

Location (Island)	Sub Unit	Vehicle Type	Year	Make Model-Vin	License Plate	GWWR	Vehicle Acquisition Cost	Vehicle Acquisition Date	Fuel Config	Fuel Usage	EPA Rated MPG	Vehicle Mileage	Fuel Consumption	Average Vehicle MPG
HNL BSYD	2183	SUV 4X4	2005	JEEP LIBERTY (1J4GL48K65W637 878)	SHE146		\$ 0.00		E10	ETHANOL 10%		17346	296.0	58.6
HNL BSYD	2183	SUV 4X4	2005	JEEP LIBERTY (1J4GL48K85W637 879)	SHE149		\$ 0.00		E10	ETHANOL 10%		16959	228.8	74.1
HNL BSYD	2185	LOADERS	2007	BOBCAT SKIDSTEER LDR (530915219)	AN440		\$ 0.00		DSL	DIESEL		1112	52.0	21.4
HNL BSYD	2185	BACKHOES	1999	CASE 580 L (JG024)	AN368		\$ 0.00		DSL	DIESEL		216	89.8	2.4
HNL BSYD	2185	MOWERS	1999	CASE CX80 (4997)	AN369		\$ 0.00		DSL	DIESEL		49179	783.8	62.7
HNL BSYD	2185	LOADERS	1999	CASE 621CXT (JEE0093774)	AN376		\$ 0.00		DSL	DIESEL		414	387.3	1.1
HNL BSYD	2185	MATERIAL HANDLING	1995	CATERPILLAR DP45-D FCC567 (5CM00140)	AN325		\$ 0.00		DSL	DIESEL		14	66.6	0.2
HNL BSYD	2185	TRUCKS 8.5K-10K GVW	1991	CHEVROLET C2500 (1GBGC24K9ME119 952)	SH4887		\$ 0.00		E10	ETHANOL 10%		698	25.5	27.4
A26 HNL BSYD	2185	TRUCKS <8.5K GVW	1990	CHEVROLET C1500 (1GDCD14H3LZ226 824)	SH4888		\$ 0.00		E10	ETHANOL 10%		6748	425.5	15.9
HNL BSYD	2185	TRUCKS <8.5K GVW	1989	CHEVROLET C1500 (1GDCD14ZXKZ232 708)	SH8055		\$ 0.00		E10	ETHANOL 10%		3753	253.2	14.8
HNL BSYD	2185	TRUCKS <8.5K GVW	2000	CHEVROLET S10 (1GCCS14W2YK192 338)	SH9600		\$ 0.00		E10	ETHANOL 10%		3328	184.4	18.0
HNL BSYD	2185	TRUCKS 8.5K-10K GVW	2000	CHEVROLET C3500 (1GBGC33R4YF481 787)	SH9701		\$ 0.00		E10	ETHANOL 10%		75691	548.6	138.0
HNL BSYD	2185	TRUCKS <8.5K GVW	2007	CHEVROLET SILVERADO (1GCEC14Z37Z1665 77)	SHC711		\$ 0.00		E10 E85	ETHANOL 10%		7195	512.6	14.0

Appendix 4: Department of Transportation - Airports Division Fuel Data

Location (Island)	Sub Unit	Vehicle Type	Year	Make Model-Vin	License Plate	GVWR	Vehicle Acquisition Cost	Vehicle Acquisition Date	Fuel Config	Fuel Usage	EPA Rated MPG	Vehicle Mileage	Fuel Consumption	Average Vehicle MPG
HNL BSYD	2185	TRUCKS 8.5K-10K GVW	2007	CHEVROLET SILVERADO 2500 (1GCHC23U57F124 339)	SHC712		\$ 0.00		E10	ETHANOL 10%		17815	1081.0	16.5
HNL BSYD	2185	SUV 4X4	2002	CHEVROLET TAHOE K1500 (1GNEK13Z42J3145 31)	SHC872		\$ 0.00		E10 E85	ETHANOL 10%		2462	198.8	12.4
HNL BSYD	2185	TRUCKS 8.5K-10K GVW	2000	CHEVROLET C3500 (1GCGC33R0YF490 403)	SHC874		\$ 0.00		E10	ETHANOL 10%		3850	251.9	15.3
HNL BSYD	2185	TRUCKS <8.5K GVW	2000	CHEVROLET S10 (1GCCS1459Y82577 41)	SHD647		\$ 0.00		E10 E85	ETHANOL 10%		5750	427.6	13.4
HNL BSYD	2185	MATERIAL HANDLING	1983	DATSUN FORKLIFT (F01-020918)	AN218		\$ 0.00		E10	ETHANOL 10%		2164	50.4	42.9
HNL BSYD	2185	TRUCKS <8.5K GVW	2005	DODGE RAM 1500 (1D7HA16P55J5563 99)	SHB623		\$ 0.00		E10 E85	ETHANOL 10%		5796	732.6	7.9
HNL BSYD	2185	SUV 2X4	2006	DODGE DURANGO (1D4HB38P46F1781 77)	SHC236		\$ 0.00		E10 E85	ETHANOL 10%		3568	493.8	7.2
HNL BSYD	2185	SUV 2X4	2006	DODGE DURANGO (1D4HB38P66F1781 78)	SHC237		\$ 0.00		E10 E85	ETHANOL 10%		7163	863.0	8.3
HNL BSYD	2185	TRUCKS 8.5K-10K GVW	1999	DODGE RAM 2500 (3B6KC26Z3XM580 700)	SHC419		\$ 0.00		E10	ETHANOL 10%		6040	351.9	17.2
HNL BSYD	2185	TRUCKS 8.5K-10K GVW	2006	DODGE RAM 1500 (1D7HA16P96J1710 39)	SHC531		\$ 0.00		E10 E85	ETHANOL 10%		4973	772.8	6.4
HNL BSYD	2185	SUV 4X4	2007	DODGE DURANGO (1D8HB38P07F5126 11)	SHC676		\$ 0.00		E10 E85	ETHANOL 10%		3595	317.6	11.3
HNL BSYD	2185	SUV 4X4	2008	DODGE DURANGO (1D8HD38N98F118 292)	SHD323		\$ 0.00		E10 E85	ETHANOL 10%		3025	254.2	11.9
HNL BSYD	2185	TRUCKS 10K-16K GVW	2008	DODGE RAM 3500 (3D6WG36A18G131 429)	SHD440		\$ 0.00		DSL	DIESEL		6863	297.9	23.0

Appendix 4: Department of Transportation - Airports Division Fuel Data

Location (Island)	Sub Unit	Vehicle Type	Year	Make Model-Vin	License Plate	GVWR	Vehicle Acquisition Cost	Vehicle Acquisition Date	Fuel Config	Fuel Usage	EPA Rated MPG	Vehicle Mileage	Fuel Consumption	Average Vehicle MPG
HNL BSYD	2185	TRUCKS 10K-16K GVW	2008	DODGE RAM 3500 (3D6WG36AX8G131 428)	SHD441		\$ 0.00		DSL	DIESEL		1292	68.2	18.9
HNL BSYD	2185	TRUCKS 10K-16K GVW	2009	DODGE RAM 3500 (3D6WH38LX9G514 167)	SHD994		\$ 71989.50	9-1-2008	DSL	DIESEL		25918	916.1	28.3
HNL BSYD	2185	TRUCKS 10K-16K GVW	2009	DODGE RAM 3500 (3D6WH38L19G514 168)	SHD995		\$ 71989.50		DSL	DIESEL		16869	1082.6	15.6
HNL BSYD	2185	CYCLES - PARKING	1997	EZGO MEDALIST GX444Z (1067366)	AN346		\$ 0.00		E10	ETHANOL 10%		1	3.9	0.3
HNL BSYD	2185	TRUCKS 26K-33K GVW	1991	FORD F600 (1FDWK64PTMVAO 1441)	SH4454		\$ 0.00		DSL	DIESEL		608	46.5	13.1
HNL BSYD	2185	TRUCKS <8.5K GVW	2002	FORD RANGER (1FTYR14V02PB360 00)	SHA473		\$ 0.00		E10 E85	ETHANOL 10%		6117	519.6	11.8
HNL BSYD	2185	SUV 4X4	2003	FORD EXPLORER (1FMZU72K93ZA12 274)	SHA710		\$ 0.00		E10 E85	ETHANOL 10%		1330	225.6	5.9
HNL BSYD A28	2185	LIGHT	2005	FORD EXPLORER (1FMZU72K75UA28 828)	SHB592		\$ 0.00		E10 E85	ETHANOL 10%		6539	986.6	6.6
	2185	TRUCKS <8.5K GVW	1998	FORD F250 (1FTRF27Z8XKC125 53)	SHC304		\$ 0.00		E10 PRO	ETHANOL 10%		4086	575.0	7.1
HNL BSYD	2185	TRUCKS <8.5K GVW	1998	FORD F250 (1FTRF27Z6WKB88 218)	SHC306		\$ 0.00		E10 PRO	ETHANOL 10%		2761	277.2	10.0
HNL BSYD	2185	TRUCKS <8.5K GVW	1998	FORD F250 (1FTRF27Z2WKB88 216)	SHC307		\$ 0.00		E10 PRO	ETHANOL 10%		4255	612.8	6.9
HNL BSYD	2185	TRUCKS 8.5K-10K GVW	2006	FORD F350 (1FDWW36PX6EB8 9214)	SHC316		\$ 0.00		DSL	DIESEL		8940	563.4	15.9
HNL BSYD	2185	TRUCKS <8.5K GVW	1998	FORD F250 (1FTRF27Z1WKB88 224)	SHC340		\$ 0.00		E10 PRO	ETHANOL 10%		5456	174.2	31.3
HNL BSYD	2185	TRUCKS 8.5K-10K GVW	1999	FORD F350 (1FTSW30L7XEB29 918)	SHC421		\$ 0.00		E10	ETHANOL 10%		8547	582.0	14.7

Appendix 4: Department of Transportation - Airports Division Fuel Data

Location (Island)	Sub Unit	Vehicle Type	Year	Make Model-Vin	License Plate	GWWR	Vehicle Acquisition Cost	Vehicle Acquisition Date	Fuel Config	Fuel Usage	EPA Rated MPG	Vehicle Mileage	Fuel Consumption	Average Vehicle MPG
HNL BSYD	2185	TRUCKS <8.5K GVW	1999	FORD RANGER (1FTYR10V5XPB586 36)	SHC422		\$ 0.00		E10 E85	ETHANOL 10%		13735	997.4	13.8
HNL BSYD	2185	TRUCKS <8.5K GVW	1999	FORD RANGER (1FTYR10VXXPB586 33)	SHC594		\$ 0.00		E10 E85	ETHANOL 10%		3257	384.0	8.5
HNL BSYD	2185	VANS - CARGO	1999	FORD ECONOLINE HI-CU (1FCJE39LXXHC012 09)	SHC902		\$ 0.00		E10	ETHANOL 10%		657	109.7	6.0
HNL BSYD	2185	TRUCKS <8.5K GVW	2007	FORD F150 (1FTPX12V07KC981 70)	SHC904		\$ 0.00		E10 E85	ETHANOL 10%		5776	520.6	11.1
HNL BSYD	2185	TRUCKS <8.5K GVW	2007	FORD F150 (1FTPX12V27KC981 71)	SHC905		\$ 0.00		E10 E85	ETHANOL 10%		-59714	638.4	-93.5
HNL BSYD	2185	TRUCKS 10K-16K GVW	2008	FORD F450 (1FDXW46R68EB77 558)	SHC949		\$ 0.00		DSL	DIESEL		7336	512.5	14.3
HNL BSYD	2185	TRUCKS 10K-16K GVW	2008	FORD F350 (1FDWW36Y68EC1 9174)	SHD242		\$ 0.00		E10	ETHANOL 10%		10256	680.0	15.1
HNL BSYD	2185	TRUCKS 10K-16K GVW	2008	FORD F350 (1FDWW36Y68EC1 9175)	SHD243		\$ 0.00		E10	ETHANOL 10%		12982	987.4	13.1
HNL BSYD	2185	TRUCKS 10K-16K GVW	2008	FORD F350 (1FDWW36Y68EC1 9176)	SHD244		\$ 0.00		E10	ETHANOL 10%		8182	531.4	15.4
HNL BSYD	2185	TRUCKS 10K-16K GVW	2008	FORD F350 (1FDWW36Y68EC1 9177)	SHD245		\$ 0.00		E10	ETHANOL 10%		7124	516.4	13.8
HNL BSYD	2185	SEDANS - GENERAL	2005	FORD TAURUS (1FAFP53205A1140 37)	SHD417		\$ 0.00		E10 E85	ETHANOL 10%		3046	397.6	7.7
HNL BSYD	2185	TRUCKS 8.5K-10K GVW	2008	FORD F250 (1FTSW20Y48EC19 180)	SHD442		\$ 0.00		E10	ETHANOL 10%		5764	537.0	10.7
HNL BSYD	2185	TRUCKS 8.5K-10K GVW	2008	FORD F250 (1FTSW20Y88EC19 179)	SHD443		\$ 0.00		E10	ETHANOL 10%		5388	1253.8	4.3
HNL BSYD	2185	TRUCKS 8.5K-10K GVW	2008	FORD F250 (1FTSW20Y68EC19 178)	SHD444		\$ 0.00		E10	ETHANOL 10%		8150	622.9	13.1

Appendix 4: Department of Transportation - Airports Division Fuel Data

Location (Island)	Sub Unit	Vehicle Type	Year	Make Model-Vin	License Plate	GVWR	Vehicle Acquisition Cost	Vehicle Acquisition Date	Fuel Config	Fuel Usage	EPA Rated MPG	Vehicle Mileage	Fuel Consumption	Average Vehicle MPG
HNL BSYD	2185	TRUCKS 8.5K-10K GVW	2008	FORD F250 (1FTSX20558EB730 99)	SHD445		\$ 0.00		E10	ETHANOL 10%		13881	790.4	17.6
HNL BSYD	2185	TRUCKS 8.5K-10K GVW	2008	FORD F250 (1FDNF20588EE164 47)	SHD444		\$ 0.00		E10	ETHANOL 10%		6482	367.5	17.6
HNL BSYD	2185	TRUCKS 8.5K-10K GVW	2001	FORD F350 (1FTSW31L11ED51 022)	SHD648		\$ 0.00		E10	ETHANOL 10%		13953	823.1	17.0
HNL BSYD	2185	VANS - PASSENGER	2001	FORD ECONOLINE (1FCJE39L61HB280 72)	SHD651		\$ 0.00		E10	ETHANOL 10%		25862	24.4	1059.9
HNL BSYD	2185	TRUCKS 8.5K-10K GVW	2008	FORD F250 (1FTSW20Y68EE58 990)	SHD838		\$ 0.00		E10	ETHANOL 10%		6731	496.3	13.6
HNL BSYD	2185	TRUCKS 8.5K-10K GVW	2008	FORD F250 (1FDSW20528EE55 716)	SHD839		\$ 0.00		E10	ETHANOL 10%		14787	1159.5	12.8
HNL BSYD	2185	TRUCKS 10K-16K GVW	2008	FORD F450 (1FDXX46R28EE418 90)	SHD866		\$ 0.00		DSL	DIESEL		660	141.5	4.7
A30 HNL BSYD	2185	TRUCKS 10K-16K GVW	2009	FORD F450 (1FDAF7Y69EA0322 7)	SHE150		\$ 0.00		E10	ETHANOL 10%		522	52.0	10.0
HNL BSYD	2185	TRUCKS 26K-33K GVW	2009	FREIGHTLINER M2 112 MEDIUM D (1FVMC5CV09HAF9 290)	SHD811		\$ 0.00		DSL	DIESEL		-48871	386.7	-126.4
HNL BSYD	2185	TRUCKS <8.5K GVW	1992	GMC SIERRA C1500 (1GTDK14Z7NZ537 684)	SH4893		\$ 0.00		E10	ETHANOL 10%		3054	103.4	29.5
HNL BSYD	2185	TRUCKS 8.5K-10K GVW	1993	GMC SIERRA K2500 (1GDGK29K3PE556 773)	SH6324		\$ 0.00		E10	ETHANOL 10%		142359	55.6	2560.4
HNL BSYD	2185	TRUCKS 8.5K-10K GVW	2000	GMC SONOMA (1GTC514WTY8123 335)	SH7712		\$ 0.00		E10	ETHANOL 10%		4991	129.5	38.5
HNL BSYD	2185	TRUCKS 26K-33K GVW	1997	GMC C7H042 (1GDM7H1J2VJ502 749)	SH8571		\$ 0.00		DSL	DIESEL		385	97.5	3.9

Appendix 4: Department of Transportation - Airports Division Fuel Data

Location (Island)	Sub Unit	Vehicle Type	Year	Make Model-Vin	License Plate	GVWR	Vehicle Acquisition Cost	Vehicle Acquisition Date	Fuel Config	Fuel Usage	EPA Rated MPG	Vehicle Mileage	Fuel Consumption	Average Vehicle MPG
HNL BSYD	2185	TRUCKS 8.5K-10K GVW	1999	GMC SIERRA C1500 (1GTEC14T3XE5096 51)	SH9187		\$ 0.00		E10	ETHANOL 10%		1033	55.4	18.6
HNL BSYD	2185	TRUCKS 8.5K-10K GVW	2000	GMC SIERRA C3500 (1GTHC34RTYF425 112)	SH9621		\$ 0.00		E10	ETHANOL 10%		2013	42.7	47.1
HNL BSYD	2185	TRUCKS 8.5K-10K GVW	2000	GMC SIERRA C3500 (1GBLC34F2UF4695 86)	SH9679		\$ 0.00		DSL	DIESEL		2745	219.1	12.5
HNL BSYD	2185	TRUCKS 26K-33K GVW	2005	GMC T-SERIES F7B042 (1GDM7F1305F516 772)	SHC165		\$ 0.00		DSL	DIESEL		5458	534.2	10.2
HNL BSYD	2185	MOWERS	2006	GRASSHOPPER 9772 (5521699)	AN434		\$ 0.00		DSL	DIESEL		7090	19.6	361.7
HNL BSYD	2185	TRUCKS 26K-33K GVW	2003	INTERNATIONAL SWEEPER (H582061)	SHA868		\$ 0.00		DSL	DIESEL		1790	289.9	6.2
HNL BSYD	2185	TRUCKS 26K-33K GVW	2008	INTERNATIONAL 7600 (1HTWYAHT78J642 411)	SHD295		\$ 0.00		DSL	DIESEL		3727	358.4	10.4
HNL BSYD	2185	TRUCKS 26K-33K GVW	2008	INTERNATIONAL 5900I (1HSXRAPT08J6632 19)	SHD325		\$ 0.00		DSL	DIESEL		2152	328.3	6.6
HNL BSYD	2185	TRUCKS 26K-33K GVW	1989	KENWORTH W900 (1NKWL59XOKS525 225)	SH4437		\$ 0.00		DSL	DIESEL		457	78.5	5.8
HNL BSYD	2185	TRACTORS - TRUCKING	1991	KENWORTH T800 (1XKDD20X2MS557 716)	SH4451		\$ 0.00		DSL	DIESEL		202	41.3	4.9
HNL BSYD	2185	MATERIAL HANDLING	2004	KOMATSU V100Y355 (1103087)	AN410		\$ 0.00		DSL	DIESEL		439	67.8	6.5
HNL BSYD	2185	MOWERS \$1K-\$25K	2004	LAZER LZ27KC604 (455712)	AN412		\$ 0.00		E10	ETHANOL 10%		341	153.5	2.2
HNL BSYD	2185	MOWERS \$1K-\$25K	2004	LAZER LZ27KC604 (473083)	AN413		\$ 0.00		E10	ETHANOL 10%		7191	184.1	39.1

Appendix 4: Department of Transportation - Airports Division Fuel Data

Location (Island)	Sub Unit	Vehicle Type	Year	Make Model-Vin	License Plate	GVWR	Vehicle Acquisition Cost	Vehicle Acquisition Date	Fuel Config	Fuel Usage	EPA Rated MPG	Vehicle Mileage	Fuel Consumption	Average Vehicle MPG
HNL BSYD	2185	SUV 2X4	2007	SATURN VUE (5GZCZ53417S8241 02)	SHC662		\$ 0.00		E10	ETHANOL 10%		3789	106.7	35.5
HNL BSYD	2185	CYCLES - PARKING	2007	TIGER STAR (LSCBB13D86G119 251)	AN446		\$ 0.00		E10	ETHANOL 10%		1083	22.7	47.7
HNL BSYD	2185	CYCLES - PARKING	2007	TIGER STAR (LSCBB13D96G119 257)	AN447		\$ 0.00		E10	ETHANOL 10%		6978	127.7	54.6
HNL BSYD	2185	CYCLES - PARKING	2007	TIGER STAR (LFWA2F1557JG000 21)	AN451		\$ 0.00		E10	ETHANOL 10%		255	7.5	34.0
HNL BSYD	2185	CYCLES - PARKING	2007	TIGER STAR (LFWA2F1577JG000 19)	AN452		\$ 0.00		E10	ETHANOL 10%		11920	120.9	98.6
HNL BSYD	2185	CYCLES - PARKING	2008	TIGER STAR (LSCBB43D97G007 979)	AN474		\$ 0.00		E10	ETHANOL 10%		6611	52.6	125.7
HNL BSYD	2185	CYCLES - PARKING	2008	TIGER STAR (LSCBB43D07G049 134)	AN475		\$ 0.00		E10	ETHANOL 10%		2739	89.1	30.7
A32 HNL BSYD	2185	CYCLES - PARKING	2008	TIGER STAR (LSCBB43D87G049 138)	AN476		\$ 0.00		E10	ETHANOL 10%		3731	66.1	56.4
HNL BSYD	2185	CYCLES - PARKING	2008	TIGER STAR (LSCBB43D87G049 141)	AN477		\$ 0.00		E10	ETHANOL 10%		9240	6.8	1358.8
HNL BSYD	2185	CYCLES - PARKING	2008	VANTAGE TRUCK- ALL (LFWA1F1247JB008 14)	AN460		\$ 0.00		E10	ETHANOL 10%		-31482	18.1	-1739.3
HNL BSYD	2185	CYCLES - PARKING	2008	VANTAGE TRUCK- ALL (LFWA1F1267JB008 01)	AN461		\$ 0.00		E10	ETHANOL 10%		2704	13.6	198.8
HNL BSYD	2185	CYCLES - PARKING	2008	VANTAGE TRUCK- ALL (LFWA211517JJ017 79)	AN463		\$ 0.00		E10	ETHANOL 10%		8474	129.0	65.7
HNL BSYD	2185	CYCLES - PARKING	2008	VANTAGE TRUCK- ALL (LFWA211587JJ017 80)	AN464		\$ 0.00		E10	ETHANOL 10%		5340	39.5	135.2

Appendix 4: Department of Transportation - Airports Division Fuel Data

Location (Island)	Sub Unit	Vehicle Type	Year	Make Model-Vin	License Plate	GWWR	Vehicle Acquisition Cost	Vehicle Acquisition Date	Fuel Config	Fuel Usage	EPA Rated MPG	Vehicle Mileage	Fuel Consumption	Average Vehicle MPG
HNL BSYD	2185	CYCLES - PARKING	2008	VANTAGE TRUCK- ALL (LFBJB8B197JC001 28)	AN465		\$ 0.00		E10	ETHANOL 10%		2870	32.1	89.4
HNL BSYD	2185	CYCLES - PARKING	2008	VANTAGE TRUCK- ALL (LFWA1F1258JB002 39)	AN483		\$ 0.00		E10	ETHANOL 10%		3183	8.3	383.5
HNL BSYD	2185	MATERIAL HANDLING	2008	KOMATSU FORKLIFT (675911A)	AN466		\$ 21600.26		E10	ETHANOL 10%		5445	116.9	46.6
HNL BSYD	2185	TRUCKS 8.5K-10K GVW	1995	CHEVROLET C2500 (1GCF24K4SZ1123 38)	SH7988		\$ 19199.00		E10	ETHANOL 10%		47841	315.3	151.7
HNL BSYD	2185	MOWERS	2002	CASE MX170 (14663)	AN393		\$ 0.00		DSL	DIESEL		222	114.5	1.9
HNL BSYD	2185		2003	TENANT VACUUM (4300-2016)			\$ 0.00		DSL	DIESEL		0	17.9	0.0
HNL BSYD	2185	MOWERS \$1K-\$25K	2004	LAZER LZ27KC604 (455709)	AN411		\$ 0.00		E10	ETHANOL 10%		425	203.0	2.1
HNL BSYD	2185	MOWERS	2004	CASE MXM175 (MEC2AG2)	AN428		\$ 0.00		DSL	DIESEL		-115	574.9	-0.2
HNL BSYD	2185	CYCLES - PARKING	2006	KAWASAKI MULE KAF620 (511713)	AN436		\$ 0.00		E10	ETHANOL 10%		811	277.7	2.9
HNL BSYD	2185	MOWERS	2007	CASE JX1100U (HJT060041)	AN441		\$ 0.00		DSL	DIESEL		987	882.1	1.1
HNL BSYD	2185		2007	TENANT VACUUM (4300-2816)			\$ 0.00		DSL	DIESEL		0	275.6	0.0
HNL BSYD	2185	CYCLES - PARKING	2008	VANTAGE VANGO (BOC143176F04803)	AN454		\$ 0.00		E10	ETHANOL 10%		8469	94.7	89.4
HNL BSYD	2185		2008	VOLVO 240 (UCEC240CK001107 35)			\$ 0.00		DSL	DIESEL		2578	294.7	8.7
HNL BSYD	2185		1900	NA NA (EQUIPMENT OPERATOR)	OMF/EO		\$ 0.00		DSL E10	DIESEL		0	82.6	0.0
HNL BSYD	2185		1900	NA NA (EQUIPMENT OPERATOR-LABOR)	OMF/EOL		\$ 0.00		DSL E10	DIESEL		0	22.6	0.0

Appendix 4: Department of Transportation - Airports Division Fuel Data

Location (Island)	Sub Unit	Vehicle Type	Year	Make Model-Vin	License Plate	GVWR	Vehicle Acquisition Cost	Vehicle Acquisition Date	Fuel Config	Fuel Usage	EPA Rated MPG	Vehicle Mileage	Fuel Consumption	Average Vehicle MPG
HNL BSYD	2185		1900	NA NA (LABOR)	OMF/LB		\$ 0.00		DSL E10	ETHANOL 10%		0	718.0	0.0
HNL BSYD	2185		1900	NA NA (LANDSCAPE)	OMF/LS		\$ 0.00		DSL E10	ETHANOL 10%		0	668.2	0.0
HNL BSYD	2185		1900	NA NA (OMF-EOL) JFEOLKAIO			\$ 0.00		DSL E10	ETHANOL 10%		0	12.8	0.0
HNL BSYD	2185		1900	NA NA (FUEL CAN)			\$ 0.00			ETHANOL 10%		0	1341.9	0.0
HNL BSYD	2185	TRUCKS <8.5K GVW	1990	CHEVROLET C1500 (2GCEC19Z1L1239179)	SH4885		\$ 0.00		E10	ETHANOL 10%		3185	127.3	25.0
HNL BSYD	2185	TRUCKS <8.5K GVW	1992	CHEVROLET C1500 (1GCDC14ZNXZ203178)	SH4894		\$ 0.00		E10	ETHANOL 10%		3262	125.2	26.1
HNL BSYD	2185	TRUCKS <8.5K GVW	1988	CHEVROLET C1500 (1GCDC14Z0JZ24915)	SH7371		\$ 0.00		E10	ETHANOL 10%		1465	234.3	6.3
A34	HNL BSYD	2185 TRUCKS 8.5K-10K GVW	1995	FORD F250 (1FTHX26H2SKC15782)	SH8195		\$ 0.00		E10	ETHANOL 10%		22888	278.6	82.2
	HNL BSYD	2185 TRUCKS <8.5K GVW	1989	CHEVROLET C1500 (1GCDC14Z4KZ229321)	SH8315		\$ 0.00		E10	ETHANOL 10%		3452	247.9	13.9
HNL BSYD	2185	TRUCKS <8.5K GVW	1997	CHEVROLET S10 (1GCCS1446V8112112)	SH8478		\$ 0.00		E10	ETHANOL 10%		4990	205.3	24.3
HNL BSYD	2185	TRUCKS 8.5K-10K GVW	1997	FORD F250 (1FDHX26H3VEC03722)	SH8730		\$ 0.00		E10	ETHANOL 10%		11294	1295.0	8.7
HNL BSYD	2185	TRUCKS 8.5K-10K GVW	1997	CHEVROLET C3500 (1GBHC34R5VF054830)	SH8773		\$ 0.00		E10	ETHANOL 10%		2110	266.5	7.9
HNL BSYD	2185	TRUCKS 8.5K-10K GVW	2000	CHEVROLET C3500 (1GBLC34FPU459753)	SH9680		\$ 0.00		DSL	DIESEL		541	49.9	10.8

Appendix 4: Department of Transportation - Airports Division Fuel Data

Location (Island)	Sub Unit	Vehicle Type	Year	Make Model-Vin	License Plate	GVWR	Vehicle Acquisition Cost	Vehicle Acquisition Date	Fuel Config	Fuel Usage	EPA Rated MPG	Vehicle Mileage	Fuel Consumption	Average Vehicle MPG
HNL BSYD	2185	TRUCKS 8.5K-10K GVW	2001	FORD F350 (3FTSW30S31MA51 811)	SH9929		\$ 0.00		E10	ETHANOL 10%		7276	525.5	13.8
HNL BSYD	2185	TRUCKS 8.5K-10K GVW	1998	FORD F250 (1FTRF27Z5WKB88 22)	SHB780		\$ 0.00		E10	ETHANOL 10%		8709	407.4	21.4
HNL BSYD	2185	TRUCKS 26K-33K GVW	2005	GMC T-SERIES F7B042 (1GDM7F1305F518 151)	SHC166		\$ 0.00		DSL	DIESEL		6456	791.7	8.2
HNL BSYD	2185	SUV 2X4	2006	DODGE DURANGO (1D4HB38P26F1781 76)	SHC286		\$ 0.00		E10 E85	ETHANOL 10%		10712	845.6	12.7
HNL BSYD	2185	TRUCKS <8.5K GVW	1999	FORD RANGER (1FTYR10V2XUA36 382)	SHC305		\$ 0.00		E10 E85	ETHANOL 10%		6305	656.8	9.6
HNL BSYD	2185	TRUCKS 26K-33K GVW	2005	GMC T-SERIES F7B042 (1GDM7F1325F533 444)	SHC315		\$ 0.00		DSL	DIESEL		10989	1333.3	8.2
HNL BSYD	2185	TRUCKS 8.5K-10K GVW	1999	DODGE RAM 2500 (3B6KC26Z4XM580 706)	SHC418		\$ 0.00		E10	ETHANOL 10%		2860	246.9	11.6
HNL BSYD	2185	TRUCKS <8.5K GVW	2000	CHEVROLET S10 (1GCCS1451Y83009 85)	SHC870		\$ 0.00		E10 E85	ETHANOL 10%		5430	620.4	8.8
HNL BSYD	2185	TRUCKS 8.5K-10K GVW	2000	CHEVROLET C3500 (1GCGC33R2YF488 250)	SHC873		\$ 0.00		E10	ETHANOL 10%		1734	5.7	304.2
HNL BSYD	2185	TRUCKS 26K-33K GVW	2007	FREIGHTLINER HC80 (1FVAB6BV37DX09 507)	SHD101		\$ 0.00		DSL	DIESEL		16124	2901.9	5.6
HNL BSYD	2185	TRUCKS <8.5K GVW	2002	CHEVROLET SILVERADO (1GCEC14Z32Z3207 80)	SHE144		\$ 0.00		E10 E85	ETHANOL 10%		6755	482.8	14.0
HNL BSYD	2185	TRUCKS 8.5K-10K GVW	2005	CHEVROLET SILVERADO 2500 (1GCGK13U35F926 927)	SHE770		\$ 0.00		E10	ETHANOL 10%		38536	21.9	1759.6

Appendix 4: Department of Transportation - Airports Division Fuel Data

Location (Island)	Sub Unit	Vehicle Type	Year	Make Model-Vin	License Plate	GWWR	Vehicle Acquisition Cost	Vehicle Acquisition Date	Fuel Config	Fuel Usage	EPA Rated MPG	Vehicle Mileage	Fuel Consumption	Average Vehicle MPG
HNL BSYD	2186	TRUCKS 8.5K-10K GVW	2000	CHEVROLET C3500 (1GCGC33R1YF471 889)	SH9678		\$ 0.00		E10	ETHANOL 10%		2621	166.6	15.7
HNL BSYD	2186	VANS - LIGHT DUTY	1999	DODGE GRAND CARAVAN (2B4GP44G9XR410 527)	SHC302		\$ 0.00		E10 E85	ETHANOL 10%		15787	895.2	17.6
HNL BSYD	2186	VANS - PASSENGER	1998	FORD E150 (1FTRE1468WHB60 537)	SH9029		\$ 0.00		E10	ETHANOL 10%		461	19.4	23.8
HNL BSYD	2186	TRUCKS 8.5K-10K GVW	2005	FORD F350 (1FTWW30Y85EB15 939)	SHB959		\$ 0.00		E10	ETHANOL 10%		3810	322.7	11.8
HNL BSYD	2186	TRUCKS 8.5K-10K GVW	2008	FORD F350 (1FTSW30S38EB49 537)	SHC937		\$ 0.00		E10	ETHANOL 10%		8033	474.1	16.9
HNL BSYD	2186	VANS - PASSENGER	2009	FORD ECONOLINE (1FMNE11W69DA02 921)	SHD810		\$ 0.00		E10 E85	ETHANOL 10%		-846	945.8	-0.9
HNL BSYD	2186	LIGHT OFF-ROAD	1986	YAMAHA CART (J31-113384)	AN248		\$ 0.00		E10	ETHANOL 10%		0	46.1	0.0
HNL BSYD	2186		1900	NA NA (CARPET CLEANERS)	ARPET CLE		\$ 0.00		E10	ETHANOL 10%		0	15.3	0.0
HNL BSYD	2187	SUV 4X4	2000	CHEVROLET SUBURBAN (3GNGK26U9YG185 680)	SHE145		\$ 0.00		E10	ETHANOL 10%		41085	214.1	191.9
HNL BSYD	2187	SUV 4X4	2001	DODGE DURANGO (1B4HS28N11F5920 27)	SHD649		\$ 0.00		E10	ETHANOL 10%		3392	160.7	21.1
HNL BSYD	2187	SUV 4X4	2003	FORD EXCURSION (1FMNU41S83EA28 116)	SHA559		\$ 0.00		E10	ETHANOL 10%		22671	1559.8	14.5
HNL BSYD	2187	TRUCKS 8.5K-10K GVW	2002	FORD F350 (1FTSW31S72ED24 254)	SHA560		\$ 0.00		E10	ETHANOL 10%		6026	325.8	18.5
HNL BSYD	2187	VANS - PASSENGER	2002	FORD E350 (1FBSS31S92HB644 39)	SHA709		\$ 0.00		E10	ETHANOL 10%		6294	630.7	10.0
HNL BSYD	2187	TRUCKS 10K-16K GVW	1997	FORD AMBULANCE (1FDKF38F1VED046 55)	SHC319		\$ 0.00		DSL	DIESEL		1192	43.0	27.7

Appendix 4: Department of Transportation - Airports Division Fuel Data

Location (Island)	Sub Unit	Vehicle Type	Year	Make Model-Vin	License Plate	GWWR	Vehicle Acquisition Cost	Vehicle Acquisition Date	Fuel Config	Fuel Usage	EPA Rated MPG	Vehicle Mileage	Fuel Consumption	Average Vehicle MPG
HNL BSYD	2187	SUV 4X4	2000	FORD EXPEDITION (1FMPU16L5YLC258 23)	SHC341		\$ 0.00		E10	ETHANOL 10%		24596	1705.8	14.4
HNL BSYD	2187	CYCLES - PARKING	2008	YAMAHA CART (JW1-109999)	AN457		\$ 0.00		E10	ETHANOL 10%		0	36.4	0.0
HNL BSYD	2187	CYCLES - PARKING	2008	YAMAHA CART (JW1-110120)	AN458		\$ 0.00		E10	ETHANOL 10%		-4	46.5	-0.1
HNL BSYD	2187	CYCLES - PARKING	2008	YAMAHA CART (JW1-110223)	AN459		\$ 0.00		E10	ETHANOL 10%		95	28.5	3.3
HNL BSYD	2187	VANS - LIGHT DUTY	1998	FORD WINDSTAR (2FMDA51U1WBB5 7679)	SH8775		\$ 0.00		E10	ETHANOL 10%		2009	98.8	20.3
HNL BSYD	2187	SUV 4X4	2002	FORD EXPLORER (1FMZU73W22ZC61 841)	SHA557		\$ 0.00		E10	ETHANOL 10%		2933	925.0	3.2
A37 HNL BSYD	2187	SUV 4X4	2002	FORD EXPLORER (1FMZU73W02ZC61 840)	SHA558		\$ 0.00		E10	ETHANOL 10%		19018	1294.0	14.7
HNL BSYD	2187	SEDANS - POLICE	2003	FORD CROWN VIC INTER (2FAHP71W13X150 057)	SHA729		\$ 0.00		E10	ETHANOL 10%		18830	734.1	25.7
HNL BSYD	2187	SEDANS - POLICE	2003	FORD CROWN VIC INTER (2FAHP71W53X150 062)	SHA731		\$ 0.00		E10	ETHANOL 10%		26521	1204.0	22.0
HNL BSYD	2187	SEDANS - POLICE	2003	FORD CROWN VIC INTER (2FAHP71W33X150 061)	SHA733		\$ 0.00		E10	ETHANOL 10%		27334	1620.0	16.9
HNL BSYD	2187	SUV 4X4	2000	FORD EXPEDITION (1FMPU16L2YLB734 40)	SHC678		\$ 0.00		E10	ETHANOL 10%		25331	1101.7	23.0
HNL BSYD	2187	SEDANS - POLICE	2007	FORD CROWN VIC INTER (2FAHP71W87X153 401)	SHC806		\$ 0.00		E10	ETHANOL 10%		32322	1695.3	19.1
HNL BSYD	2187	SEDANS - POLICE	2007	FORD CROWN VIC INTER (2FAHP71WX7X153 402)	SHC807		\$ 0.00		E10	ETHANOL 10%		40233	1701.7	23.6

Appendix 4: Department of Transportation - Airports Division Fuel Data

Location (Island)	Sub Unit	Vehicle Type	Year	Make Model-Vin	License Plate	GWWR	Vehicle Acquisition Cost	Vehicle Acquisition Date	Fuel Config	Fuel Usage	EPA Rated MPG	Vehicle Mileage	Fuel Consumption	Average Vehicle MPG
HNL BSYD	2187	SEDANS - POLICE	2007	FORD CROWN VIC INTER (2FAHP71W37X153 404)	SHC809		\$ 0.00		E10	ETHANOL 10%		43144	1837.9	23.5
HNL BSYD	2188		1900	NA NA (CRASHFIRE)			\$ 0.00			ETHANOL 10%		0	126.0	0.0
HNL BSYD	2188	FIRE - PUMPER	1988	PIERCE PUMPER (1P9CT01D6JA0402 66)	SH4435		\$ 0.00		DSL	DIESEL		1782	124.4	14.3
HNL BSYD	2188	TRUCKS 10K-16K GVW	1990	GMC R3500 (1GDJR33J9LF7006 31)	SH4441		\$ 0.00		DSL	DIESEL		30995	27.3	1135.3
HNL BSYD	2188	ARFF VEHICLES	1991	OSHKOSH TA1500 (41741)	SH4459		\$ 0.00		DSL	DIESEL		576	18.7	30.8
HNL BSYD	2188	FIRE - PUMPER	1991	OSHKOSH TA1500 (41742)	SH4852		\$ 0.00		DSL	DIESEL		803	15.0	53.5
HNL BSYD	2188	SUV 4X4	2005	FORD EXCURSION (1FMNU40S35EB36 907)	SHB722		\$ 0.00		E10	ETHANOL 10%		14899	666.0	22.4
HNL BSYD	2188	SUV 4X4	2005	FORD EXCURSION (1FMNU40S55EB36 908)	SHB723		\$ 0.00		E10	ETHANOL 10%		2432	161.1	15.1
HNL BSYD	2188	FIRE - PUMPER	2005	OSHKOSH LOW TILT T (10TDKAK195S0815 32)	SHB989		\$ 0.00		DSL	DIESEL		980	57.0	17.2
HNL BSYD	2188	FIRE - PUMPER	2005	OSHKOSH LOW TILT T (10TBKAK115S0815 33)	SHB990		\$ 0.00		DSL	DIESEL		3745	71.9	52.1
HNL BSYD	2188	FIRE - PUMPER	2005	OSHKOSH LOW TILT T (10TBKAK135SO85 597)	SHC128		\$ 0.00		DSL	DIESEL		3931	115.9	33.9
HNL BSYD	2188	FIRE - PUMPER	2005	OSHKOSH LOW TILT T (10TBKAK155SO85 598)	SHC129		\$ 0.00		DSL	DIESEL		2787	43.9	63.5
HNL BSYD	2188	FIRE - PUMPER	2005	OSHKOSH T3000 (10TDKAK165SO85 599)	SHC130		\$ 0.00		DSL	DIESEL		2538	45.0	56.4

Appendix 4: Department of Transportation - Airports Division Fuel Data

Location (Island)	Sub Unit	Vehicle Type	Year	Make Model-Vin	License Plate	GVWR	Vehicle Acquisition Cost	Vehicle Acquisition Date	Fuel Config	Fuel Usage	EPA Rated MPG	Vehicle Mileage	Fuel Consumption	Average Vehicle MPG
HNL BSYD	2188	TRUCKS 8.5K-10K GVW	2006	FORD F350 (1FTSW31P96EC37 831)	SHC227		\$ 0.00		DSL	DIESEL		6587	73.0	90.2
HNL BSYD	2188	TRUCKS 8.5K-10K GVW	2006	FORD F350 (1FTSW31P76EC37 830)	SHC228		\$ 0.00		DSL	DIESEL		11375	378.4	30.1
HNL BSYD	2188	FIRE - PUMPER	2007	OSHKOSH 1500 (10TBKAK1X7S0944 93)	SHC857		\$ 0.00		DSL	DIESEL		4209	42.9	98.1
HNL BSYD	2190	VANS - LIGHT DUTY	1999	DODGE GRAND CARAVAN (2B4GP44G8XR411 586)	SHC303		\$ 0.00		E10 E85	ETHANOL 10%		3397	319.0	10.6
HNL BSYD	2190	SEDANS - GENERAL	2004	DODGE STRATUS (1B3EL36T04N3415 68)	SHD415		\$ 0.00		E10 E85	ETHANOL 10%		1454	116.6	12.5
HNL BSYD	2190	VANS - LIGHT DUTY	1992	GMC SAFARI XT (1GKDM19Z4NB546 331)	SH4049		\$ 0.00		E10	ETHANOL 10%		500	40.7	12.3
HNL BSYD	2190	VANS - LIGHT DUTY	1999	GMC SAFARI XT (1GKDM19W5XB53 6318)	SH9436		\$ 0.00		E10	ETHANOL 10%		1709	103.7	16.5
HNL BSYD	2195	SUV 4X4	2003	CHEVROLET TAHOE (1GNEK13Z32R187 3)	SHA515		\$ 0.00		E10 E85	ETHANOL 10%		1124	565.2	2.0
HNL BSYD	2195	SUV 4X4	2006	DODGE DURANGO (1D4HB38P86F1781 79)	SHC532		\$ 0.00		E10 E85	ETHANOL 10%		12277	973.8	12.6
HNL BSYD	2195	TRANSIT - COACH	1994	FORD BUS (1FDKE30G0RHB02 840)	SHA286		\$ 0.00		E10	ETHANOL 10%		233831	17.1	13674.3
HNL BSYD	2195	TRUCKS <8.5K GVW	2003	FORD EXPLORER SPORT (1FMZU77E93UA80 431)	SHA604		\$ 0.00		E10 E85	ETHANOL 10%		4925	163.0	30.2
HNL BSYD	2195	SEDANS - GENERAL	2005	FORD TAURUS (1FAFP5325A1140 38)	SHD418		\$ 0.00		E10 E85	ETHANOL 10%		1518	72.2	21.0
HNL BSYD	2195	SEDANS - GENERAL	2005	FORD TAURUS (1FAFP53245A1140 39)	SHD419		\$ 0.00		E10 E85	ETHANOL 10%		18366	847.0	21.7

Appendix 4: Department of Transportation - Airports Division Fuel Data

Location (Island)	Sub Unit	Vehicle Type	Year	Make Model-Vin	License Plate	GWWR	Vehicle Acquisition Cost	Vehicle Acquisition Date	Fuel Config	Fuel Usage	EPA Rated MPG	Vehicle Mileage	Fuel Consumption	Average Vehicle MPG
HNL BSYD	2195	TRUCKS <8.5K GVW	2009	FORD F150 (1FTPW14V29KA40 073)	SHD869		\$ 54352.10		E10 E85	ETHANOL 10%		3801	245.8	15.5
HNL BSYD	2195	VANS - CARGO	2000	CHEVROLET C3500 (1GBJG31R9Y12106 54)	SH9829		\$ 0.00		E10	ETHANOL 10%		3804	36.4	104.5
HNL BSYD	2285		1900	NA NA (HDH FUEL CAN)			\$ 0.00			ETHANOL 10%		0	64.2	0.0
HNL BSYD	2485	LOADERS	1995	CASE 4210 (JJE0908222)	AN327		\$ 0.00		DSL	DIESEL		0	5.1	0.0
HNL BSYD	2485	MATERIAL HANDLING	1998	KOMATSU FORKLIFT (323830A)	AN356		\$ 0.00		E10	ETHANOL 10%		4079	51.1	79.8

Appendix 5: Department of Transportation - Harbors Division Vehicle Data

Harbors Division

Act 96 Vehicle Baseline Data
FY 2012 (July 2011 - June 2012)

Make/Model	YR	Gross Vehicle Weight Rating/Class	Vehicle Acquisition Cost (\$)	EPA Rated Fuel Economy (MPG) (city/hwy)	Vehicle Fuel Configuration	Actual in-use Vehicle Mileage (Miles)	Actual in-use Vehicle Fuel Consumption (GAL)	Actual in-use annual average vehicle Fuel Economy (MPG)
Sedan, Stratus, Dodge	04	Sedan	\$7,200	no listing	unleaded	2,335	149.50	15.62
Sedan, Stratus, Dodge	04	Sedan	\$7,200	no listing	unleaded	4,156	273.90	15.17
SDN FORD TAURUS	93	Sedan, Coupe, Station wagon, SUV	\$18,148	19/27	unleaded	n/a	8.4	n/a
SDN FORD TAURUS	93	Sedan, Coupe, Station wagon, SUV	\$18,148	19/27	unleaded	657.0	50.2	13.1
VAN CHEV	92	Van (passenger, cargo)	\$23,799	14/18	unleaded	1549.0	257.5	6.0
P/U GMC	86	Truck (0 - 10,000 GVW)	\$9,006	no listing	unleaded	n.a	12.9	n/a
P/U TRUCK 91 GMC	91	Truck (0 - 10,000 GVW)	\$21,443	15/19	unleaded	136.0	17.0	8.0
TRUCK INT'L FTBD	91	Truck (over 45,000 GVW)	\$62,857	no listing	diesel	n/a	45.7	n/a
P/U DODGE D250	87	Truck (0 - 10,000 GVW)	\$16,026	11/13	unleaded	n/a	36.8	n/a
TRUCK GMC TC 10703	90	Truck (0 - 10,000 GVW)	\$13,724	18/21	unleaded	626.0	5.5	11.3
TRUCK AERIAL LADDER INTL	81	Truck (20,000 - 45,000 GVW)	\$36,381	no listing	unleaded	vehicle was idle	n/a	n/a
TRUCK FORD F600 W/LIFT	90	Truck (10,000 - 20,000 GVW)	\$47,618	11/15	unleaded	231.0	58.9	3.9
P/U GMC FLATBED	86	Truck (10,000 - 20,000 GVW)	\$28,576	no listing	diesel	vehicle was idle	n/a	n/a
TRUCK INT'L 4900 W/BM & JIB	90	Truck (20,000 - 45,000 GVW)	\$95,229	no listing	diesel	n/a	30	n/a
TRUCK INTL AERIAL LIFT	82	Truck (20,000 - 45,000 GVW)	\$97,017	no listing	diesel	n/a	29.0	n/a
TRUCK FLATBED GMC	91	Truck (0 - 10,000 GVW)	\$21,443	15/19	unleaded	4330.0	487.7	8.9
TRUCK CHEV FLTSIDE	94	Truck (0 - 10,000 GVW)	\$16,838	14/19	unleaded	3447.8	394.4	8.7
VAN CHEV	94	Truck (0 - 10,000 GVW)	\$13,687	14/19	unleaded	3030.8	269.4	11.2
VAN CHEV ASTRO	88	Van (passenger, cargo)	\$5,900	17/22	unleaded	758.4	87.6	8.7
TRUCK CHEV CAB	94	Truck (0 - 10,000 GVW)	\$18,192	13/17	unleaded	310.8	27.9	11.1
TRUCK CHEV CAB	94	Truck (0 - 10,000 GVW)	\$18,192	13/17	unleaded	3256.0	388.8	8.4
TRUCK CHEV CAB	94	Truck (0 - 10,000 GVW)	\$18,192	13/17	unleaded	5720.4	438.0	13.0
P/U CHEV	96	Truck (0 - 10,000 GVW)	\$25,187	15/19	unleaded	4035.0	560.7	7.2
INT'L MSTR AERIAL	99	Truck (20,000 - 45,000 GVW)	\$69,695	no listing	diesel	47.0	21.0	2.2
SDN CHEV CORSICA	95	Sedan, Coupe, Station wagon, SUV	\$6,300	21/29	unleaded	157.0	10.5	14.9
SDN CHEV CORSICA	95	Sedan, Coupe, Station wagon, SUV	\$6,300	21/29	unleaded	n/a	5.5	n/a
SDN CHEV CORSICA	95	Sedan, Coupe, Station wagon, SUV	\$6,300	21/29	unleaded	369.0	29.5	12.5
P/UP CHEV	99	Truck (0 - 10,000 GVW)	\$36,145	12/16	unleaded	4751.0	674.0	7.0
TRUCK PETERBILT	00	Truck (20,000 - 45,000 GVW)	\$81,932	no listing	diesel	1927.0	304.2	6.3
VAN CARGO CHEV	01	Van (passenger, cargo)	\$56,655	no listing	diesel	39.0	12.4	3.1
TRUCK CHEV	93	Truck (0 - 10,000 GVW)	\$15,450	15/20	unleaded	835.0	84	9.9
TRUCK FORD	03	Truck (0 - 10,000 GVW)	\$8,000	11/15	unleaded	3084.6	312.1	9.9
TRUCK FORD	03	Truck (0 - 10,000 GVW)	\$8,000	11/15	unleaded	831.1	112.5	7.1
STN WGN TAURUS, Ford	91	STATION WAGON	\$14,988	no listing	unleaded	533	23.60	22.58
GMC TRUCK CREW CAB	91	Truck (0 -10,000 GVW)	\$20,838	no listing	unleaded	broken odom	743.90	N/A
CHEV S10 P/U TRUCK	92	Truck (0 -10,000 GVW)	\$12,290	no listing	unleaded	2,211	147.20	15.02
REFUSE TRUCK GMC WHITE	89	Truck (Over 45,000 GVW)	\$90,272	no listing	diesel	2,069.00	365.30	5.66
STN WGN CRUISER, Oldsmobile	95	STATION WAGON	\$15,344	no listing	unleaded	5,466	452.40	12.00
FORD TRUCK STYLESIDE	94	Truck (0 -10,000 GVW)	\$20,203	no listing	unleaded	1,114	94.70	11.76
STN WGN CRUISER, Oldsmobile	95	STATION WAGON	\$16,894	no listing	unleaded	3,754	155.20	24.10
STN WGN CRUISER, Oldsmobile	95	STATION WAGON	\$16,894	no listing	unleaded	2,639	170.30	15.50
CHEV TRUCK P/U C10FS	96	Truck (0 -10,000 GVW)	\$5,400	no listing	unleaded	3,822.00	267.50	14.29
CHEV DUMPING FLATBED	92	Truck (20,000 - 45,000 GVW)	\$49,070	no listing	diesel	4,773	551.80	8.65
CROWN VIC	97	Sedan	\$29,272	17/23	unleaded	3,528.00	404.4	8.72
CROWN VIC	97	Sedan	\$29,272	17/23	unleaded	3,528.00	404.4	8.72
CROWN VIC	97	Sedan	\$29,272	17/23	unleaded	3,528.00	404.4	8.72
CROWN VIC	98	Sedan	\$31,449	16/22	unleaded	3,528.00	404.4	8.72
MINI-VAN, WINDSTAR, Ford	98	Van, passenger	\$19,939	no listing	unleaded	1,152	51.50	22.40
SWEEPER ELGIN	99	Misc.	\$93,369	no listing	diesel	N/A	0.00	N/A
CHEV P/U TRUCK	99	Truck (0 -10,000 GVW)	\$23,524	no listing	unleaded	2,054	244.90	8.39
CROWN VIC	99	Sedan	\$31,824	16/22	unleaded	3,528.00	404.4	8.72
CROWN VIC	99	Sedan	\$31,824	16/22	unleaded	3,528.00	404.4	8.72
CROWN VIC	99	Sedan	\$30,809	16/22	unleaded	3,528.00	404.4	8.72
CHEV LUMINA SEDAN	91	Sedan, Coupe, Station wagon, SUV	\$5,600	no listing	unleaded	3,042	175.00	17.38
TRUCK ROLL-OFF PETERBILT	99	Truck (Over 45,000 GVW)	\$115,406	no listing	diesel	1,344.00	241.20	5.57
REFUSE TRUCK, PETERBILT	99	Truck (20,000 - 45,000 GVW)	\$129,914	no listing	diesel	0	0.00	N/A
CROWN VIC	99	Sedan	\$14,642	16/22	unleaded	3,528.00	404.4	8.72
VAN AEROSTAR	97	Van, passenger	\$5,700	no listing	unleaded	3,303.00	360.60	9.16
FORD FDSD	00	Sedan	\$6,806	16/22	unleaded	3,528.00	404.4	8.72
ELGIN SWEEPER	06	Misc.	\$214,481	no listing	diesel	3,739	2,023.60	1.85
ELGIN SWEEPER	06	Misc.	\$214,481	no listing	diesel	2,392	1,041.60	2.30
TRUCK FORD	07	TRUCK	\$26,094	no listing	unleaded	4,660.00	588	7.93
CHEVY CLASSIC	04	Sedan, Coupe, Station wagon, SUV	\$7,000	21/31	unleaded	2,328.00	260.40	8.94
CHEVY CLASSIC	04	Sedan, Coupe, Station wagon, SUV	\$7,000	21/31	unleaded	2,328.00	260.40	8.94
REFUSE TRUCK GMC	08	Truck (20,000 - 45,000 GVW)	\$195,898	no listing	diesel	15,744.00	2,952.20	5.33
FORD TRUCK 4DR	09	Truck (0 -10,000 GVW)	\$32,880	no listing	unleaded	7,535.00	1,081.20	6.97
FORD TRUCK 4DR	09	Truck (0 -10,000 GVW)	\$32,880	no listing	unleaded	8,184.00	1,170.40	6.99
CROWN VIC	09	Sedan	\$34,860	15/23	unleaded	3,528.00	404.4	8.72
CROWN VIC	09	Sedan	\$34,860	15/23	unleaded	3,528.00	404.4	8.72
FORD P/U TRUCK	11	P/U Truck	\$18,026	29/40	unleaded	1,000.00	50.00	20.00

Appendix 5: Department of Transportation - Harbors Division Vehicle Data
Harbors Division
Act 96 Vehicle Baseline Data
FY 2012 (July 2011 - June 2012)

Make/Model	YR	Gross Vehicle Weight Rating/Class	Vehicle Acquisition Cost (\$)	EPA Rated Fuel Economy (MPG) (city/hwy)	Vehicle Fuel Configuration	Actual in-use Vehicle Milage (Miles)	Actual in-use Vehicle Fuel Consumption (GAL)	Actual in-use annual average vehicle Fuel Economy (MPG)
FORD P/U TRUCK	01	Truck (0 -10,000 GVW)	\$15,375.00	21	unl	1,525.00	149.80	10.18
TOYOTA TACOMA P/UP	06	Truck (0 -10,000 GVW)	\$17,682.18	19	unl	2,427.00	142.20	17.07
TOYOTA HIGHLANDER H.BRID	07	SUV (0 - 10,000 GVW)	\$35,989.35	32	unl/Hybrid	4,675.00	192.00	24.35
FORD P/U TRUCK	11	Truck (0 - 10,000 GVW)	\$18,025.94	no listing	Unl	1,101.30	101.90	10.81
TRUCK FORD STYLESIDE	94	Truck (0 - 10,000 GVW)	\$29,036.00	13	GAS	No Longer in use	Unused	Unused
TRUCK CHEV STYLESIDE	94	Truck (0 - 10,000 GVW)	\$16,249.00	19	GAS	No Longer in use	Unused	Unused
SUV CHEV BLAZER	95	Truck (0 - 10,000 GVW)	\$22,769.00	17	GAS	No Longer in use	Unused	Unused
P/U CHEV FLATBED	99	Truck (0 - 10,000 GVW)	\$26,680.00	14	GAS	2,836.00	345.50	8.21
SUV CHEV BLAZER	99	Truck (0 - 10,000 GVW)	\$32,019.00	16	GAS	2,387.00	222.50	10.73
P/U TRUCK CHEV	99	Truck (0 - 10,000 GVW)	\$27,350.00	14	GAS	5,556.00	512.40	10.84
TRUCK CHEV	99	Truck (0 - 10,000 GVW)	\$26,817.00	14	GAS	4,011.00	379.50	10.57
P/U TRUCK FORD	01	Truck (0 - 10,000 GVW)	\$15,375.00	21	GAS	9,229.00	512.40	18.01

Appendix 5: Department of Transportation - Harbors Division Vehicle Data
Harbors Division
Act 96 Vehicle Baseline Data
FY 2012 (July 2011 - June 2012)

Make/Model	YR	Gross Vehicle Weight Rating/Class	Vehicle Acquisition Cost (\$)	EPA Rated Fuel Economy (MPG) (city/hwy)	Vehicle Fuel Configuration	Actual in-use Vehicle Mileage (Miles)	Actual in-use Vehicle Fuel Consumption (GAL)	Actual in-use annual average vehicle Fuel Economy (MPG)
P/U TRUCK 92 FORD F-150	92	Truck (0 - 10,000 GVW)	\$15,556	no listing	unleaded	162	26.00	6.23
P/U CHEV FLATBED	94	Truck (20,000 - 45,000 GVW)	\$30,871	no listing	unleaded	0	0.00	unused
SUV ISUZU MPVH	00	SUV (0 - 10,000 GVW)	\$22,362	17/22	unleaded	17,925	907.44	19.75
P/U TRUCK 250 FORD F-250	03	Truck (0 - 10,000 GVW)	\$24,673	15/19	unleaded	3,329	250.40	13.29
SUV FORD ESCAPE	05	SUV (0 - 10,000 GVW)	\$26,924	17/23	unleaded	2,935	249.50	11.76
PRERUNNER TOYOTA	07	Truck (0 - 10,000 GVW)	\$25,099	16/20	unleaded	9,298	461.50	20.15
P/U DODGE DAKOTA	07	Truck (0 - 10,000 GVW)	\$18,726	18/23	unleaded	6,115	357.01	17.13
SUV FORD ESCAPE	09	SUV (0 - 10,000 GVW)	\$24,814	17/23	unleaded	2,716	208.00	13.06
FORD RANGER	11	Truck (0 - 10,000 GVW)	\$18,026	19/24	unleaded	5,642	392.00	14.39
FORD RANGER TRUCK	11	Truck (0 - 10,000 GVW)	\$17,494	19/24	unleaded	4,793	210.50	22.77

Appendix 5: Department of Transportation - Harbors Division Vehicle Data
Harbors Division
Act 96 Vehicle Baseline Data
FY 2012 (July 2011 - June 2012)

Make/Model	YR	Gross Vehicle Weight Rating/Class	Vehicle Acquisition Cost (\$)	EPA Rated Fuel Economy (MPG) (city/hwy)	Vehicle Fuel Configuration	Actual in-use Vehicle Mileage (Miles)	Actual in-use Vehicle Fuel Consumption (GAL)	Actual in-use annual average vehicle Fuel Economy (MPG)
P/U TRUCK FORD	92	Truck (0 - 10,000 GVW)	\$19,621	12/17	Gas	1740	291.27	5.97
INTL STAKE	84	Truck (10,000 - 20,000 GVW)	\$20,661	N/A	Gas	647	187.22	3.46
P/U FORD	86	Truck (0 - 10,000 GVW)	\$9,550	18/24	Gas	n/a	n/a	n/a
P/U TRUCK GMC SONOMA	91	Truck (0 - 10,000 GVW)	\$17,405	18/24	Gas	1086	116.05	9.36
SDN OLDS CUTLASS CRUISER	95	Sedan	\$14,765	19/29	Gas	57	18.23	3.13
TRUCK GMC	95	Truck (0 - 10,000 GVW)	\$20,182	16/21	Gas	3687	428.88	8.60
TRUCK GMC	95	Truck (0 - 10,000 GVW)	\$15,954	16/21	Gas	5146	368.23	13.97
P/U CHEV	97	Truck (0 - 10,000 GVW)	\$15,625	17/23	Gas	1017	175.29	5.80
SUV CHEV BLAZER	98	Truck (0 - 10,000 GVW)	\$31,100	16/20	Gas	2255	345.36	6.53

Appendix 6: Department of Transportation - Highways Division Vehicle Data

HIGHWAYS DIVISION - OAHU DISTRICT

E/U ALTERNATIVE FUEL REPORT BY FUEL TYPE 9/04/07

PERIOD: 07/01/06 THRU 06/30/07

EQUIPMENT	DESCRIPTION.....	SERIAL NUMBER.....	GVW	FUEL.....	-----ACQUISITION-----	
					COST	DATE
91812 266	80 SEDAN: CHEV CHEVETTE	1J089AA258370	0	GASOLINE	5,043.90	
91812 329	83 TRUCK: GMC CREWCAB PICKUP	1GTGC33T9DS525047	0	GASOLINE	12,200.00	10/01/83
91812 333	83 TRUCK: FORD FLATBED 3/4 TON	1FDHF27Y6DPA87288	0	GASOLINE	11,000.00	10/01/83
91812 335	84 VAN: CHEV SPORTS	1G8GK26M9EF152727	0	GASOLINE	13,207.73	05/01/84
91812 340	86 SEDAN: FORD TAURUS	1FABP29U3GG206569	0	GASOLINE	10,624.51	06/01/86
91812 343	86 TRUCK: FORD RANGER PICKUP	1FTBR10T1GUC95174	0	GASOLINE	8,404.65	07/01/86
91812 344	86 SEDAN: FORD F150 PICKUP	1FTDF15Y8GPB29545	0	GASOLINE	10,253.12	07/01/86
91812 345	86 TRUCK: FORD F150 PICKUP	1FTFE14N0GPB32161	0	GASOLINE	12,340.40	07/01/86
91812 347	86 TRUCK: GMC CREWCAB PICKUP	1GTHK33J6GS527712	0	GASOLINE	19,250.00	11/01/86
91812 348	87 VAN: FORD E150 CLUBWAGON	1FMEE11HXHB41247	0	GASOLINE	15,226.09	
91812 349	87 TRUCK: DODGE D150 PICKUP	1B7GD14H3HS464215	0	GASOLINE	10,242.52	07/01/87
91812 352	87 TRUCK: DODGE D150 PICKUP	1B7GD14H9HS464218	0	GASOLINE	10,242.52	07/01/87
91812 353	87 TRUCK: DODGE D150 PICKUP	1B7GD14H0HS464219	0	GASOLINE	10,242.52	07/01/87
91812 354	87 TRUCK: CHEV CREWCAB PICKUP(EXCH FOR 526)	1GCGR33R5HS148941	0	GASOLINE	15,891.81	08/01/87
91812 355	87 TRUCK: CHEV S-10 PICKUP	1GCB514R5H2231624	0	GASOLINE	8,957.76	08/01/97
91812 356	88 TRUCK: CHEV S-10 PICKUP	1GCB514R5J8142865	0	GASOLINE	9,967.02	03/01/88
91812 358	88 TRUCK: CHEV BLAZER	1GNEV18K7JF129880	0	GASOLINE	16,769.76	04/01/88
91812 359	88 VAN: FORD CLUBWAGON	1FBJS31H7JHB47654	0	GASOLINE	19,995.08	07/01/88
91812 361	87 TRUCK: FORD HERBICIDE FLATBED	2FDJF37HXHCA99202	0	GASOLINE	30,480.91	07/01/88
91812 362	88 TRUCK: CHEV S-10 PICKUP	1GCCS19R1J8221186	0	GASOLINE	11,596.73	08/01/88
91812 365	88 SEDAN: CHEVY CELEBRITY	1G1AW51W3J6282080	0	GASOLINE	12,640.46	09/01/88
91812 366	88 SEDAN: CHEVY CELEBRITY	1G1AW51W0J6282117	0	GASOLINE	12,640.46	09/01/88
91812 367	88 SEDAN: CHEVY CELEBRITY	1G1AW51WXJ6284988	0	GASOLINE	12,640.46	09/01/88
91812 368	88 TRUCK: CHEVY FLEETSIDE PICKUP	1GCGC34KLJE208184	0	GASOLINE	14,078.62	09/04/88
91812 370	88 TRUCK: CHEVY CREWCAB PICKUP	1GCGR33K6JJ138625	0	GASOLINE	17,256.32	09/01/88
91812 371	86 TRUCK: CHEVY PICKUP	1GCDC14H9GJ119460	0	GASOLINE	5,925.00	08/01/88
91812 372	88 TRUCK: DODGE D150 PICKUP W/HYD TAILGATE	1B7HD14Y9JS787324	0	GASOLINE	17,442.49	11/01/88
91812 375	89 TRUCK: CHEV SUBURBAN 4 W/D	1GNGV26K1KF112060	0	GASOLINE	21,675.56	12/01/88
91812 376	89 TRUCK: DODGE D350 RAM FLATBED	1B6ME3650KS042168	0	GASOLINE	25,402.60	03/01/89
91812 378	87 SEDAN: CHEV CAVALIER	1G1JCS110HK140543	0	GASOLINE	5,850.00	04/01/89
91812 379	89 VAN: CHEV BEAUVILLE SPORTS	1GNDG15K1K7140122	0	GASOLINE	16,673.00	04/01/89
91812 380	89 STATION WAGON: FORD TAURUS	1FABP55U8KG202419	0	GASOLINE	12,857.33	04/01/89
91812 381	89 TRUCK: GMC S15 PICKUP	1GTCS19Z5K8528099	0	GASOLINE	11,487.87	06/01/89
91812 382	89 TRUCK: GMC S15 PICKUP	1GTCS19Z8K8528209	0	GASOLINE	11,487.87	06/01/89
91812 384	89 VAN: GMC RALLYSTX	1GKDG15H3K7515445	0	GASOLINE	18,974.57	07/01/89
91812 385	88 WAGON: TOYOTA LAND CRUISER STATION	JT3FJ62G8J0090489	0	GASOLINE	12,069.79	09/01/89
91812 386	90 SEDAN: CHEV LUMINA	2G1WL54TXL9234877	0	GASOLINE	12,368.87	06/01/90
91812 388	90 VAN: DODGE B350 RAM	2B4KB35ZXLK766975	0	GASOLINE	19,333.07	07/01/90
91812 389	90 VAN: DODGE B350 RAM	2B4KB35Z8LK766974	0	GASOLINE	19,333.07	07/01/90
91812 390	90 SEDAN: CHEV LUMINA	2G1WL54T6L9234844	0	GASOLINE	12,367.83	07/01/90
91812 391	90 SEDAN: CHEV LUMINA	2G1WL54TXL9235401	0	GASOLINE	12,367.83	07/23/90
91812 392	90 SEDAN: CHEV LUMINA	2G1WL54T9L9235406	0	GASOLINE	12,367.83	07/01/90
91812 393	90 SEDAN: CHEV LUMINA	2G1WL54T2L9239149	0	GASOLINE	12,367.83	07/01/90
91812 394	90 VAN: DODGE B350 RAM	2B4KB35Z1LK766976	0	GASOLINE	19,333.07	07/01/90
91812 395	91 TRUCK: CHEVY BLAZER	1GNCS18Z2M0120136	0	GASOLINE	13,936.96	07/01/90
91812 396	91 TRUCK: CHEVY BLAZER	1GNCS18Z7M0120262	0	GASOLINE	13,936.96	07/01/90
91812 397	90 TRUCK: FORD F350 CREWCAB PICKUP	2FTJW35H8LCA97061	0	GASOLINE	18,518.81	07/01/90
91812 398	90 TRUCK: FORD F350 CREWCAB PICKUP	2FTJW35HXLCA97059	0	GASOLINE	18,518.81	07/01/90
91812 399	90 TRUCK: FORD F350 CREWCAB PICKUP	2FTJW35H6LCA97060	0	GASOLINE	18,518.81	07/01/90
91812 400	90 STATION WAGON: CHEV CELEBRITY	2G1AW84T8L2116581	0	GASOLINE	12,385.62	07/01/90
91812 401	91 TRUCK: CHEV S10 PICKUP	1GCCS19Z8M8131389	0	GASOLINE	11,871.04	07/01/90

Appendix 6: Department of Transportation - Highways Division Vehicle Data

HIGHWAYS DIVISION - OAHU DISTRICT

E/U ALTERNATIVE FUEL REPORT BY FUEL TYPE 9/04/07

PERIOD: 07/01/06 THRU 06/30/07

EQUIPMENT	DESCRIPTION.....	SERIAL NUMBER.....	GVW	FUEL.....	-----ACQUISITION-----	
					COST	DATE
91812 402	91 TRUCK: CHEV S-10 PICKUP	1GCCS1923M8133650	0	GASOLINE	11,871.03	07/01/90
91812 403	91 TRUCK: CHEV S10 PICKUP	1GCCS1925M8135528	0	GASOLINE	11,872.08	07/01/90
91812 404	91 TRUCK: CHEV S-10 PICKUP	1GCCS1921M8131783	0	GASOLINE	11,872.08	07/01/90
91812 405	91 TRUCK: CHEV S10 PICKUP	1GCCS1929M8135273	0	GASOLINE	11,872.08	07/01/90
91812 406	87 WAGON: CHEV CELEBRITY STATION WAGON	1G1AW81W6H6122884	0	GASOLINE	6,000.00	08/01/90
91812 407	88 TRUCK: FORD F150 PICKUP	1FTDF15Y1JPA33828	0	GASOLINE	5,500.00	08/01/90
91812 408	88 SEDAN: FORD TEMPO GL	1FAPP36XXJK107875	0	GASOLINE	3,000.00	08/01/90
91812 409	84 VAN: DODGE RAM 250	2B4HB21H8EK265362	0	GASOLINE	1,300.00	
91812 410	85 VAN: CHEVY G20	1G8EG25N3F7167870	0	GASOLINE	1,300.00	
91812 412	91 TRUCK: CHEV CREWCAB PICKUP	1GCGR33KXMF304622	0	GASOLINE	17,071.50	06/01/91
91812 413	91 TRUCK: CHEV PICKUP	1GCGR33K4MF304552	0	GASOLINE	17,071.50	06/01/91
91812 414	91 SEDAN: CHEV LUMINA	2G1WL54T1M9228869	0	GASOLINE	13,075.50	06/01/91
91812 415	91 VAN: CHEV EXTENDED SPORT	2GAGG39K4M4134012	0	GASOLINE	18,817.77	07/01/91
91812 416	91 TRUCK: CHEV S-10 PICKUP	1GCCS1922M2300485	0	GASOLINE	12,174.99	07/01/91
91812 417	91 TRUCK: CHEV S-10 PICKUP	1GCCS1921M2300672	0	GASOLINE	12,175.00	07/01/91
91812 418	91 TRUCK: CHEV S-10 PICKUP	1GCCS1926M2301283	0	GASOLINE	12,175.00	
91812 420	01 TRUCK: CHEV SUBURBAN 4 WD	1GNVG26K7MF138634	0	GASOLINE	19,589.00	07/22/91
91812 421	91 TRUCK: CHEV CREWCAB PICKUP	1GCHV33J4MF305935	0	GASOLINE	22,276.00	07/01/91
91812 422	91 SEDAN: CHEV LUMINA	2G1WL54T1M9228516	0	GASOLINE	13,075.50	07/01/93
91812 423	91 TRUCK: CHEV 3/4 TON PICKUP	1GFCFC24H8MZ215480	0	GASOLINE	14,430.00	09/01/91
91812 424	91 TRUCK: CHEV S-10 PICKUP	1GCCS1925M2300125	0	GASOLINE	12,175.00	09/01/91
91812 425	91 SEDAN: DODGE DYNASTY	1B3XC46R7MD259412	0	GASOLINE	12,434.48	09/01/91
91812 426	91 VAN: CHEVY ASTRO	1GNDM1926MB212142	0	GASOLINE	17,437.00	10/14/91
91812 427	91 TRUCK: CHEV UTILITY 3/4 TON PICKUP	1GBG24K9ME203530	0	GASOLINE	18,845.00	10/01/91
91812 428	91 TRUCK: CHEV UTILITY 3/4 TON PICKUP	1GBG24K8ME203910	0	GASOLINE	18,845.00	
91812 429	91 TRUCK: CHEV FLATBED CONE	1GBHC34K2ME174897	0	GASOLINE	23,609.45	11/01/91
91812 430	85 VAN: ASTRO	1G8CM152XGB100159	0	GASOLINE	.00	03/01/92
91812 431	92 TRUCK: SONOMA S19Z PICKUP	1GTCS1927N8515472	0	GASOLINE	11,965.00	05/01/92
91812 432	92 TRUCK: SONOMA S19Z PICKUP	1GTCS192XN8515479	0	GASOLINE	11,965.00	05/01/92
91812 433	92 TRUCK: SONOMA S19Z PICKUP	1GTCS1921N8515760	0	GASOLINE	11,965.00	05/01/92
91812 434	92 SUBURBAN: CHEV 4W/D W/AIR	1GNKG26KONJ333644	0	GASOLINE	21,875.07	07/01/92
91812 435	92 TRUCK: CHEV SUBURBAN 4 WD W/AIR	1GNKG26KXNJ334168	0	GASOLINE	21,875.07	07/01/92
91812 436	92 TRUCK: CHEV SUBURBAN 4 WD W/AIR	1GNKG26K5NJ334854	0	GASOLINE	21,875.07	07/01/92
91812 437	92 TRUCK: CHEV SUBURBAN 4 WD W/AIR	1GNKG26K3NJ335839	0	GASOLINE	21,875.07	07/01/92
91812 438	92 SUBURBAN: CHEV 4W/D W/AIR	1GNKG26K1NJ3340876	0	GASOLINE	21,875.07	07/01/92
91812 439	92 SUBURBAN: CHEV 4W/D W/AIR	1GNKG26K7NJ3341787	0	GASOLINE	21,875.07	07/01/92
91812 440	92 SUBURBAN: CHEV 4W/D W/AIR	1GNKG26K1NJ3341476	0	GASOLINE	21,875.07	07/01/92
91812 441	92 SUBURBAN: CHEV 4W/D W/AIR	1GNKG26K9NJ3341354	0	GASOLINE	21,875.07	07/01/92
91812 442	92 VAN: CHEVY SPORT	2GNDG15K6N4163430	0	GASOLINE	16,602.59	08/01/92
91812 443	92 VAN: CHEVY SPORT	2GNDG15K7N4164196	0	GASOLINE	16,602.59	08/01/92
91812 444	93 TRUCK: GMC SIERRA PICKUP	1GTGC33K2PJ724376	0	GASOLINE	18,250.00	05/01/93
91812 445	92 TRUCK: CHEV CREWCAB PICKUP	1GCCG33K6NJ350383	0	GASOLINE	19,962.98	12/01/92
91812 446	93 TRUCK: FORD F-150 PICKUP	1FTDF15YXPLA66164	0	GASOLINE	10,265.84	04/01/93
91812 447	93 TRUCK: FORD F150 PICKUP	1FTDF15Y1PLA66165	0	GASOLINE	10,265.84	04/01/93
91812 448	93 TRUCK: FORD F150 PICKUP	1FTDF15Y3PLA66166	0	GASOLINE	10,265.84	04/01/93
91812 449	93 TRUCK: FORD F150 PICKUP	1FTDF15Y2PLA66160	0	GASOLINE	10,365.84	05/18/93
91812 450	93 TRUCK: FORD F150 PICKUP	1FTDF15Y4PLA66161	0	GASOLINE	10,369.84	04/01/93
91812 451	93 TRUCK: FORD F150 PICKUP	1FTDF15Y6PLA66162	0	GASOLINE	10,369.84	04/01/93
91812 452	93 TRUCK: FORD F150 PICKUP	1FTDF15Y8PLA66163	0	GASOLINE	10,369.84	04/01/93
91812 453	93 TRUCK: FORD F15 PICKUP	1FTDF15Y5PLA66167	0	GASOLINE	10,853.44	04/01/93
91812 454	93 VAN: FORD AEROSTAR	1FMCA11U1PZB27844	0	GASOLINE	13,801.84	05/01/93

Appendix 6: Department of Transportation - Highways Division Vehicle Data

HIGHWAYS DIVISION - OAHU DISTRICT
E/U ALTERNATIVE FUEL REPORT BY FUEL TYPE 9/04/07

PERIOD: 07/01/06 THRU 06/30/07

EQUIPMENT	DESCRIPTION.....	SERIAL NUMBER.....	GVW	FUEL.....	-----ACQUISITION-----	
					COST	DATE
91812 455	93 VAN: FORD AEROSTAR	1FMCA11U5PZB27846	0	GASOLINE	14,351.00	05/01/93
91812 456	93 STATION WAGON: FORD TAURUS	1FACP57U6PG245844	0	GASOLINE	13,592.80	05/01/93
91812 457	93 STATION WAGON: FORD TAURUS	1FACP57U8PG245845	0	GASOLINE	13,488.80	05/01/93
91812 458	93 STATION WAGON: FORD TAURUS	1FACP57UXPG245846	0	GASOLINE	13,488.80	05/01/93
91812 459	93 SEDAN: CHEVROLET LUMINA 4 DR	2G1WL54T3P9206344	0	GASOLINE	11,890.70	05/01/93
91812 460	93 SEDAN: CHEVROLET LUMINA 4DR	2G1WL54T1P9204866	0	GASOLINE	11,890.70	05/01/93
91812 461	93 SEDAN: CHEVROLET LUMINA 4 DR	2G1WL54T8P9205142	0	GASOLINE	11,890.70	05/01/93
91812 462	93 SEDAN: CHEVROLET LUMINA 4 DR	2G1WL54T0P9208147	0	GASOLINE	11,890.70	05/01/93
91812 463	93 SEDAN: CHEVROLET LUMINA 4 DR	2G1WL54T2P9205279	0	GASOLINE	11,916.75	05/01/93
91812 464	93 SEDAN: CHEVROLET LUMINA 4 DR	2G1WL54T3P1143325	0	GASOLINE	11,916.75	05/01/93
91812 465	93 TRUCK: FORD F350 PICKUP	2FTJW35H1PCA94802	0	GASOLINE	18,383.04	07/01/93
91812 466	93 TRUCK: FORD RANGER PICKUP	1FTCR10X3PUC48316	0	GASOLINE	11,059.36	07/01/93
91812 467	93 TRUCK: FORD RANGER PICKUP	1FTCR10X5PUC48317	0	GASOLINE	11,059.36	07/01/93
91812 468	93 TRUCK: FORD RANGER PICKUP	1FTCR10X7PUC48318	0	GASOLINE	11,059.36	07/01/93
91812 469	93 TRUCK: FORD RANGER PICKUP	1FTCR10A1PUC48309	0	GASOLINE	9,393.28	05/01/93
91812 470	93 TRUCK: FORD RANGER PICKUP	1FTCR10A8PUC48310	0	GASOLINE	9,393.28	05/01/93
91812 471	93 TRUCK: FORD RANGER PICKUP	1FTCR10AXPUC48311	0	GASOLINE	9,393.28	05/01/93
91812 472	93 TRUCK: FORD RANGER PICKUP	1FTCR10A1PUC48312	0	GASOLINE	9,393.28	05/01/93
91812 473	93 TRUCK: FORD RANGER PICKUP	1FTCR10A3PUC48313	0	GASOLINE	9,393.28	05/01/93
91812 474	93 TRUCK: FORD RANGER PICKUP	1FTCR10A5PUC48314	0	GASOLINE	9,393.28	05/01/93
91812 475	93 TRUCK: FORD RANGER PICKUP	1FTCR10A7PUC48315	0	GASOLINE	9,393.28	05/01/93
91812 476	93 TRUCK: FORD F150 4WHEEL DRIVE PICKUP	1FTPF14N4PLA66169	0	GASOLINE	14,582.12	06/01/93
91812 477	93 SEDAN: CHEV CAVALIER 4DSD	1G1JC5443P7315150	0	GASOLINE	8,888.00	08/01/93
91812 478	93 SEDAN: CHEV CAVALIER 4DSD	1G1JC5444P7315965	0	GASOLINE	8,888.00	08/01/93
91812 479	93 SEDAN: CHEV CAVALIER 4DSD	1G1JC5P7317000	0	GASOLINE	8,888.00	08/01/93
91812 480	93 SEDAN: CHEV CAVALIER 4DSD	1G1JC5441P7317057	0	GASOLINE	8,888.00	08/01/93
91812 481	93 SEDAN: CHEV CAVALIER 4DSD	1G1JC5443P7318341	0	GASOLINE	8,888.00	08/01/93
91812 482	93 SEDAN: CHEV CAVALIER 4DSD	1G1JC544XP7319129	0	GASOLINE	9,663.00	08/01/93
91812 483	93 SEDAN: CHEV CAVALIER 4DSD	1G1JC5445P7319183	0	GASOLINE	8,888.00	08/01/93
91812 484	93 SEDAN: CHEV CAVALIER 4DSD	1G1JC5441P7325708	0	GASOLINE	8,888.00	08/01/93
91812 485	93 SEDAN: CHEV CAVALIER 4DSD	1G1JC5445P7336940	0	GASOLINE	8,888.00	08/01/93
91812 486	93 SEDAN: CHEV CAVLIER 4DSD	1G1JC5441P7338488	0	GASOLINE	8,888.00	08/01/93
91812 487	93 SEDAN: CHEV CAVALIER	1G1JC5446P7339197	0	GASOLINE	8,888.00	08/01/93
91812 488	93 TRUCK: GMC SUBURBAN 4WD	1GKGK26K1PJ746057	0	GASOLINE	22,422.59	08/01/93
91812 489	94 TRUCK: CHEV S-10 PICKUP	1GCCS1441R8180629	0	GASOLINE	10,554.48	06/01/94
91812 490	94 TRUCK: CHEV S-10 PICKUP	1GCCS1447R8181624	0	GASOLINE	10,553.40	06/01/94
91812 491	94 TRUCK: CHEV S-10 PICKUP	1GCCS1441R8178587	0	GASOLINE	10,553.40	06/01/94
91812 492	94 TRUCK: CHEV S-10 PICKUP(EXCH FOR 464)	1GCCS1444R8178969	0	GASOLINE	10,554.49	06/01/94
91812 493	94 TRUCK: CHEV S-10 PICKUP	1GCCS1446R8178794	0	GASOLINE	10,553.40	06/01/94
91812 494	94 TRUCK: CHEV S-10 PICKUP	1GCCS1444R8180074	0	GASOLINE	10,553.40	06/01/94
91812 495	94 TRUCK: CHEV S-10 PICKUP	1GCCS1442R8179196	0	GASOLINE	10,553.40	06/01/94
91812 496	94 TRUCK: CHEVY S-10 PICKUP	1GCCS1449R8180068	0	GASOLINE	10,553.40	06/01/94
91812 497	94 TRUCK: CHEV S-10 PICKUP	1GCCS144XR8179480	0	GASOLINE	10,553.40	06/01/94
91812 498	94 TRUCK: CHEV S-10 PICKUP	1GCCS1444R8179300	0	GASOLINE	10,553.40	06/01/94
91812 499	94 TRUCK: CHEV. C2500 PICKUP	1GFCP24H4RZ194098	0	GASOLINE	14,693.49	06/01/94
91812 500	94 SEDAN: OLDSMOBILE CUTLASS CIERA(EXC 456)	1G3AG55M5R6397806	0	GASOLINE	13,027.13	06/01/94
91812 501	94 STA WGN: OLDSMOBILE CUTLASS CRUISER	1G3AG55M3R6397822	0	GASOLINE	13,130.25	06/01/94
91812 502	94 STA WGN: OLDSMOBILE CUTLASS CRUISER	1G3AJ85M4R6402884	0	GASOLINE	13,832.34	06/01/94
91812 503	94 STA WGN: OLDSMOBILE CUTLASS CRUISER	1G3AJ85M6R6398806	0	GASOLINE	13,931.29	06/01/94
91812 504	94 STA WGN: OLDSMOBILE CUTLASS CRUISER	1G3AJ85M1R6399216	0	GASOLINE	13,931.29	06/01/94
91812 505	94 STA WGN:OLDSMOBILE CUTLASS CRUISER	1G3AJ85M0R6399238	0	GASOLINE	13,906.30	06/01/94

Appendix 6: Department of Transportation - Highways Division Vehicle Data

HIGHWAYS DIVISION - OAHU DISTRICT

E/U ALTERNATIVE FUEL REPORT BY FUEL TYPE 9/04/07

PERIOD: 07/01/06 THRU 06/30/07

EQUIPMENT	DESCRIPTION.....	SERIAL NUMBER.....	GVW	FUEL.....	-----ACQUISITION-----	
					COST	DATE
91812 506	94 STA WGN: OLDSMOBILE CUTLASS CRUISER	1G3AJ85M6R6400845	0	GASOLINE	13,906.30	06/01/94
91812 507	94 STA WGN: OLDSMOBILE CUTLASS CRUISER	1G3AJ85MSR6400707	0	GASOLINE	13,931.29	06/01/94
91812 508	94 TRUCK: CHEVROLET 1/2 TON PICKUP(EXCH 449	1GDCD14H1RZ217659	0	GASOLINE	13,667.77	06/01/94
91812 509	94 TRUCK: CHEVROLET 1/2 TON PICKUP	1GDCD14H2RZ217427	0	GASOLINE	13,666.77	06/01/94
91812 510	94 TRUCK: CHEVROLET 1/2 TON PICKUP	1GDCD14H0RZ217541	0	GASOLINE	13,666.77	06/01/94
91812 511	94 TRUCK: CHEVROLET 1/2 TON PICKUP	1GDCD14H8RZ217738	0	GASOLINE	13,666.77	06/01/94
91812 512	94 VAN: GMC SAFARI	1GKDM15Z1RB542846	0	GASOLINE	15,072.96	08/01/94
91812 513	94 VAN: GMC SPORT RALLY	1GKEG25H3RF532871	0	GASOLINE	16,144.84	06/01/94
91812 514	94 STATION WAGON:CHEVROLET CAVALIER	1G1JC8445R7317633	0	GASOLINE	11,859.15	06/01/94
91812 515	94 STATION WAGON:CHEVY CAVALIER	1G1JC8442R7314950	0	GASOLINE	11,859.16	06/01/94
91812 516	94 TRUCK: CHEV. CHASSIS CAB 3/4 TON PICKUP	1GBGC24K8RE270241	0	GASOLINE	17,731.59	09/01/94
91812 517	94 TRUCK: CHEV PICKUP W/ SKID TRAILER	1GCGC31N0RJ408472	0	GASOLINE	22,682.00	11/01/94
91812 518	94 TRUCK: GMC SIERRA CLUB COUPE	1GTHK39F4RE503732	0	GASOLINE	143,457.00	09/01/95
91812 519	85 TRUCK: CHEV 4WD P/U-MILITARY	1GCGD34J2FF434840	0	GASOLINE	1,600.00	08/01/96
91812 520	85 TRUCK: CHEV 4WD P/U-MILITARY	1GCHD34J0FF444366	0	GASOLINE	1,600.00	08/01/96
91812 521	84 TRUCK: CHEV. PICKUP	1GCHD34J6EP357800	0	GASOLINE	1,600.00	
91812 528	97 TRUCK: CHEV S-10 EXT CAB PICKUP CHEYENNE	1GCCS19X1VK179464	0	GASOLINE	17,015.61	04/01/97
91812 529	97 TRUCK: CHEV S-10 EXT CAB PICKUP CHEYENNE	1GCCS19X2VK179571	0	GASOLINE	17,015.61	04/01/97
91812 530	97 TRUCK: CHEV S-10 EXT CAB PICKUP CHEYENNE	1GCCS19X0VK179665	0	GASOLINE	17,015.61	04/01/97
91812 531	97 TRUCK: CHEV S-10 EXT CAB PICKUP CHEYENNE	1GCCS19X4VK179622	0	GASOLINE	17,171.86	04/01/97
91812 532	97 TRUCK: CHEV S-10 PICK UP	1GCCS14X7V8169705	0	GASOLINE	14,648.95	05/01/97
91812 533	97 TRUCK: CHEV S-10 PICK UP	1GCCS14X3V8170558	0	GASOLINE	14,648.95	05/01/97
91812 534	97 TRUCK: CHEV S-10 PICKUP	1GCCS14X9V8169690	0	GASOLINE	14,648.95	05/01/97
91812 535	97 TRUCK: CHEV S-10 PICKUP	1GCCS14X2V8169854	0	GASOLINE	14,648.95	05/01/97
91812 536	97 TRUCK: CHEV S-10 PICKUP	1GCCS14X7V8168862	0	GASOLINE	14,648.95	05/01/97
91812 538	97 TRUCK: CHEV 1/2 TON PICKUP	1GCBC14M0VZ216420	0	GASOLINE	19,269.78	06/01/97
91812 539	85 TRUCK: CHEVROLET PICK UP	1GCGD34J2FF425426	0	GASOLINE	1,600.00	04/01/97
91812 540	85 TRUCK: CHEVROLET PICKUP	1GCGD34J5FF425498	0	GASOLINE	1,600.00	04/01/97
91812 541	85 TRUCK: CHEVROLET PICKUP	1GCGD34JXFF426761	0	GASOLINE	1,600.00	04/01/97
91812 542	86 TRUCK: CHEV 4WD P/U- MILITARY	1GCGD34J0GF362375	0	GASOLINE	1,600.00	06/01/97
91812 544	97 VAN: FORD ECONOLINE	1FTHE242XVHB09473	0	GASOLINE	20,000.00	06/01/97
91812 545	97 VAN: FORD ECONOLINE	1FTHE2421VHB09474	0	GASOLINE	20,000.00	06/01/97
91812 546	97 VAN: FORD ECONOLINE	1FTHE2423VHB09475	0	GASOLINE	20,000.00	06/01/97
91812 547	96 TRUCK: TOYOTA PICK UP	4TAWN72NXTZ103533	3,670	GASOLINE	15,171.04	06/01/96
91812 548	96 TRUCK: TOYOTA PICK UP	4TAWN72NXTZ118386	3,670	GASOLINE	15,171.04	06/01/96
91812 549	92 STATION WAGON TOYOTA 4DR LAND CRUISER	JT3FJ80W3N0044046	4,700	GASOLINE	.00	06/01/92
91812 553	98 BLAZER CHEVROLET 4 DR	1GNCS13WXWK245714	0	GASOLINE	23,951.93	06/01/98
91812 554	92 WAGON: FORD EXPLORER STATION WAGON	1FMD432X1NUC59187	0	GASOLINE	.00	06/01/92
91812 556	98 SEDAN: CHEVROLET CAVALIER 4 DR.	3G1JC5243WS862406	0	GASOLINE	17,807.18	06/01/98
91812 564	95 SEDAN: CHEVROLET CORSICA 4 DR.	1G1LD55M7SY271838	0	GASOLINE	6,100.00	06/01/95
91812 565	95 SEDAN: CHEVROLET CORSICA 4 DR.	1G1LD558M6SY273323	0	GASOLINE	6,100.00	06/01/95
91812 566	95 SEDAN: CHEVROLET CORSICA 4 DR.	1G1LD55M4SY284594	0	GASOLINE	6,100.00	06/01/95
91812 567	95 SEDAN: CHEVROLET CAPRICE 4DR.	1G1BL52W0SR163723	0	GASOLINE	11,900.00	06/01/95
91812 569	98 TRUCK: FORD RANGER	1FTZR15U4WPA05345	0	GASOLINE	.00	06/01/98
91812 570	98 TRUCK: FORD RANGER	1FTZR15U8WPA05347	0	GASOLINE	.00	06/01/98
91812 571	98 TRUCK: FORD MPVH EXPLORER	1FMZU34E9WUA20005	0	GASOLINE	.00	06/01/98
91812 575	98 TRUCK: FORD RANGER PICK UP	1FTZR15U6WPA05346	0	GASOLINE	.00	06/01/98
91812 578	95 SEDAN: FORD TAURUS 4 DR.	1FALP52U1SA230476	0	GASOLINE	6,500.00	06/01/95
91812 579	00 VAN: CHEVROLET ASTRO	1GNDM19W1YB181166	0	GASOLINE	108,100.00	06/01/00
91812 580	00 WAGON: JEEP CHEROKEE MPVH 4 DR.	1J4FT28S2YL208971	0	GASOLINE	25,030.05	06/01/00
91812 581	00 SEDAN: CHEVROLET 4 DR. MALIBU	SN1G1MD52J9Y6256443	0	GASOLINE	17,485.30	06/01/00

Appendix 6: Department of Transportation - Highways Division Vehicle Data

HIGHWAYS DIVISION - OAHU DISTRICT

E/U ALTERNATIVE FUEL REPORT BY FUEL TYPE 9/04/07

PERIOD: 07/01/06 THRU 06/30/07

EQUIPMENT	DESCRIPTION.....	SERIAL NUMBER.....	GVW	FUEL.....	-----ACQUISITION-----	
					COST	DATE
91812 582	00 TRUCK: GMC S-15 PU	1GTD119W8Y8267907	0	GASOLINE	1.00	06/01/00
91812 583	00 TRUCK: GMC 2-15 PU	1GTD119W0Y8270039	0	GASOLINE	1.00	06/01/00
91812 584	93 TRUCK: DODGE PICKUP D250 RAM	1B7JE26X5SP257238	0	GASOLINE	5,900.00	06/01/93
91812 595	01 SEDAN: CHEVROLET 4 DOOR IMPALA	2G1WF55E919344274	4,423	GASOLINE	21,025.00	06/01/01
91812 610	95 SEDAN: FORD TAURUS 4 DR	1FALP524XSA230475	3,220	GASOLINE	.00	06/01/95
91812 637	04 TRUCK DODGE DAKOTA 4DR	1D7HG38K845718546	0	GASOLINE	22,859.23	12/09/04
91812 655	05 TRUCK: DODGE F1500 PICKUP	1D7HA16N15J604298	0	GASOLINE	23,352.98	09/29/05
91812 676	05 TRUCK: FORD RANGER PU	1FTYR44U25PA81711	0	GASOLINE	21,195.80	12/30/05
91812 678	02 SEDAN: OLDSMOBILE ALERO	1G3NL52F82C255380	0	GASOLINE	7,150.00	03/13/07
91812 679	02 SEDAN: OLDSMOBILE ALERO	1G3NL52F52C244403	0	GASOLINE	7,150.00	03/13/07
91812 680	02 SEDAN: OLDSMOBILE ALERO	1G3NL52F92C244324	0	GASOLINE	7,150.00	03/13/07
91812 691	06 SUV FORD EXPEDITION XLS 4X4	1FMPU14506LA83463	0	GASOLINE	37,117.26	01/22/07
91812 692	06 SUV FORD EXPEDITION XLS 4X4	1FMPU14596LA83462	0	GASOLINE	37,117.26	01/22/07
91812 693	06 SUV FORD EXPEDITION XLS 4X4	1FMPU14576LA83461	0	GASOLINE	37,117.26	01/05/07
91812 694	06 SUV FORD EXPEDITION XLS 4X4	1FMPU14596LA83459	0	GASOLINE	37,117.26	01/05/07
91812 695	06 SUV FORD EXPEDITION XLS 4X4	1FMPU14526LA83464	0	GASOLINE	37,117.26	01/22/07
91812 696	06 SUV FORD EXPEDITION XLS 4X4	1FMPU14576LA83458	0	GASOLINE	37,117.26	01/22/07
91812 697	06 SUV FORD EXPEDITION XLS 4X4	1FMPU14556LA83460	0	GASOLINE	37,117.26	01/22/07
91812 698	06 SUV FORD EXPEDITION XLS 4X4	1FMPU14546LA83465	0	GASOLINE	37,117.26	01/22/07
91822 115	76 TRUCK: DODGE UTILITY SERVICE	D51DG6J021829	18,500	GASOLINE	15,300.00	
91822 163	81 FORKLIFT: TOYOTA	2FG3020424	0	GASOLINE	17,115.00	06/01/81
91822 196	92 FORKLIFT: YALE FORKLIFT TRUCK	N523949	0	GASOLINE	20,046.00	09/01/92
91822 220	94 TRUCK: GMC	1GDM7H1J8RJ502423	32,000	GASOLINE	80,861.00	09/01/95
91822 221	94 TRUCK: GMC	1GDM7H1J3RJ501258	32,000	GASOLINE	80,861.00	09/01/95
91822 225	77 FORKLIFT: ALIS CHALMERS ACC-40B PS	102882	0	GASOLINE	900.00	06/01/77
91822 229	77 FORKLIFT: ALLISCHALMERS ACC-40BPS	102871	0	GASOLINE	1,500.00	06/01/77
91842 167	82 KELLY-CRESWELL STRIPING MACHINE	2952	0	GASOLINE	8,777.60	08/01/82
91842 169	84 KELLY-CRESWELL STRIPING MACHINE	3623	0	GASOLINE	9,994.40	11/01/84
91842 172	86 MB STRIPING MACHINE	3-0584	0	GASOLINE	2,784.09	06/01/86
91842 190	88 BINKS AIRLESS STRIPING MACHINE	1714	0	GASOLINE	5,869.62	08/01/88
91842 191	88 BINKS AIRLESS STRIPING MACHINE	1715	0	GASOLINE	5,869.62	08/01/88
91842 196	90 MOWER: CUBCADET POWER	000189371	0	GASOLINE	3,593.76	08/01/90
91842 197	90 MOWER: CUBCADET POWER	000189465	0	GASOLINE	3,593.76	08/01/90
91842 198	90 MOWER: CUBCADET LAWN TRACTOR	000189468	0	GASOLINE	3,593.76	08/01/90
91842 202	91 MOWER: SNAPPER POWER	05077521	0	GASOLINE	2,698.80	06/01/91
91842 203	91 MOWER: SNAPPER POWER	05077708	0	GASOLINE	2,698.80	06/01/91
91842 204	91 LAWN MOWER: SNAPPER TRACTOR	15143832	0	GASOLINE	2,698.80	06/01/91
91842 208	92 MOWER: CUBCADET POWER	221512	0	GASOLINE	4,078.14	10/01/92
91842 209	92 MOWER: CUBCADET POWER	221514	0	GASOLINE	4,078.14	10/01/92
91842 210	92 MOWER: CUBCADET POWER	221526	0	GASOLINE	4,078.13	10/01/92
91842 214	94 MACHINE STRIPING KELLY CRESWELL	KCB42T	0	GASOLINE	19,344.11	02/01/94
91842 229	96 GENERATOR, HONDA GA-6HZ	5131560	0	GASOLINE	2,945.00	12/01/96
91842 234	98 MOWER: CUB CADET POWER	380918	0	GASOLINE	4,122.68	12/01/97
91842 235	96 MIXER, BETONIERA WORKMAN 250 CONCRETE	123789	0	GASOLINE	2,442.96	01/01/98
91842 239	98 STRIPING MACHINE KELLY CRESWELL HDCT-2	8007	0	GASOLINE	17,290.70	06/01/98
91842 263	99 STRIPING MACHINE: MB W/POWER DRIVE 5-12	399041271	0	GASOLINE	11,467.00	06/01/99
91842 276	03 TRAILER: SPECTRUM W/CHEM SPRAYER TANK	1S9ES16163H364226	0	GASOLINE	.00	06/01/97
91842 277	00 STRIPING MACHINE: KELLY CRESWELL HDCT	SN8173	0	GASOLINE	13,956.72	06/01/97
91842 278	00 STRIPING MACHINE: KELLY CRESWELL HDCT	8174	0	GASOLINE	13,956.72	06/01/97
91842 300	03 STRIPING MACHINE: KELLY CRESWELL B4-2T	8377	0	GASOLINE	29,725.14	10/30/03
91842 312	06 WELDER LINCOLN 10KW K2468-1	159ES14146H364223	0	GASOLINE	31,340.00	05/01/07

Appendix 6: Department of Transportation - Highways Division Vehicle Data

HIGHWAYS DIVISION - OAHU DISTRICT
E/U ALTERNATIVE FUEL REPORT BY FUEL TYPE 9/04/07

PERIOD: 07/01/06 THRU 06/30/07

EQUIPMENT	DESCRIPTION	SERIAL NUMBER	GVW	FUEL	-----ACQUISITION-----	
					COST	DATE
91842 314	06 GENERATOR HONDA EB7000I	EAKJ1002570	0	GASOLINE	6,495.00	02/16/07
91842 316	06 ERADICATOR ROBIN MOD 20H W/VACUUM		0	GASOLINE	9,979.98	02/16/07
91842 317	06 WELDER LINCOLN 06 K2468-1	9ES14166H364224	0	GASOLINE	31,340.00	05/01/07
91842 318	06 GENERATOR BRIGGS & STRATTON MOD 030242	1013892078	0	GASOLINE	2,548.08	02/16/07
91862 106	87 ADVANCE INDUSTRIAL SWEEPER	215714	2,960	GASOLINE	18,705.15	07/01/87
91862 111	99 VACUUM: TENNANT LITTER MACHINE	4300-1132	2,600	GASOLINE	29,421.21	04/01/99
91862 112	00 TRUCK: TENNANT LITTER MACH (VACUUM) ATLV	4300-1437	0	GASOLINE	26,562.33	03/31/00
91862 119	06 FORKLIFT KOMATSU FG30HT-14	204327A	0	GASOLINE	30,728.97	02/13/07
					FUEL TYPE TOTAL	
91812 522	97 TRUCK: CHEV CREW CAB PICK UP CHEYENNE	1GCGC33F0V028201	0	DIESEL	27,121.70	06/01/97
91812 523	97 TRUCK: CHEV CREWCAB PICKUP	1GCGC33F4VF028153	0	DIESEL	27,121.70	04/01/97
91812 524	97 TRUCK: CHEV CREWCAB PICKUP	1GCGC33F8VF028205	0	DIESEL	27,121.70	04/01/97
91812 525	97 TRUCK: CHEV PICKUP CHEYENNE	1GCGC33F0V027212	0	DIESEL	27,121.70	04/01/97
91812 526	97 TRUCK: CHEV CREWCAB PICKUP CHEYENNE	1GCGC33F7VF027398	0	DIESEL	27,121.70	04/01/97
91812 527	97 TRUCK: CHEV CREWCAB PICKUP	1GCGC33F8VF027488	0	DIESEL	26,600.88	04/01/97
91812 543	97 VAN: CHEVROLET W/TELESCOPIC AERIAL LIFT	1GCHG39F0V1053533	9,500	DIESEL	50,770.80	06/01/97
91812 550	98 TRUCK: CHEVROLET CREW CAB PICKUP	1GCGC33F5WF061065	0	DIESEL	31,621.33	06/01/98
91812 551	98 TRUCK: CHEVROLET CREW CAB PICKUP	1GCGC33F5WF061549	0	DIESEL	31,828.68	06/01/98
91812 552	98 TRUCK: CHEVROLET CREW CAB PICK UP	1GCGC33F0WF061927	0	DIESEL	31,829.66	06/01/98
91812 555	99 TRUCK: GMC UTILITY CREW CAB	1GDHK33FOX006639	10,000	DIESEL	76,347.44	06/01/99
91812 557	99 TRUCK: CHEVROLET SUBURBAN 4X4	3GNKG26F8XG206132	0	DIESEL	33,848.74	06/01/99
91812 558	99 TRUCK: GMC SIERRA CREW CAB	1GTHC33F9XF012988	0	DIESEL	41,843.36	06/01/99
91812 559	99 TRUCK: GMC SIERRA CREW CAB	1GTHC33F9XF013235	0	DIESEL	41,843.36	06/01/99
91812 560	99 TRUCK: CHEVROLET FLEETSIDE CREWCAB P/U	1GCGC33F7XF060677	0	DIESEL	32,011.25	06/01/99
91812 561	99 TRUCK: CHEVROLET FLEETSIDE CREWCAB P/U	1GCGC33F3XF059719	0	DIESEL	32,115.42	06/01/99
91812 562	99 TRUCK: GMC SIERRA CREW CAB	1GTHC33F1XF010491	10,000	DIESEL	41,843.36	06/01/99
91812 577	00 TRUCK: GMC UTILITY BODY	1GDHC34F3YF415392	10,000	DIESEL	45,694.48	06/01/00
91812 585	00 TRUCK: GMC 3500 SIERRA CREWCAB PICKUP	1GTGC33FOYF496692	9,000	DIESEL	33,906.03	06/01/00
91812 586	01 TRUCK: GMC 2500HD P/U	1GTHC24101E216685	9,200	DIESEL	33,246.44	06/01/01
91812 587	01 TRUCK: GMC 2500 HD P/U W/ARROW BOARD	1GTHC24111E216114	9,200	DIESEL	35,423.92	06/01/01
91812 588	01 TRUCK: GMC 2500 HD P/U W/LIFT GATE	1GTHC24171E218322	9,200	DIESEL	35,605.21	06/01/01
91812 594	01 TRUCK: GMC STAKE W/LIFT GATE	1GDJC34171F141030	11,400	DIESEL	41,569.91	06/01/01
91812 596	01 TRUCK: FORD PICKUP W/EXT. CAB ONE TON	1FTWX32F41EC51441	11,000	DIESEL	32,714.45	06/01/01
91812 597	01 TRUCK: FORD PICKUP W/EXT CAB ONE TON	1FTWX32F61EC51442	11,000	DIESEL	32,714.45	06/01/01
91812 598	01 TRUCK: FORD PICKUP W/EXT CAB ONE TON	1FTWX32F81EC51443	11,000	DIESEL	32,714.45	06/01/01
91812 599	01 TRUCK: FORD PICKUP W/.EXT CAB ONE TON	1FTWX32F41EC51444	11,000	DIESEL	32,714.45	06/01/01
91812 600	01 TRUCK: FORD PICKUP W/EXT CAB ONE TON	1FTWX32F11EC51445	11,000	DIESEL	32,714.25	06/01/01
91812 601	01 TRUCK: FORD P/U ONE TON W/EXTENDED CAB	1FTWX32F21EC51440	11,000	DIESEL	32,714.45	06/01/01
91812 602	01 TRUCK: FORD ONE TON P/U W/EXTENDED CAB	1FTWX32F31EC51446	11,000	DIESEL	32,610.44	06/01/01
91812 603	01 TRUCK: FORD P/U ONE TON W/EXTENDED CAB	1FTWX32F51EC51447	11,000	DIESEL	32,610.44	06/01/01
91812 605	01 TRUCK: FORD CREW CAB PICK UP	1FTWX32F51EC84032	11,000	DIESEL	35,510.40	06/01/01
91812 606	01 TRUCK: GMC PICK UP	1GTHC24161E316693	9,200	DIESEL	33,246.44	06/01/01
91812 607	01 TRUCK: FORD ONE TON UTILITY PICKUP	1FDWF32F51EC47610	11,000	DIESEL	35,349.81	06/01/01
91812 608	01 TRUCK: FORD ONE TON UTILITY PICKUP	1FDWF32F91EC47609	11,000	DIESEL	35,349.81	06/01/01
91812 609	01 VAN: CHEVROLET FULL SIZE MODEL 3500	1GAHG35F611235570	9,500	DIESEL	30,117.00	06/01/01
91812 611	01 TRUCK: GMC W/AERIAL	3GDKC34F41M115307	15,000	DIESEL	98,393.22	03/27/02
91812 613	02 TRUCK: FORD ONE TON PU W/EXT. CAB	1FTWX32FX2EC50960	11,500	DIESEL	32,736.18	08/23/02
91812 614	02 TRUCK: FORD ONE TON PU W/EXT. CAB	1FTWX32F12EC50961	11,500	DIESEL	32,736.18	08/23/02
91812 615	02 TRUCK: FORD ONE TON PU W/EXT. CAB	1FTWX32F32EC50962	11,500	DIESEL	32,736.18	08/23/02
91812 616	02 TRUCK: FORD ONE TON PU W/EXT. CAB	1FTWX32F52EC50963	11,500	DIESEL	32,736.18	08/23/02

Appendix 6: Department of Transportation - Highways Division Vehicle Data

HIGHWAYS DIVISION - OAHU DISTRICT

E/U ALTERNATIVE FUEL REPORT BY FUEL TYPE 9/04/07

PERIOD: 07/01/06 THRU 06/30/07

EQUIPMENT	DESCRIPTION.....	SERIAL NUMBER.....	GVW	FUEL.....	-----ACQUISITION-----	
					COST	DATE
91812 617	02 TRUCK: FORD ONE TON PU W/EXT. CAB	1FTWX32F72EC50964	11,500	DIESEL	32,736.18	08/23/02
91812 620	02 VAN: CHEV 3500 FULL SIZE	1GNHG35F721243001	9,500	DIESEL	27,785.00	09/12/02
91812 621	02 VAN: CHEV. 3500 15 PASSENGER	1GAHG39F651243664	9,500	DIESEL	28,925.00	09/12/02
91812 622	03 TRUCK: FORD 4DR EXCURSION MPVH	1FMSU41P03ED13424	7,650	DIESEL	39,993.77	12/08/03
91812 623	03 TRUCK: FORD EXCURSION 4 DR MPVH	1FMSU41P43ED13426	7,650	DIESEL	39,993.77	12/08/03
91812 624	03 TRUCK: FORD 4DR EXCURSION MPVH	1FMSU41P63ED13427	7,650	DIESEL	39,993.77	12/08/03
91812 625	03 TRUCK: FORD 350 PICKUP W/CREW CAB	1FTWW32P53ED35668	11,500	DIESEL	36,186.18	12/08/03
91812 629	04 TRUCK: FORD EXCURSION 4X4 SPORT UTIL.	1FMSU41P94ED77883	0	DIESEL	40,060.64	11/18/04
91812 630	04 TRUCK: CHEV CREWCAB F350 4X2	1FTWW32P94ED29681	0	DIESEL	32,609.15	11/16/04
91812 631	04 TRUCK: FORD F350 CREW CAB	1FTWW32P04ED29682	0	DIESEL	32,609.15	11/16/04
91812 632	04 TRUCK: FORD 4X2 CREW CAB	1FTWW32P24ED29683	0	DIESEL	32,609.14	11/16/04
91812 633	04 TRUCK: FORD F350 CREWCAB	1FTSF30P84ED37126	0	DIESEL	30,848.43	11/16/04
91812 646	04 TRUCK: FORD F350 PICKUP	1FTWF32P84EE0972	6,640	DIESEL	29,107.05	08/10/05
91812 647	04 TRUCK: FORD F350 PICKUP	1FTSF31P64EE09701	0	DIESEL	31,165.37	09/09/05
91812 648	05 VAN: FORD E350	1FMNE31P45HAO2083	0	DIESEL	29,407.10	08/17/05
91812 649	05 VAN: FORD E350	JFMNE31P65HAO2084	0	DIESEL	29,407.11	08/17/05
91812 662	06 TRUCK: FORD PU	1FTSF30P46EA19555	0	DIESEL	29,770.77	12/29/05
91812 663	06 TRUCK: FORD PU	1FTSF30P66EA19556	0	DIESEL	29,770.77	12/29/05
91812 664	06 TRUCK: FORD PU	1FTSF30P86EA19557	0	DIESEL	29,770.77	12/29/05
91812 665	06 TRUCK: FORD PU	1FTSF30PX6EA19558	0	DIESEL	29,770.77	12/29/05
91812 666	06 TRUCK: FORD PU	1FTSF30P16EA19559	0	DIESEL	29,770.77	12/29/05
91812 667	06 TRUCK: FORD PU	1FTSF30P86EA19560	0	DIESEL	29,770.77	12/29/05
91812 668	06 TRUCK FORD PU	1FTSF30PX6EA19561	0	DIESEL	29,770.74	12/30/05
91812 669	06 TRUCK: FORD PU F350	1FTSF30P16EA19562	0	DIESEL	29,770.77	12/29/05
91812 670	06 TRUCK: FORD PU	1FTSF30P36EA19563	0	DIESEL	29,770.77	12/29/05
91812 671	06 TRUCK: FORD PU	1FTSF30P56EA19564	0	DIESEL	29,770.77	12/29/05
91812 672	06 TRUCK: FORD PU	1FTSF30P76EA19565	0	DIESEL	29,770.77	12/29/05
91812 673	06 TRUCK: FORD PU	1FTSF30P75ED36700	0	DIESEL	29,770.77	12/29/05
91812 677	06 TRUCK FORD F350 PU W/LIFT GATE	1FTWF30P96EA26082	0	DIESEL	36,706.92	02/23/06
91812 702	06 TRUCK FORD 06 F350 PU	1FTWF30P66ED69920	0	DIESEL	30,931.75	04/21/07
91812 703	06 TRUCK FORD F350 PU	1FTWF30P66ED69917	0	DIESEL	30,931.75	04/19/07
91812 704	06 TRUCK FORD F350 PU	1FTWF30P56ED69908	0	DIESEL	30,931.75	04/19/07
91812 705	07 TRUCK FORD 06 F350 PU	TWF30P66ED69898	0	DIESEL	30,931.75	04/19/07
91812 706	06 TRUCK FORD F350	1FDWF30P66ED72523	0	DIESEL	35,603.52	07/17/07
91822 167	83 TRACTOR: INTERNATIONAL TRUCK	1HTDA2273DGB10421	32,000	DIESEL	44,558.00	10/01/82
91822 168	83 TRACTOR: INTERNATIONAL TRUCK	1HTDA2272DGB10426	32,000	DIESEL	44,558.00	10/01/82
91822 169	82 TRUCK: FORD W/MOUNTED STRIPING UNIT	1FDKE3013CHA93815	0	DIESEL	68,120.00	10/01/82
91822 176	86 TRUCK: INT'L 50' AERIAL UTILITY	1HTLCHYN8GHA16614	35,000	DIESEL	79,044.16	01/01/84
91822 177	86 TRUCK: INTERNATIONAL FLATBED	1HTLDTVR2GHA58770	35,000	DIESEL	45,221.28	01/01/86
91822 178	87 TRUCK: FORD 50' AERIAL PLATFORM	1FDXK74N8HVA45723	28,000	DIESEL	78,787.23	01/01/87
91822 179	87 TRUCK: FORD 10CY DUMP	1FDXU90L9HVA48298	50,000	DIESEL	60,896.28	02/01/88
91822 180	87 TRUCK: THERMO-LAY ASPHALT	1PDWT74P6HVA64443	23,100	DIESEL	54,587.00	02/01/88
91822 181	89 TRACTOR: KENWORTH TANDEM TRUCK	1KXWD29X5KS524167	56,860	DIESEL	71,788.76	05/01/89
91822 182	90 TRUCK: INTL STAKE TRUCK W/ HYD TAILGATE	1HTSAZRL5LH224932	24,160	DIESEL	30,973.91	09/01/89
91822 183	90 TRUCK: INTERNATIONAL STAKE TRUCK W/ DUMP	1HTSAZRL3LH224931	24,160	DIESEL	29,909.29	09/01/89
91822 184	90 TRUCK: INTERNATIONAL 2-1/2 CY DUMP TRUCK	1HTSAZPL2LH229525	24,160	DIESEL	30,448.89	09/01/89
91822 185	90 TRUCK: FORD STAKE DUMP TRUCK	1FDWK64P5LVLA44447	23,100	DIESEL	30,605.60	09/01/90
91822 186	91 TRUCK: INTERNATIONAL AERIAL 28' LADDER	1HTSAZPK1MH326465	18,400	DIESEL	70,820.53	10/01/90
91822 187	91 TRUCK: INTERNATIONAL AERIAL 28' LADDER	1HTSAZPK3MH326466	18,400	DIESEL	70,820.53	10/01/90
91822 188	91 TRUCK: MACK 10 CY DUMP TRUCK	1M2AY80C5MM005596	56,540	DIESEL	68,348.13	01/01/91
91822 189	91 TRUCK: MACK 10 CY DUMP TRUCK	1M2AY80C7MM005597	56,540	DIESEL	68,348.14	01/01/91

Appendix 6: Department of Transportation - Highways Division Vehicle Data

HIGHWAYS DIVISION - OAHU DISTRICT

E/U ALTERNATIVE FUEL REPORT BY FUEL TYPE 9/04/07

PERIOD: 07/01/06 THRU 06/30/07

EQUIPMENT	DESCRIPTION	SERIAL NUMBER	GVW	FUEL	-----ACQUISITION-----	
					COST	DATE
91822 190	91 TRACTOR MACK TANDEM TRUCK	1M2AY83YXMM005598	57,980	DIESEL	72,515.33	06/19/91
91822 191	91 TRUCK: CHEV KODIAK 2 1/2 CY DUMP	1GBK6HLJ0MJ111567	24,260	DIESEL	35,143.19	11/01/91
91822 192	91 TRUCK: CHEV KODIAK 2 1/2 CY DUMP	1GBK6HLJ0MJ111620	24,260	DIESEL	35,143.19	11/01/91
91822 193	91 TRUCK: CHEV KODIAK 2 1/2 CY DUMP	1GBK6HLJ0MJ111673	24,260	DIESEL	35,143.19	11/01/91
91822 194	91 TRUCK: CHEV KODIAK 2 1/2 CY DUMP	1GBK6HLJ0MJ111732	24,260	DIESEL	35,664.04	11/01/91
91822 195	91 TRUCK: CHEV KODIAK 2 1/2 CY DUMP	1GBK6HLJ3MJ111806	24,260	DIESEL	35,143.19	11/01/91
91822 197	93 TRUCK: INT'L STAKE W/HYD TAILGATE	1HTSCPEL6PH469510	25,500	DIESEL	37,762.57	11/01/92
91822 198	93 TRUCK: INT'L STAKE W/HYD TAILGATE	1HTSCPEL8PH469511	25,500	DIESEL	37,345.88	11/01/92
91822 199	93 TRUCK: INT'L BITUMIOUS TANK	1HTSDPPN2PH472254	28,080	DIESEL	78,157.00	11/01/92
91822 200	93 TRUCK: INT'L 2000 GAL. TANK	1HTGEA2R6PH471408	36,220	DIESEL	76,548.14	11/01/92
91822 201	92 TRUCK: GMC 7CY DUMP	1GDP7H1J3NJ525485	35,000	DIESEL	45,289.00	11/01/92
91822 203	93 TRUCK: PETERBILT U/BRDG REACHAL CRANE357	AXPALBOX2PN331520	77,000	DIESEL	417,261.89	12/01/92
91822 204	84 TRUCK: INTERNATIONAL DUMP 10 CY	1HTGGA2T6RH571307	56,000	DIESEL	70,727.99	01/01/94
91822 205	94 TRUCK: CHEV KODIAK DUMP 2 1/2 CY	1GBK6HLJ2RJ103896	24,260	DIESEL	35,595.50	02/01/94
91822 206	94 TRUCK: CHEV KODIAK DUMP 2 1/2 CY	1GBK6HLJ5RJ103813	24,260	DIESEL	34,137.16	02/01/94
91822 207	94 TRUCK: CHEV KODIAK DUMP 7 CY	16BP7H1J4RJ103790	35,550	DIESEL	43,328.35	02/01/94
91822 208	94 TRUCK: INT'L UNDERBRIDGE REACHALL CRANE	1HTGGA6T2RH548438	77,000	DIESEL	428,900.34	05/01/94
91822 209	94 TRUCK: GMC STAKE DUMP	1GDMTH1J1RJ105924	27,060	DIESEL	39,577.73	04/01/94
91822 210	94 TRUCK: GMC STAKE DUMP	1GDMTH1J2RJ506113	27,060	DIESEL	39,577.74	04/01/94
91822 211	94 TRUCK: INT'L FLATBED W/CREWCAB	1HTSCACR9RH571309	35,000	DIESEL	46,874.79	04/01/94
91822 212	95 INTL. ALTEC AERIAL BUCKET MOD. 4900	1HTSDAAN9SH641782	33,000	DIESEL	234,584.84	10/01/94
91822 213	95 INTL. ALTEC AERIAL BUCKET MOD. 4900	1GTSDAABISG641783	33,000	DIESEL	117,292.42	10/01/94
91822 214	95 TRUCK: INT'L ALTEC DERRIC	1HTSDAAR9SH641784	35,000	DIESEL	123,952.24	11/01/94
91822 215	95 TRUCK: FORD STAKE DUMP TRUCK	1FDWF80C5SVA18402	26,000	DIESEL	36,389.70	11/01/94
91822 216	95 TRUCK: FORD STAKE W/HYD HOIST	1FDWF80C7SVA18403	26,000	DIESEL	36,389.70	11/01/94
91822 217	95 TRUCK: FORD STAKE DUMP	1FDWF80C9SVA18404	26,000	DIESEL	36,389.70	11/01/94
91822 218	95 TRUCK: INT'L DUMP 12 CY	1HTGGAUT6SH641780	56,000	DIESEL	71,329.67	02/01/95
91822 219	95 TRUCK: INT'L DUMP 12 CY	1HTGGAUT8SH641781	0	DIESEL	70,808.82	02/01/95
91822 222	83 TRUCK: FORKLIFT (MILILARY)	3336022159	47,000	DIESEL	1,600.00	08/01/96
91822 223	97 TRUCK: INTL TUNNEL WASH VEHICLE	1HTSDAAR9VH46573	0	DIESEL	420,000.00	06/01/97
91822 224	99 TRUCK: INTERNATIONAL STAKE CREWCAB	1HTSCAAL5XH646633	0	DIESEL	71,294.23	06/01/99
91822 226	99 TRUCK: INT'L TECO AERIAL BUCKET	1HTSDAANOXH646635	33,000	DIESEL	179,086.70	06/01/99
91822 228	99 TRUCK: INT'L TECO AERIAL BUCKET	1HTSDAAN9XH646634	25,700	DIESEL	180,024.19	06/01/99
91822 230	99 TRUCK: FORD STAKE W/SCISSORS LIFT	1FDXF46F0XEC46765	15,000	DIESEL	76,867.99	06/01/99
91822 231	99 TRUCK: FORD F-800 W/BOOM	3FEKF8013XMA11609	33,000	DIESEL	121,266.15	06/01/99
91822 232	99 TRUCK: FORD F-8-- W/BOOM	3FEKF801XXMA11610	33,000	DIESEL	121,266.15	06/01/99
91822 233	99 TRUCK: FORD FLATBED	1FDAF56F7XEB75284	17,500	DIESEL	61,842.20	06/01/99
91822 234	00 TRUCK: INT'L. UTILITY SERVICE 4900	1HTSDAAN7YH212102	33,000	DIESEL	114,544.98	06/01/00
91822 235	00 TRUCK: TRACTOR PETERBILT MOD 378	1KPPFD60X2YD505684	60,060	DIESEL	104,802.38	06/01/00
91822 236	00 TRUCK: INTERNATIONAL DUMP MOD. 2674	1HTGLAER3YS218405	54,060	DIESEL	101,903.92	06/01/00
91822 237	00 TRUCK: GMC ASPHALT DISTRIBUTION "T"	1GDP7C1C2YJ521274	35,000	DIESEL	156,408.79	06/01/00
91822 238	01 TRUCK: INT'L 3500 GALLON TANK	1HTGLAHT11H333470	64,000	DIESEL	140,919.12	06/01/01
91822 239	00 TRUCK: GMC 2 1/2 CU YD DUMP C 7500	1CDMTH1C3YJ516441	27,100	DIESEL	71,887.09	06/01/00
91822 240	00 TRUCK: GMC UTILITY BODY C6500	1GDGGH1C2YJ516513	23,100	DIESEL	83,825.07	06/01/00
91822 241	00 TRUCK: GMC LIFT-ALL AERIAL BUCKET C-8500	1GDP7H1C4YJ516705	35,000	DIESEL	174,423.48	06/01/00
91822 242	02 TRUCK: INTERNATIONAL DUMP 4700	1HTSCAAM72H409692	25,500	DIESEL	64,541.86	06/01/02
91822 243	02 TRUCK: INTERNATIONAL DUMP 4700	1HTSCAAM92H409693	25,500	DIESEL	64,541.86	06/01/02
91822 244	02 TRUCK: INTERNATIONAL DUMP 4700	1HTSCAAM02H409694	25,500	DIESEL	64,541.86	06/01/02
91822 245	02 TRUCK: INTERNATIONAL DUMP 4700	1HTSCAAM22H409695	25,500	DIESEL	64,021.03	06/01/02
91822 246	02 TRUCK: INTERNATIONAL TRK TRACTOR 9900I	2HSCHAET62C030153	58,860	DIESEL	101,511.59	06/01/02
91822 247	87 TRUCK: FORD ASPHALT THERMO LAY TRUCK	1FDWT746PHVA4443	23,100	DIESEL	.00	06/04/02

Appendix 6: Department of Transportation - Highways Division Vehicle Data

HIGHWAYS DIVISION - OAHU DISTRICT

E/U ALTERNATIVE FUEL REPORT BY FUEL TYPE 9/04/07

PERIOD: 07/01/06 THRU 06/30/07

EQUIPMENT	DESCRIPTION.....	SERIAL NUMBER.....	GVW	FUEL.....	-----ACQUISITION-----	
					COST	DATE
91822 248	02 TRUCK: GMC 2 1/2 CY DUMP C6500	1GDK7H1C22J502285	25,950	DIESEL	75,362.55	08/28/02
91822 249	02 TRUCK: GMC 2 1/2 CY DUMP C6500	1GDK7H1C12J502472	25,950	DIESEL	74,112.50	08/28/02
91822 250	03 TRUCK: PETERBILT FLATBED W/CRANE	1NP2L00X13D714740	64,000	DIESEL	262,151.29	04/25/03
91822 251	02 TRUCK: GMC DUMP C6500	1GDBGH1CX2J513852	23,100	DIESEL	65,923.31	05/14/03
91822 252	02 TRUCK: GMC DUMP	1GDK7H1C72J515405	25,950	DIESEL	75,978.03	05/14/03
91822 253	03 TRUCK: PETERBILT W/CRANE/DUMP	1NP2L00X33D714741	64,000	DIESEL	281,484.93	09/12/03
91822 254	04 TRUCK: GMC ALTEC AERIAL/UTILITY MDL 5500	1GDE5E1163F521412	19,500	DIESEL	95,355.56	01/15/04
91822 255	04 TRUCK: PETERBILT DUMP MDL 378	1NPFLLBOX54D818437	58,000	DIESEL	146,217.88	01/20/04
91822 256	04 TRUCK: PETERBILT DUMP MDL 378	1NPFLLBOX74D818438	58,000	DIESEL	146,217.88	01/20/04
91822 257	04 TRUCK: INTERNATIONAL DUMP MOD. 4400 SBA	1HTMKAAL44H652480	12,780	DIESEL	69,676.86	05/24/04
91822 260	05 TRUCK: PETERBILT TANK #357 SBFA	2NPLHZ8X75M852585	19,260	DIESEL	118,994.90	12/08/04
91822 261	04 TRUCK FORD F350 FLATBED	1FDFW36P74EA68038	8,620	DIESEL	36,606.02	12/02/04
91822 262	04 TRUCK FORD F350 FLATBED	1FDFW36P54EA68037	8,620	DIESEL	36,606.02	12/02/04
91822 263	04 TRUCK GMC AERIAL "C"	1GDE5C1205F503083	19,500	DIESEL	104,297.94	03/17/05
91822 264	05 TRUCK: GMC DUMP	1GDB6C13X5F500437	25,640	DIESEL	73,592.38	06/21/05
91822 265	05 TRUCK: GMC DUMP	1GDJC1375F500492	25,640	DIESEL	73,592.38	06/21/05
91822 266	05 TRUCK: GMC "T" UTILITY SERVICE	1GDB3C1285F506313	26,000	DIESEL	89,889.85	06/21/05
91822 267	05 TRUCK: GMC DUMP SOLID SIDE PANEL	1GDB6C1335F531982	25,640	DIESEL	75,757.88	03/16/06
91822 268	05 TRUCK GMC FLATBED	1GDE5C1235F528737	19,500	DIESEL	57,894.68	03/16/06
91822 269	06 TRUCK TRACTOR PETERBILT 378SFFA	1XPFD40X66D632620	60,060	DIESEL	115,692.80	06/14/06
91822 270	07 TRUCK PETERBILT 7CY DUMP	2NPLHZ8X17M673736	17,160	DIESEL	117,166.09	02/09/07
91832 110	80 TRAILER: BEALL 5000 GAL TANK	ST11600	68,000	DIESEL	42,154.08	10/01/80
91832 121	90 TRAILER: BEALL 5000 GAL TANK	1BN2T3529LP208510	65,000	DIESEL	66,580.42	12/01/89
91832 147	99 TRAILER: TRAIL KING LOW BOY TK50RG-402	1TKS04021XMO26782	64,140	DIESEL	41,666.40	06/01/99
91832 158	05 TRAILER: WATER OMC0 5,000 GAL TANDEM	DTF450BSR20506506	0	DIESEL	131,989.64	12/28/05
91832 161	06 TRAILER: TRAILING LOWBOY TK70HGD-472	1TKJ047256M103637	0	DIESEL	68,894.15	06/14/06
91842 166	82 OVERLOWE PORTABLE FLOOD LIGHT	824681	0	DIESEL	13,856.00	08/01/92
91842 170	85 POWER CURBER CURBING MACHINE	150785094	0	DIESEL	6,562.40	08/01/85
91842 173	86 GENERATOR: MILLER WELDER/GENERATOR	JG057742	0	DIESEL	3,320.00	07/01/86
91842 174	86 GENERATOR: MILLER WELDER/GENERATOR	JG062668	0	DIESEL	3,320.00	07/01/86
91842 185	88 TRACTOR MOWER: KUBOTA W/FLAIL	10674	0	DIESEL	16,908.87	02/01/88
91842 186	88 TRACTOR MOWER: KUBOTA W/ FLAIL	10675	0	DIESEL	16,908.88	02/01/88
91842 187	88 TRACTOR MOWER: KUBOTA W/ FLAIL	10676	1,650	DIESEL	16,908.87	02/01/88
91842 188	88 TRACTOR MOWER: KUBOTA W/FLAIL	10677	1,650	DIESEL	16,908.87	02/01/88
91842 189	88 TRACTOR MOWER: KUBOTA W/FLAIL	10678	0	DIESEL	16,908.88	
91842 192	89 TRACTOR MOWER:CASE INTERNATIONAL W/FLAIL	B47005B021129	0	DIESEL	15,884.42	05/01/89
91842 194	89 TRACTOR MOWER: FORD W/FLAIL	BB85039	0	DIESEL	16,972.37	07/01/89
91842 195	89 TRACTOR: FORD MOWER W/EXT FLAIL	BB85071	0	DIESEL	37,380.07	07/01/89
91842 200	90 TRACTOR MOWER: CASE IH W/FLAIL	JJE0005256	5,785	DIESEL	15,464.63	02/01/91
91842 201	90 TRACTOR MOWER: CASE IH W/ FLAIL	JJE0005258	5,785	DIESEL	16,193.80	02/01/91
91842 205	91 MOWER: CASE IH W EXT	JJE0016176	11,400	DIESEL	44,048.06	12/01/91
91842 206	91 MOWER: CASE IH W/ EXT	JJE0016178	0	DIESEL	44,048.05	12/01/91
91842 207	92 TRAILER: PORTABLE FLOODLIGHT W/ TRAILER	92150	0	DIESEL	10,610.40	09/01/92
91842 211	93 TRACTOR: KUBOTA W/ FLAIL MOWER	21623	0	DIESEL	16,403.65	03/01/93
91842 212	93 TRACTOR:KUBOTA W/ FLAIL MOWER	21649	0	DIESEL	16,403.65	03/01/93
91842 213	93 LIGHT TOWER: MAGNUM PORTABLE 4060 K-MH	93294	0	DIESEL	10,610.40	09/01/93
91842 215	93 TRACTOR: FORD W/ FLAIRMOWER	BD59042	0	DIESEL	24,261.55	02/01/94
91842 217	94 LIGHT TOWER: INGERSOLL-RAND MOD L64MH	247798 I.D.#KNC6237	0	DIESEL	13,402.51	10/01/94
91842 218	94 WELDING UNIT MILLER BIG 40 DIESEL	KE700618	0	DIESEL	8,145.80	12/01/94
91842 219	94 WELDING UNIT MILLER BIG 40 DIESEL	KE700621	0	DIESEL	8,145.80	12/01/94
91842 220	95 FLAIL MOWER:TRACTOR CASE INT'L W/REAR	JJE0908205	0	DIESEL	22,786.53	06/01/96

Appendix 6: Department of Transportation - Highways Division Vehicle Data

HIGHWAYS DIVISION - OAHU DISTRICT

E/U ALTERNATIVE FUEL REPORT BY FUEL TYPE 9/04/07

PERIOD: 07/01/06 THRU 06/30/07

EQUIPMENT	DESCRIPTION.....	SERIAL NUMBER.....	GVW	FUEL.....	-----ACQUISITION-----	
					COST	DATE
91842 221	95 TRACTOR: CASE W/ REAR W/FLAIL MOWER	JJE0908210	0	DIESEL	24,349.04	06/01/96
91842 222	95 FLAIL MOWER:TRACTOR CASE INT'L W/EXT S/R	1HE0908213	0	DIESEL	49,989.74	06/01/96
91842 223	95 FLAIR MOWER:TRACTOR CASE INT'L W/EXT W/R	JJE0908216	0	DIESEL	46,864.73	06/01/96
91842 224	95 FLAIR MOWER:TRACTOR CSE INT'L W/EXT S/R	JJE0908220	0	DIESEL	48,948.07	06/01/96
91842 225	96 SPRAYER, FMC JOHN BEAN DM10E300FERH	JB00320NA	0	DIESEL	11,048.64	02/01/96
91842 226	96 CHIPPER, MORBARK EZ #2200	2773	0	DIESEL	24,342.79	12/01/96
91842 227	96 CHIPPER, MORBARK EZ #2200	2774	0	DIESEL	24,343.83	12/01/96
91842 228	96 CHIPPER, MORBARK EZ #2200	2775	0	DIESEL	24,343.00	12/01/96
91842 232	59 TRACTOR MASSEY-FERGUSON TD35 W/BROOM ATT	SDM202540	0	DIESEL	2,000.00	12/01/96
91842 236	98 SIGN MESSAGE BOARD ELECTRONIC W/TRAILER	069801-T2	0	DIESEL	32,920.00	06/01/98
91842 240	98 MOWER: TORO GROUNDMASTER 580D	30581-80278	0	DIESEL	65,811.10	06/01/98
91842 241	98 MOWER: TORO GROUNDMASTER 325D MOD 30795	30795-80338	0	DIESEL	25,357.45	06/01/98
91842 242	98 MOWER: TORO GROUNDMASTER 325D MOD 30795	30795-80340	0	DIESEL	25,669.94	06/01/98
91842 243	98 MOWER: TORO GROUNDMASTER 325D MOD 30795	30795-80342	0	DIESEL	25,878.28	06/01/98
91842 244	99 MOWER: KUBOTA TRACTOR MOWER	7030-21047	0	DIESEL	41,200.33	06/01/99
91842 245	99 MOWER: KUBOTA TRACTOR MOWER	7030-21049	0	DIESEL	41,200.33	06/01/99
91842 246	99 AUGER, MELROE MODEL 15	187403365	0	DIESEL	2,166.65	06/01/99
91842 251	99 MOWER: TORO GROUND MASTER	30243-90111	0	DIESEL	19,041.17	06/01/99
91842 252	99 MOWER: TORO GROUNDMASTER 223-D	30243-90114	0	DIESEL	19,560.92	06/01/99
91842 253	99 MOWER: TORO GROUNDMASTER 223-D	30243-90118	0	DIESEL	19,560.92	06/01/99
91842 254	99 MOWER: TORO GROUNDMASTER 223-D MOWER	30243-90119	0	DIESEL	19,560.92	06/01/99
91842 255	99 MOWER: TORO GROUNDMASTER 223-D	30243-90120	0	DIESEL	19,560.92	06/01/99
91842 257	99 MOWER: TORO GROUNDMASTER 325D MOD. 30795	90146	0	DIESEL	27,113.60	06/01/99
91842 258	99 MOWER: TORO GROUNDMASTER 325D MOD. 30795	90142	0	DIESEL	27,113.59	06/01/99
91842 259	99 MOWER: TORO GROUNDMASTER 325D MOD. 30795	90268	0	DIESEL	27,113.59	06/01/99
91842 260	99 MOWER: TORO GROUNDMASTER 325D MOD. 30795	90390	0	DIESEL	27,113.59	06/01/99
91842 261	99 MOWER: TORO GROUNDMASTER 325D MOD 30795	90176	0	DIESEL	26,686.38	06/01/99
91842 266	99 TRACTOR: KUBOTA W/SIDE EXT. MOWER M8200	10559	0	DIESEL	60,483.02	06/01/99
91842 267	99 TRACTOR: KUBOTA W/SIDE EXT MOWER M8200	10561	0	DIESEL	60,170.52	06/01/99
91842 268	99 MOWER: TORO GROUNDMASTER 580D TRIPLEX	90489	0	DIESEL	71,246.83	06/01/97
91842 269	00 LIGHT TOWER: WACKER LTP4	5112668	0	DIESEL	10,622.00	06/01/97
91842 270	00 MOWER: TORO GROUNDMASTER 325D 30795	200000106	0	DIESEL	26,888.27	06/01/97
91842 271	97 MESSAGE BOARD PORTABLE ADDCO SOLAR	DH1000 SN584940	3,700	DIESEL	37,000.00	06/01/97
91842 272	97 MESSAGE BOARD PORTABLE ADDCO SOLAR	DH 1000 SN 584984	3,700	DIESEL	37,000.00	06/01/97
91842 273	97 MESSAGE BOARD PORTABLE ADDCO SOLAR	DH1000 SN584985	3,700	DIESEL	37,000.00	06/01/97
91842 274	97 MESSAGE BOARD PORTABLE ADDCO SOLAR	DH1000 SN 584991	3,700	DIESEL	37,000.00	06/01/97
91842 275	97 MESSAGE BOARD PORTABLE ADDCO SOLAR	DH1000 SN 584997	3,700	DIESEL	37,000.00	06/01/97
91842 279	01 LIGHT TOWER: TRAILER MOUNT WACKER LTP4Z	5231940	1,990	DIESEL	9,330.00	06/01/97
91842 280	01 LIGHT TOWER: TRAILER MOUNT WACKER LTP4	5231941	1,990	DIESEL	9,330.00	06/01/97
91842 281	01 LIGHT TOWER: TRAILER MOUNT WACKER LTP4	5231942	1,990	DIESEL	9,330.00	06/01/97
91842 282	01 LIGHT TOWER: TRAILER MOUNT WACKER LTP4	5231943	1,990	DIESEL	9,330.00	06/01/97
91842 283	01 TRACTOR: KUBOTA UTIL.W/R MTD.FLAIL MOWER	10778	0	DIESEL	39,948.99	06/01/97
91842 284	02 MESSAGE BOARD: NATL SIGNAL TRAILER MTD	1S9M214112L358009	3,500	DIESEL	24,790.67	09/12/02
91842 285	02 MESSAGE BOARD: NATL SIGNAL TRAILER MTD	1S9M24132L358013	3,500	DIESEL	24,790.66	09/12/02
91842 288	02 TRACTOR: CASE UTIL W/REAR MTD FLAIL MOWR	C080RS4JJE1020833	0	DIESEL	39,166.42	09/27/02
91842 289	02 TRAILER: SOLAR TECH MTD MESSAGE BOARD	408562	2,900	DIESEL	24,834.28	11/20/02
91842 290	02 TRAILER: SOLAR TECH MTD MESSAGE BOARD	408563	2,900	DIESEL	24,834.28	11/20/02
91842 291	02 TRAILER: SOLAR TECH MTD MESSAGE BOARD	408564	2,900	DIESEL	24,834.28	11/20/02
91842 292	02 TRAILER: SOLAR TECH MTD MESSAGE BOARD	408565	2,900	DIESEL	24,834.28	12/12/02
91842 293	02 LIGHT TOWER: INGERSOLL-RAND TRAILER MTD.	331077/1077	3,640	DIESEL	12,812.41	09/26/02
91842 294	02 LIGHT TOWER: INGERSOLL-RAND TRAILER MTD	3310781078	3,640	DIESEL	12,812.42	09/26/02

Appendix 6: Department of Transportation - Highways Division Vehicle Data

HIGHWAYS DIVISION - OAHU DISTRICT

E/U ALTERNATIVE FUEL REPORT BY FUEL TYPE 9/04/07

PERIOD: 07/01/06 THRU 06/30/07

EQUIPMENT	DESCRIPTION.....	SERIAL NUMBER.....	GVW	FUEL.....	-----ACQUISITION-----	
					COST	DATE
91842 295	02 LIGHT TOWER: INGERSOLL-RAND TRAILER MTD	331079/1079	3,640	DIESEL	12,812.42	09/26/02
91842 296	02 MOWER: TORO GROUNDMASTER 328D	30627-220000268	0	DIESEL	26,281.08	03/25/03
91842 297	03 TRACTOR: FORD T590 W/EXT S/R MTD FLAIL	199806B	0	DIESEL	72,916.20	10/23/03
91842 298	03 TRACTOR: FORD T590 W/EXT. S/R MTD FLAIL	199913B	0	DIESEL	72,916.20	10/27/03
91842 299	03 TRACTOR: FORD T590 W/EXT. S/R MTD FLAIL	200222B	0	DIESEL	72,916.20	10/27/03
91842 301	03 TRACTOR: KUBOTA UTIL. W/REAR MTD FLAIL	11071	0	DIESEL	41,727.45	12/26/03
91842 302	03 TRACTOR: KUBOTA UTIL W/REAR MTD FLAIL	11073	0	DIESEL	41,727.45	12/26/03
91842 303	85 LIGHT TOWER: OVER LOWE	851824/M	0	DIESEL	1,700.00	06/30/03
91842 304	85 LIGHT TOWER: OVER LOWE	851792/M	0	DIESEL	1,700.00	06/30/03
91842 305	85 LIGHT TOWER: OVER LOWE	851846/M	0	DIESEL	1,700.00	06/30/03
91842 311	05 LIGHT TOWER: INGERSOLL-RAND LIGHTSOURCE	356563UEP789	0	DIESEL	11,600.00	06/30/06
91852 110	76 GRADER: HUBER MOTOR	FG252950	27,000	DIESEL	41,632.00	06/01/76
91852 124	80 ROLLER: GALION 8-10 TON TANDEM	59771	0	DIESEL	35,168.95	08/01/80
91852 125	84 BASE BACKHOE	9008018	16,000	DIESEL	28,520.00	09/01/80
91852 127	80 TRUCK: INTERNATIONAL 28' AERIAL LADDER	AA172KHB22490	0	DIESEL	30,018.08	01/01/81
91852 129	82 CRAPCO ASPHALT SEALER W/JOINT CRACK MACH	3149 & C0185	3,500	DIESEL	23,040.16	09/01/82
91852 131	83 CATERPILLAR 120G ARTICULATING GRADER	87V06856	25,050	DIESEL	77,480.00	10/01/84
91852 132	84 ROLLER:DYNAPAC 2-4 TON TANDEM VIBRATORY	573-1187	0	DIESEL	29,849.04	10/01/84
91852 133	85 JOHN DEERE LOADER BACKHOE	T0510BF720730	15,300	DIESEL	62,296.00	08/01/85
91852 136	85 TRUCK: INTL SEWER HYDROJET VAC CLEANER	1HTLDTVR4FHA62673	35,180	DIESEL	104,893.36	10/01/85
91852 137	84 COMPRESSOR: LEROI	3119X1100	2,560	DIESEL	12,064.00	09/01/86
91852 139	87 DRESSER MOTOR GRADER	G750003N011951	28,200	DIESEL	66,666.88	03/01/88
91852 141	88 LOADER: JOHN DEERE ARTICULATING	DW644ED520958	34,404	DIESEL	96,838.52	12/01/88
91852 142	88 BACKHOE: CASE LOADER	JUG0012229	17,500	DIESEL	38,323.03	11/01/88
91852 143	89 GRADER: KOMATSU ARTICULATING MOTOR	50008	11,700	DIESEL	98,148.96	06/01/89
91852 144	89 SWEEPER: FMC VANGUARD	1F9VM4H13KP041136	24,600	DIESEL	117,723.30	07/01/89
91852 145	91 CASE LOADER/BACKHOE	JJG0163916	20,000	DIESEL	33,986.57	10/01/91
91852 146	92 SWEEPER: JOHNSTON V4000 SP	1JSVM4M22NPO41075	24,600	DIESEL	136,191.06	10/01/92
91852 147	92 SWEEPER: JOHNSTON V4000 SP	1JSVM4H24NP041076	24,600	DIESEL	136,191.06	10/01/92
91852 148	92 COMPRESSOR: ATLAS COPCO PORTABLE AIR	ARP978949	0	DIESEL	11,197.95	10/01/92
91852 149	93 SWEEPER: JOHNSTON VANGUARD 4000 S/P	1JSVM4H23PP041041	26,000	DIESEL	138,146.28	10/01/93
91852 150	93 SWEEPER: JOHNSTON VANGUARD 4000 S/P	1JSVM4H25PP041042	26,000	DIESEL	126,167.07	10/01/93
91852 151	93 COMPRESSOR: ATLAS COPCO PORTABLE	H01600414	0	DIESEL	11,350.07	12/01/93
91852 152	93 JOHN DEERE BACKHOE TURBO 4X4	T0410DG794985	0	DIESEL	56,231.43	12/01/93
91852 153	93 ROLLER: DYNAPAC TANDEM CC-211	61510446	0	DIESEL	65,121.04	12/01/93
91852 154	94 VACUUM: INT'L SEWER HYDRO JET MOD.4900	1HTSDAAR7RH571308	35,180	DIESEL	127,309.63	06/20/04
91852 155	94 SWEEPERS: JOHNSTON VANGUARD 4000 SP	1JSVM4H2XRC041015	26,000	DIESEL	134,292.10	08/01/94
91852 157	94 LOADER: CASE MDL:621-B	JEE0040796	0	DIESEL	79,404.42	10/01/94
91852 158	94 LOADER: CASE MDL 821-B	JEE0040797	0	DIESEL	126,904.57	10/01/94
91852 159	96 LOADER: BOBCAT SKID INGERSOLL RAND #763	512220135	0	DIESEL	17,807.36	12/01/96
91852 160	98 LOADER/BACKHOE JOHN DEERE 310SE 4X4	T0310SE848919	0	DIESEL	68,393.31	06/01/98
91852 161	98 LOADER/BACKHOE JOHN DEERE 310SE 4X4	T0310SE848978	0	DIESEL	57,976.71	06/01/98
91852 162	99 SWEEPER: ELGIN/STERLING 4-WHEEL MECH.	49HGWFAGXHA71218	32,000	DIESEL	15,138.61	06/01/99
91852 163	99 BOBCAT: MELROE INGERSOLL RAND 873	514124589	0	DIESEL	35,854.77	06/01/99
91852 164	99 LOADER/FORKLIFT: KOMATSU WA180-3L	A80497	0	DIESEL	74,634.94	06/01/99
91852 165	00 COMPRESSOR: PDS 1855 AIRMAN AIR	53-6A11637	0	DIESEL	13,395.00	06/01/00
91852 166	99 ROLLER: WACKER VIBRATORY RD-25	5080819	0	DIESEL	30,721.25	06/01/99
91852 167	00 BOBCAT: MELROE INGERSOLL RAND 873	514141825	0	DIESEL	32,313.60	06/01/00
91852 168	00 BOBCAT: MELROE INGERSOLL RAND 873	514141831	0	DIESEL	32,313.60	06/01/00
91852 169	00 TRUCK: INT'L SEWER HYDRO JET VACUUM	1HTGLAHTOYH333471	66,000	DIESEL	253,878.68	06/01/00
91852 170	01 SWEEPER: INT'L. W/ELGIN CROSSWIND 4700	1HTSCAAN81H333472	33,000	DIESEL	135,115.42	06/01/01

Appendix 6: Department of Transportation - Highways Division Vehicle Data

HIGHWAYS DIVISION - OAHU DISTRICT

E/U ALTERNATIVE FUEL REPORT BY FUEL TYPE 9/04/07

PERIOD: 07/01/06 THRU 06/30/07

EQUIPMENT	DESCRIPTION.....	SERIAL NUMBER.....	GVW	FUEL.....	-----ACQUISITION-----	
					COST	DATE
91852 171	02 TRUCK: VOLVO SEWER HYDRO VAC JET CLEANER	4V5KC9UF92N329529	66,000	DIESEL	267,290.45	06/01/02
91852 172	01 LOADER: NEW HOLLAND LS 180	187694	0	DIESEL	32,770.62	06/01/02
91852 173	02 TRUCK: GMC MOUNTED DIESEL SWEEPER	1GDP7C1C02J504190	34,350	DIESEL	171,392.88	06/18/02
91852 174	02 TRUCK: GMC MOUNTED DIESEL SWEEPER	1GDP7C1C02J504223	34,350	DIESEL	171,288.71	06/18/02
91852 175	02 GRADER: GALION ARTICULATED MOTOR GRADER	71079	0	DIESEL	108,332.64	06/18/02
91852 176	02 SWEEPER: GMC TRUCK MOUNTED T8500	1GDP7C1C22J513277	34,350	DIESEL	172,846.84	12/16/02
91852 177	02 SWEEPER: GMC TRUCK MOUNTED	1GDP7C1C82J513588	34,350	DIESEL	172,846.82	12/16/02
91852 178	03 BACKHOE/LOADER: NEW HOLLAND MOD LB90	031046530	0	DIESEL	68,228.73	05/04/04
91852 179	04 LOADER: CATERPILLAR TRACK MOD 939C	6DS01575	0	DIESEL	94,008.36	03/07/05
91852 180	05 TRUCK PETERBILT SEWER HYDRO JET-VACUUM	1NPAL00X05D851359	37,540	DIESEL	276,122.91	03/07/05
91852 181	04 SWEEPER GMC TRUCK T7F042	1GDM7F1344F509306	33,000	DIESEL	205,462.03	03/17/05
91852 182	05 LOADER: KOMATSU FRONT END WHEEL	65912	0	DIESEL	95,311.89	12/28/05
91852 183	05 LOADER/BACKHOE CASE 590SM	N5C394588	0	DIESEL	97,916.04	06/14/06
91862 102	60 CRANE: DROFT GO-DEVIL 1 TON	A1062	0	DIESEL	5,200.00	
91862 103	76 DROFT MOBILE CRANE	6223703	10,500	DIESEL	20,000.00	06/01/78
91862 105	84 CRANE: GROVE 22 TON HYD BOOM	66126	44,000	DIESEL	187,155.28	10/01/84
91862 108	98 TRUCK: LIFT BOOM GROVE ARTICULAT'G AMZ68	46668	27,420	DIESEL	95,907.76	09/01/98
91862 109	98 BARRIER TRANSFER MACHINE, BTM ZIPMOBILE	195	69,292	DIESEL	1,700,000.00	07/29/98
91862 110	98 BARRIER TRANSFER MACHINE, BTM ZIPMOBILE	196	69,292	DIESEL	1,700,000.00	09/11/98
91862 113	00 PALLET JACK: HYSTER ELECTRIC 60	B199H06696X	0	DIESEL	10,200.00	04/18/00
91862 114	99 PUMP GORMAN-RUPP PORT TRASH PA6160-4045D	1160590	5,200	DIESEL	39,893.49	06/01/00
91862 115	84 FORKLIFT: 84 TCM 6000 MODEL #FG3DNT	444305599	16,280	DIESEL	1,400.00	05/17/04
91862 116	06 CHIPPER BANDIT 280	1107	0	DIESEL	46,666.38	12/29/06
91862 117	06 CHIPPER BANDIT 280	1108	0	DIESEL	46,666.36	12/29/06
91862 118	06 CHIPPER BANDIT 280	1110	0	DIESEL	46,666.36	12/29/06
					FUEL TYPE TOTAL	
91812 537	97 TRUCK: CHEV PICKUP	1GCCS14X9V8171357	0	PROPANE	19,634.36	05/01/97
91812 563	99 TRUCK: GMC SIERRA EXT CAB PICKUP 2500	1GTGC29UXK529685	8,600	PROPANE	32,735.04	06/01/99
91812 568	97 TRUCK: CHEVROLET MPVH BLAZER	1GNDT13W8V2239006	0	PROPANE	.00	06/01/97
91812 572	98 TRUCK: FORD MPVH EXPLORER	1FMZU34X9WUA20006	0	PROPANE	.00	06/01/98
91812 573	98 TRUCK: FORD MPVH EXPLORER	1FMZU34X0WUA20007	0	PROPANE	.00	06/01/98
91812 574	98 TRUCK: FORD MPVH EXPLORER	1FMZU34X2WUA20008	0	PROPANE	.00	06/01/98
91812 576	98 TRUCK: FORD RANGER PICK UP	1FTZR15X5WPA15246	0	PROPANE	.00	06/01/98
91812 589	00 TRUCK: FORD 4 W/D PU W/ALTERNATE FUEL	1FTZR15X3YPB48056	5,080	PROPANE	29,959.18	06/01/00
91812 590	00 TRUCK: FORD 4 W/D PU W/ALTERNATE FUEL	1FTZR15X5YPB48057	5,080	PROPANE	29,959.18	06/01/00
91812 641	04 VAN FORD E350	1FMNE31L94HB42867	0	PROPANE	39,765.11	03/17/05
91812 642	04 VAN: FORD E350	1FMNE31L74HB42866	0	PROPANE	39,765.11	03/17/05
91842 233	97 THERMO PLASTIC STRIPING MACHINE		0	PROPANE	.00	01/01/97
					FUEL TYPE TOTAL	
91812 591	00 TRUCK: FORD PU W/ALTERNATE FUEL	2FTPX17ZXYCA99791	7,700	PROPANE/GAS	32,342.98	06/01/00
91812 592	00 TRUCK: FORD PU W/ALTERNATE FUEL	2FTPX17Z1YCA99792	7,700	PROPANE/GAS	31,822.15	06/01/00
91812 593	00 TRUCK: FORD PU W/ALTERNATE FUEL	2FTPX17Z3YCA99793	7,700	PROPANE/GAS	32,342.98	06/01/00
91812 650	05 TRUCK FORD F150 PICKUP	1FTRF12W35NA04809	0	PROPANE/GAS	37,305.33	10/04/05
91812 651	05 TRUCK; FORD 150 PICKUP	1FTRF12W15NA04808	0	PROPANE/GAS	37,305.34	10/04/05
91812 652	05 TRUCK; FORD 150 PICKUP	1FTRF12WX5NA04807	0	PROPANE/GAS	37,305.34	10/04/05
91812 653	05 TRUCK; FORD 150 PICKUP	1FTRF12WX5NA04810	0	PROPANE/GAS	37,305.33	10/04/05
91812 654	04 VAN: FORD E350	1FMNE31L15SHA05889	0	PROPANE/GAS	39,084.12	12/14/05
91812 700	07 SUV 06 FORD SPORT UTILITY EXPLORER	1FMEU62E56UB38457	0	PROPANE/GAS	32,245.22	06/22/07
91812 701	07 VAN 06 FORD E350	1FMNE31S66DB02148	0	PROPANE/GAS	39,752.87	06/21/07

Appendix 6: Department of Transportation - Highways Division Vehicle Data

HIGHWAYS DIVISION - OAHU DISTRICT
E/U ALTERNATIVE FUEL REPORT BY FUEL TYPE 9/04/07

PERIOD: 07/01/06 THRU 06/30/07

EQUIPMENT	DESCRIPTION.....	SERIAL NUMBER.....	GVW	FUEL.....	-----ACQUISITION-----	
					COST	DATE
					FUEL TYPE TOTAL	
91812 604	01 SEDAN: FORD 4 DOOR TAURUS	1FAPP52221A253114	4,684	ETHONAL/GAS	17,605.74	06/01/01
91812 612	02 SEDAN: FORD TAURUS 4DR	1FAPP52282A196807	4,684	ETHONAL/GAS	18,083.83	08/20/02
91812 618	02 TRK: FORD EXPLORER 4X4 4 DR.	1FMZU72K22ZC52474	5,840	ETHONAL/GAS	43,132.22	09/12/02
91812 619	02 TRK: FORD EXPLORER SPORT UTILITY	1FMZU62K12ZC52475	5,700	ETHONAL/GAS	40,151.83	09/12/02
91812 634	03 TRUCK FORD PU	1FTYR44V43TA01225	0	ETHONAL/GAS	18,500.25	12/09/04
91812 635	03 TRUCK FORD PU	1FTZR44V03PB22573	0	ETHONAL/GAS	18,500.25	12/09/04
91812 636	03 TRUCK FORD PU	1FTZR44V83PB35376	0	ETHONAL/GAS	18,500.25	12/09/04
91812 638	04 TRUCK DODGE PU	1D7HA16P54J253265	0	ETHONAL/GAS	22,807.16	12/09/04
91812 643	05 SEDAN: FORD 4 DR. TAURUS	1FAPP532X5A160474	0	ETHONAL/GAS	14,551.99	06/24/05
91812 644	05 SEDAN: FORD 4DR TAURUS	1FAPP53265A160472	0	ETHONAL/GAS	1.00	06/24/05
91812 645	05 SEDAN: FORD 4 DR TAURUS	1FAPP53285A160473	0	ETHONAL/GAS	1.00	06/24/05
91812 656	05 SEDAN: FORD TAURUS 4 DR.	1FAPP532X5A303679	0	ETHONAL/GAS	15,940.24	12/28/05
91812 657	05 SEDAN: FORD TAURUS 4 DR.	1FAPP53245A303676	0	ETHONAL/GAS	15,940.24	12/28/05
91812 658	05 SEDAN: FORD TAURUS 4 DR.	1FAPP53265A303677	0	ETHONAL/GAS	15,940.24	12/28/05
91812 659	05 SEDAN: FORD TAURUS 4 DR.	1FAPP53285A303681	0	ETHONAL/GAS	15,940.23	12/28/05
91812 660	05 SEDAN: FORD TAURUS 4 DR.	1FAPP53285A303678	0	ETHONAL/GAS	15,940.23	12/28/05
91812 661	05 SEDAN: FORD TAURUS 4 DR.	1FAPP53265A303680	0	ETHONAL/GAS	15,940.24	12/28/05
91812 674	05 SUV: FORD EXPLORER	1FMZU62K45UB86599	0	ETHONAL/GAS	23,176.93	12/30/05
91812 675	05 SUV FORD EXPLORER	1FMZU62KX5ZA62730	0	ETHONAL/GAS	23,176.94	12/30/05
91812 681	06 SEDAN FORD TAURUS	1FAPP53266A262890	0	ETHONAL/GAS	24,037.98	01/23/07
91812 682	06 TRUCK DODGE RAM 1500 QUAD CAB PU	1D7HA18P96J200732	0	ETHONAL/GAS	26,568.58	12/22/06
91812 683	06 TRUCK DODGE QUAD CAB RAM 1500 PU	1D7HA18P06J200733	0	ETHONAL/GAS	26,568.58	12/22/06
91812 684	06 TRUCK DODGE RAM 1500 PU	1D7HA16P36J200728	0	ETHONAL/GAS	22,772.77	12/22/06
91812 685	06 TRUCK DODGE RAM 1500 PU	1D7HA16P36J200731	0	ETHONAL/GAS	22,772.77	12/22/06
91812 686	06 TRUCK DODGE RAM 1500 PU	1D7HA16P56J200729	0	ETHONAL/GAS	22,772.77	12/22/06
91812 687	06 TRUCK DODGE RAM 1500 PU	1D7HA16P16J200730	0	ETHONAL/GAS	22,772.77	12/22/06
91812 688	06 TRUCK DODGE RAM 1500 QUAD CAB 4X4	7HU18P66J201912	0	ETHONAL/GAS	28,477.94	12/22/06
91812 689	06 TRUCK DODGE RAM 1500 QUAD CAB 4X4	1D7HU18P86J201913	0	ETHONAL/GAS	28,477.94	12/22/06
91812 690	06 TRUCK DODGE RAM 1500 QUAD CAB 4X4	1D7HU18PX6J201914	0	ETHONAL/GAS	28,477.94	12/22/06
91812 699	07 TRUCK 06 FORD F150 PU	1FTRF12VX6NB41044	0	ETHONAL/GAS	24,185.05	04/18/07
					FUEL TYPE TOTAL	
91822 227	99 FORKLIFT: CATERPILLAR ELECTRIC LIFT TRK	A2EC320272	0	ELECTRIC	31,437.30	06/01/99
					FUEL TYPE TOTAL	
91832 101	77 TRAILER: FERREIRA CUSTOM MADE SCALE	SH100477HON	0	NOT APPLICABLE	8,936.00	99/99/99
91832 102	77 TRAILER: EVERGREEN SCALE	103	0	NOT APPLICABLE	.00	03/01/77
91832 103	49 TRAILER: FREUHAUF 20 TON LOWBOY W/O RAMP	FW15025	56,000	NOT APPLICABLE	1,016.19	99/99/99
91832 108	76 TRAILER: ZIEMAN 20 TON LOWBOY	Z221954	40,000	NOT APPLICABLE	12,181.52	09/01/76
91832 111	82 TRAILER: TRAIL KING SMALL	1TKU01621CM103194	12,500	NOT APPLICABLE	4,321.12	11/01/82
91832 112	82 TRAILER: TRAIL KING SMALL	1TKU01623CM103195	12,500	NOT APPLICABLE	4,321.12	11/01/82
91832 113	82 TRAILER: TRAIL KING SMALL	1TKU01625CM103196	12,500	NOT APPLICABLE	4,321.12	11/01/82
91832 114	81 TRAILER: TRAIL FLITE	1669	0	NOT APPLICABLE	.00	
91832 115	84 TRAILER: EAGER BEAVER UTILITY	1120TL10XES030032	7,200	NOT APPLICABLE	.00	10/01/84
91832 116	66 TRAILER: TRANSCO 20 CY 20 TON DUMP	DA20113AMC09977T	55,000	NOT APPLICABLE	2,000.00	07/01/85
91832 117	86 TRAILER: MANNS WELDING UTILITY SCALE	TL648	0	NOT APPLICABLE	12,420.00	09/01/86
91832 118	88 TRAILER: HOMEMADE UTILITY	SOH022588HON	0	NOT APPLICABLE	2,855.00	03/01/88
91832 119	87 TRAILER: ZIEMAN TILT	1ZCT27E20HZP13858	14,000	NOT APPLICABLE	5,662.62	05/01/89
91832 120	89 TRAILER: CALKINS BOAT	1CXBP1413KS910653	0	NOT APPLICABLE	427.08	06/01/89

Appendix 6: Department of Transportation - Highways Division Vehicle Data

HIGHWAYS DIVISION - OAHU DISTRICT
E/U ALTERNATIVE FUEL REPORT BY FUEL TYPE 9/04/07

PERIOD: 07/01/06 THRU 06/30/07

EQUIPMENT	DESCRIPTION.....	SERIAL NUMBER.....	GVW	FUEL.....	-----ACQUISITION-----	
					COST	DATE
91832 122	90 TRAILER: RENCO TILT SCALE	1220000000ST73500	0	NOT APPLICABLE	18,077.28	07/01/90
91832 123	90 TRAILER: RENCO TILT SCALE	1230000000ST73500	0	NOT APPLICABLE	18,077.28	07/01/90
91832 124	90 TRAILER: TRAIL KING LOWBOY	1TKJ04229LM077188	63,800	NOT APPLICABLE	27,855.82	09/01/90
91832 125	66 TRAILER: STEVENS MFG.CO.CARGO	3801	0	NOT APPLICABLE	150.00	09/01/90
91832 126	93 TRAILER: TRALEVATOR UTILITY	1TSMEL419PM199185	4,680	NOT APPLICABLE	6,408.35	10/01/93
91832 127	93 TRAILER: ZIEMAN UTILITY TILT MOD-2310	1ZC729B25PZP17467	22,500	NOT APPLICABLE	.00	12/01/93
91832 128	94 TRAILER: W/SKID RESISTANCE EQUIPMENT	M1270-082	0	NOT APPLICABLE	183,874.00	02/01/95
91832 129	96 TRAILER: (HOMEMADE)		0	NOT APPLICABLE	1.00	02/01/96
91832 130	96 TRAILER: SPECTRUM SCALE LT-2900	1S9EC1613TH364445	0	NOT APPLICABLE	16,110.93	12/01/96
91832 131	96 TRAILER: SPECTRUM SCALE LT-2900	1S9EC1615TH364446	0	NOT APPLICABLE	16,110.93	12/01/96
91832 132	96 TRAILER: BOBCAT SHOPBUILT BCT-16-7500	1S9BS2126TH364435	0	NOT APPLICABLE	6,250.00	12/01/96
91832 133	97 TRAILER: SHOPBUILT UTILITY	1S9US121XVH364555	0	NOT APPLICABLE	885.41	06/01/97
91832 134	97 TRAILER: SHOPBUILT UTILITY	1S9US1212VH364556	0	NOT APPLICABLE	885.41	06/01/97
91832 135	98 TRAILER: WEIGHT SCALE	EC161XVH364302	0	NOT APPLICABLE	17,587.38	06/01/98
91832 136	97 TRAILER WEIGHT SCALE SHOPBLT LODEC3030	1S9EC1611VH36403	0	NOT APPLICABLE	17,014.47	06/01/97
91832 137	98 TRAILER: INTERNATIONAL BW508	1ZFUF0818WB001623	0	NOT APPLICABLE	2,520.00	06/01/98
91832 138	98 TRAILER: SPECTRUM LAWNMOWER T3000	1S9SL1828WH364459	5,000	NOT APPLICABLE	5,800.00	06/01/98
91832 139	98 TRAILER: SPECTRUM LAWNMOWER T3000	1S9SL1826WH364460	5,000	NOT APPLICABLE	5,800.00	06/01/98
91832 140	98 TRAILER: SPECTRUM LAWNMOWER T3000	1S9SL1824WH364461	5,000	NOT APPLICABLE	5,800.00	06/01/98
91832 141	99 TRAILER: ZIEMAN UTILITY #8012 SPL	1ZCE18S22XZP20671	8,300	NOT APPLICABLE	6,508.30	06/01/99
91832 142	99 TRAILER: ZIEMAN UTILITY #8012 SPL	1ZCE18S24XZP20672	8,300	NOT APPLICABLE	6,508.29	06/01/99
91832 143	99 TRAILER: ZIEMA UTILITY #8012 SPL	1ZCE18S26XZP20673	8,300	NOT APPLICABLE	6,508.00	06/01/99
91832 144	99 TRAILER: SPECTRUM BOBCAT MOD. 2580	1S9BS2420XH364108	0	NOT APPLICABLE	7,276.00	06/01/99
91832 145	99 TRAILER: SPECTRUM LAWNMOWER	1S9SL1828XH364110	4,980	NOT APPLICABLE	5,800.00	06/01/99
91832 146	99 TRAILER: CHILTON UTILITY UT4815S-1	14DAC0810XC000231	1,500	NOT APPLICABLE	2,200.00	06/01/99
91832 148	00 TRAILER: SPECTRUM LAWNMOWER T-3000	1S9SL1826VH364107	5,280	NOT APPLICABLE	6,249.96	06/01/00
91832 149	00 TRAILER: BUTLER FLAT BED LT-812-DH	00-2059-2250LB	8,500	NOT APPLICABLE	5,168.75	06/01/00
91832 150	00 TRAILER: SPECTRUM BOBCAT BCT 16-12000	1S9BC2320VH364111	12,000	NOT APPLICABLE	8,749.94	06/01/00
91832 151	00 TRAILER: SPECTRUM BOBCAT	1S9BC2322VH364112	12,000	NOT APPLICABLE	8,749.94	06/01/99
91832 152	00 TRAILER: CARRY-ON UTILITY 5X8G	4YMUK0813YH042326	0	NOT APPLICABLE	2,864.68	06/01/00
91832 153	00 TRAILER: CARRY-ON UTILITY 5X8G	4YMUK0815YH042327	0	NOT APPLICABLE	2,864.68	06/01/00
91832 154	01 TRAILER: ZIEMAN UTILITY	1ZCE18S2712P23136	8,300	NOT APPLICABLE	8,958.28	06/01/01
91832 155	01 TRAILER: ZIEMAN TILT 1157	1ZCT21T261ZP23378	14,000	NOT APPLICABLE	8,609.32	06/01/01
91832 156	02 TRAILER: SPECTRUM LAWNMOWER	1S9US18201H364193	5,440	NOT APPLICABLE	7,291.62	03/25/03
91832 157	03 TRAILER: ZIEMAN UTILITY	1ZCE18S233ZP24562	8,300	NOT APPLICABLE	6,770.79	12/09/03
91832 159	05 SCALES ELECTRONIC AXLE W/TRAILER		0	NOT APPLICABLE	27,505.00	09/22/06
91832 160	05 SCALES ELECTRONIC AXLE W/TRAILER		0	NOT APPLICABLE	27,505.00	09/22/06
91842 123	75 WELDER: LINCOLN ARC	4795022	0	NOT APPLICABLE	3,121.00	06/01/97
91842 230	96 ERADICATOR, ROBIN EH 17	1098152	0	NOT APPLICABLE	7,209.00	12/01/96
91842 231	96 VACUUM: CLEANER, NELFISK GS83	960529-2064	0	NOT APPLICABLE	4,923.00	12/01/96
91842 237	98 OPEN RADAR SPEED MONITOR UNIT	4AGAU09SXWC027173	0	NOT APPLICABLE	9,765.00	06/01/98
91842 238	98 OPEN RADAR SPEED MONITOR UNIT	4AGAU09S1WC027174	0	NOT APPLICABLE	9,765.00	06/01/98
91842 247	99 POST POUNDER, DANUSER MODEL MD-6	11827	0	NOT APPLICABLE	4,718.71	06/01/99
91842 248	98 CART, EZ-GO GOLF CARGO CARRIERS #875E		0	NOT APPLICABLE	6,236.92	06/01/98
91842 249	98 CART, EZ-GO GOLF CARGO CARRIERS #875E		0	NOT APPLICABLE	6,236.92	06/01/98
91842 250	98 CART, EZ-GO GOLF CARGO CARRIERS #875E	21675	0	NOT APPLICABLE	6,236.92	06/01/98
91842 256	97 MIXER: BETONIERA WORKMAN 250 CONCRETE	0000138311	0	NOT APPLICABLE	2,080.00	06/01/97
91842 264	99 MONITOR: MIGHTY MOVER SPEED CONTROL	4AGAU1112XC029946	2,000	NOT APPLICABLE	10,020.77	06/01/99
91842 265	99 MONITOR: MIGHTY MOVER SPEED CONTROL	4AGAU114XC029947	2,000	NOT APPLICABLE	10,020.77	06/01/99
91842 286	02 TRAILER: ITCP MTD SPEED CONTROL MONITOR	40XK111S02A0007	2,000	NOT APPLICABLE	11,999.00	09/12/02
91842 287	02 TRAILER: ITCP MTD SPEED CONTROL MONITOR	40XK111S22A020008	2,000	NOT APPLICABLE	11,999.00	09/12/02

Appendix 6: Department of Transportation - Highways Division Vehicle Data

HIGHWAYS DIVISION - OAHU DISTRICT

E/U ALTERNATIVE FUEL REPORT BY FUEL TYPE 9/04/07

PERIOD: 07/01/06 THRU 06/30/07

EQUIPMENT	DESCRIPTION.....	SERIAL NUMBER.....	GVW	FUEL.....	-----ACQUISITION-----	
					COST	DATE
91842 309	05 ARROWBOARD WANCO W/TRAILER WTSP75-LSAC	5F11S101351000	0	NOT APPLICABLE	7,830.00	09/22/06
91842 310	05 ARROWBOARD WANCO W/TRAILER WTSP75-LSAC	5F11S551000458	0	NOT APPLICABLE	7,830.00	09/22/06
91842 313	06 WELDER LINCOLN TIG K1828-1	U1060202431	0	NOT APPLICABLE	17,580.00	05/01/07
91842 315	06 POT PREMELTER TRANTEX THERMOPLASTIC	000504/000505	0	NOT APPLICABLE	133,702.00	02/16/07
91842 319	06 VACUUM EDCO 18 GAL DR VAC 250	061814230	0	NOT APPLICABLE	8,705.94	02/16/07
					FUEL TYPE TOTAL	

LSS Delivery Vans 2011-2012 Figures

Van ID	Gallons	Miles	MPG
Kauai SH B427 2004 Ford E150	801.9	14,132	17.62
Maui SH D871 2009 Chevy 3500	629.9	8,514	13.52
Hawaii SH C117 2006 Ford E250	1,549.65	24,639	15.93
Hawaii SH C118 2006 Ford E250	1,008.50	16,808	16.7
Oahu SH 8486 1997 Chevy 3500	305.53	4,109	13.45
Oahu SH D872 2009 Dodge 3500	71.53	810	11.32
Oahu SH B248 2004 Ford E150	542.99	7,212	13.28
Oahu SH B982 2006 Ford E350	1,589.01	18,113	11.40
Oahu SH D870 2009 Chevy 3500	1,415.04	16,183	11.44
Oahu SH E63 2011 Chevy 3500	778.141	10,645	13.68
Totals	8,692.19	121,165	13.94

ISLAND	FACILITY	BUILDING NAME	OWNER	ADDRESS	CITY	BLDG SQFT	PKG SQFT
Oahu	DAR	Anuenue Fisheries Research Center	DLNR	1039 Sand Island Parkway	Honolulu		
Oahu	DOBOR Admin	Melim Building	lease	333 Queen Street, Suite 300	Honolulu		
Oahu	DOBOR/Ala Wai SBH	Harbor Office	DLNR	1651 Ala Moana Blvd.	Honolulu		
Oahu	DOBOR/Oahu Branch/Keahi SBH	Harbor Office	DLNR	4 Sand Island Access Road	Honolulu		
Oahu	DOBOR/Haleiwa SBH	Harbor Office	DLNR	66-105 Haleiwa Road	Haleiwa		
Oahu	DOBOR/Heeia Kea SBH	Harbor Office	DLNR	46-499 Kamehameha Hwy.	Kaneohe		
Oahu	DOBOR/Waianae SBH	Harbor Office	DLNR	85-371 Farrington Hwy.	Waianae		
Oahu	DOCARE Oahu District Office	DOCARE Oahu District Office	DLNR	2551 Waimano Home Road, Bldg. #202	Pearl City		
Oahu	DOCARE Hunter Education Program	Hunter Education Office	lease?	1130 N. Nimitz Hwy. A-212	Honolulu		
Oahu	DOFAW/ Oahu Branch-Baseyard	DOFAW Oahu Baseyard	DLNR	2135 Makiki Heights Drive	Honolulu		
Oahu	State Parks Oahu District	State Parks Oahu District Office	DLNR	480 Makapuu Avenue	Honolulu		
Maui	DAR/Maui Office	Maui DLNR Annex	DLNR	130 Mahalani Street	Wailuku	3,150	864
Maui	DOBOR/Maui District Office	Maui District Harbor Office	DLNR	101 Maalaea Boat Harbor Road	Wailuku		
Maui	DOBOR Lahaina SBH	Harbor Office	DLNR	675 Wharf Street	Lahaina		
Maui	DOFAW/ Maui Baseyard	DOFAW Maui Baseyard	DLNR	685 Haleakala Highway	Kahului	4,800	11,520
Maui	DOCARE/ Maui Branch Office	DOCARE Armory	DLNR	175 S. Puunene Ave.	Kahului	10,000	10,000
Maui	KIRC	KIRC Baseyard	KIRC				
Hawaii	DOBOR/Hawaii District Office		DLNR	74-380 Kealahake Parkway	Kailua-Kona		
Hawaii	DOCARE/ Hawaii Branch Office	DOCARE Hawaii Baseyard	DLNR	35 Holomua Street	Hilo	1,152	32,598
Hawaii	DOFAW/ Hawaii Branch Office	DOFAW Hawaii Baseyard	DLNR	19 E. Kawaii Street	Hilo		
Hawaii	DOFAW/Kamuela	Kamuela Tree	DLNR	66-1220A Lalamilo Road	Kamuela		

	Tree Nursery	Nursery							
Kauai	DOBOR/Kauai District Office		lease?	4370 Kukui Grove Street, Suite 109	Lihue				
Kauai	DOFAW/ Kauai Baseyard	DOFAW Kauai Baseyard	DLNR	4396D Pua Loke	Lihue				