

DEPARTMENT OF PUBLIC WORKS

LARRY DILL, P.E., COUNTY ENGINEER
LYLE TABATA, DEPUTY COUNTY ENGINEER

ADMINISTRATION

The Department of Public Works (DPW) is responsible for the planning, design, and construction of all new improvements to County-owned facilities, excluding Department of Water projects. The maintenance, repair and upkeep of all County facilities, the collection and disposal of garbage and refuse, the collection and treatment of sewage, the review and enforcement of the various codes and other regulations pertaining to public and private construction work are also responsibilities of this Department.

Facilities managed by the DPW include:

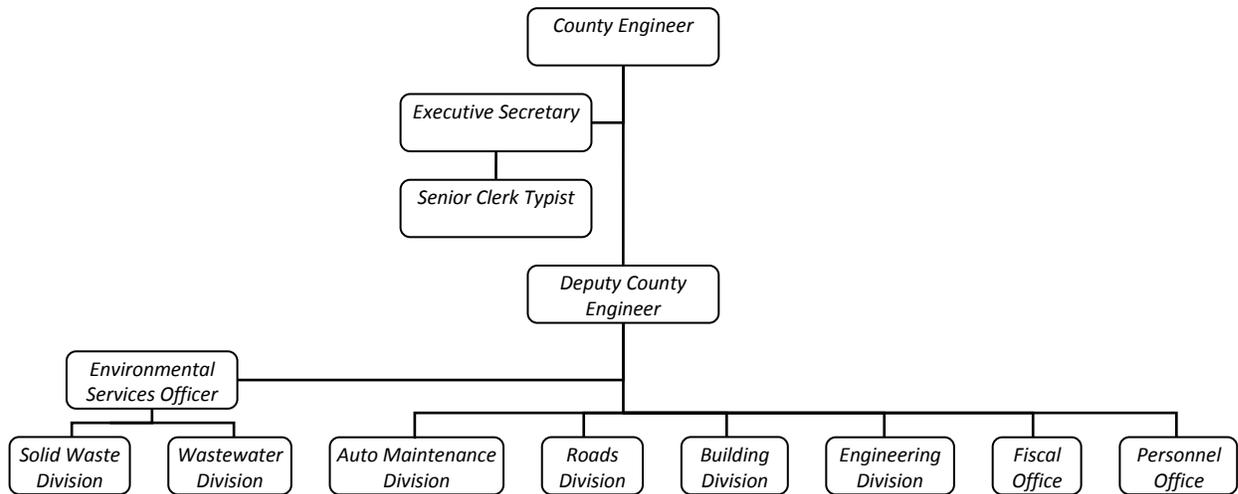
- Four sanitary sewerage facilities
 - Wailua Wastewater Treatment Plant
 - Līhu‘e Wastewater Treatment Plant
 - ‘Ele‘ele Wastewater Treatment Plant
 - Waimea Wastewater Treatment Plant
- Kekaha Landfill
- Four refuse transfer stations
 - Hanalei Refuse Transfer Station
 - Kapa‘a Refuse Transfer Station
 - Līhu‘e Refuse Transfer Station
 - Hanapēpē Refuse Transfer Station
- Three road construction and maintenance baseyards
 - Hanalei Baseyard
 - Kapa‘a Baseyard
 - Hanapēpē Baseyard
- Approximately 308 miles of roadways

DPW also provides repair and maintenance and/or custodial services for the following:

- Vidinha Stadium
- Hanapēpē Stadium
- Kaua‘i War Memorial Convention Hall
- Līhu‘e Civic Center
- Historic County Building and Annex
- Police Department / Civil Defense Agency / Transportation Agency
- Ten Neighborhood Centers
- County Parks

Duties and functions of DPW are directed by an administrative staff consisting of the County Engineer, the Deputy County Engineer, Executive Secretary, Personnel Officer, Fiscal Officer, Environmental Services Officer, Senior Clerk Typist and six Divisions. The six divisions are: Auto

Maintenance; Building; Engineering; Roads Construction and Maintenance; Solid Waste Management; and Wastewater Management. Detailed information for these divisions is provided in the pages that follow.



Mission

The Mission of the Department of Public Works is to deliver excellent service to our constituents and support the health and safety of their communities with sustainable services and solutions.

Goals & Objectives

1. The DPW Administration seeks to support the Goals and Objectives of the six Divisions within the Department, ensuring manpower, equipment and materials needs are met adequately.
2. Implement the Goals and Objectives of the County Administration, including Holo Holo 2020.
3. Ensure the health, safety and welfare of the public.

Challenges

1. Planning for future improvements while continuing to meet the day to day needs and demands of the community.
2. Utilizing funds in the most efficient manner while maintaining satisfactory levels of service.
3. Succession planning.
4. Continuing to maintain a positive working relationship with our union partners.
5. Recruiting qualified hires.
6. Expediting the permit approval process.

Significant Improvements

1. Improved systems for the delivery of services with IT investments in electronic systems that gather data and format them into usable reference of outcomes.

2. Recruited and hired competent personnel in the Divisions who are making positive changes to the way we do business and service to our community.
3. Improved CIP project planning, monitoring and delivery.
4. Improved our relationships with our Union partners with scheduled monthly communications.

Key Successes and Achievements

1. CIP program manager working with PW to improve management of status, schedule and funding of projects to improve delivery of County wide projects.
2. Moving multiple CIP projects to construction; Kapaa Base Yard renovation, Lihue Civic Center ADA improvements, three phases of Lydgate to Kapaa Bicycle Path Ke Ala Hele Makalae including the Spur to Kawaihau road, and Kokee Road Resurfacing.
3. Replaced the obsolete computerized fuel management system previously in operation which was not reliable and limited in data collection.
4. Completed reconfiguration of a two man working bay into a three man working bay at the Auto Shop, increasing the ability to accommodate additional repairs.
5. Implementation of the Electronic Plan Review (EPR) of Building Permit applications.
6. LEED certification Silver obtained for Kaiākea Fire Station.
7. Assist the Planning Department in the successful amending of the Subdivision Ordinance to incorporate Smart Growth and Complete Streets principles.
8. Hiring an engineer for the regulatory review section of Engineering Division which significantly increased the capacity to review and approve plans.
9. Assisted the Planning Department in hiring a Transportation Planner to assist DPW and County agencies with transportation projects and implementing Complete Street principles and the Multimodal Land Transportation Plan approved in FY 2013.
10. Submission of proposals to the State Safe Routes to School program for infrastructure improvement projects.
11. Accomplished two Complete Streets community planning and design charrettes which also trained staff personnel in the process.
12. Completed the reorganization of Roads Division to include a Special Construction section.
13. Completed necessary maintenance upgrades bringing the Hanapepe and Waimea Levees back into compliance with the US Army Corp of Engineers.
14. Completed a County-wide inventory and assessment of all County roads.
15. Began implementation of two Computerized Maintenance Management Systems (CMMS) in Roads Division; MicroPaver for all County roadway management and MPet for all other County infrastructure asset management.
16. Executing the Island Wide Resurfacing program with improved processes of delivery which include structural section repairs, shoulder repairs dressing and implemented the sustainable practice of recycling material via cold planing of surfaces to reduce costs of raw materials.
17. Completion of March 2012 storm damage projects and continued progress to address all damage needs with expected completion into 2014.
18. In concert with our Union partners implemented significant changes to Solid Waste Landfill and Refuse Transfer Station work schedules which resulted in significant savings.

19. Successfully transitioned operations for the Puhi Metals Recycling operation.
20. Solid Waste Recycling activities increased diversion rates 5 percent.
21. An Energy Services Company (ESCO) conducted energy audits for County Wastewater facilities, and identified capital improvement projects intended to improve wastewater treatment processes, efficiency of operations, and for renewable energy development.
22. The major construction project this year continued to be the \$15.7 million design-build Waimea WWTP Expansion Project, which reached substantial completion in June 2013.

Upcoming Initiatives

1. **Strengthen Community Partnerships:** The DPW acknowledges the issues and opportunities that affect the quality of life of our residents and visitors. DPW will continue to seek opportunities for the joint community involvement of infrastructure development in our communities and to develop partnerships to further the department's mission to support the Administration.
2. **Maintain and Enhance Functional and Sustainable Facilities:** DPW will work with the Administration and the County Council to develop a strategy for funding needed repair and maintenance of our County's facilities. These projects are necessary in enhancing the quality of life of our residents and visitors.
3. **Increase Education and Public Participation:** DPW seeks to work with the community in developing solutions that benefit and meet the public's expectations. DPW intends to do this by providing community groups and organizations with information exchange sessions and presentations for the planning and development of upcoming projects, while learning more about the community's needs and concerns. The department will also work with the County's Communications Office to disseminate information regarding the initiatives and work being accomplished by the department via social media networks, the County website, newspaper and radio agencies, and other media venues.
4. **Providing Quality Customer Service:** Employees in every division of DPW interact with residents and visitors on a daily basis. DPW will strengthen its delivery of customer service by developing strategies to increase efficiency and response times responding to requests for service, communication with the public, and our ability to transition smoothly from routine operations to emergency operations during times of need.

FISCAL OFFICE

Staffed by a Business Management Officer, an Accountant IV and an Accountant II, the primary duties of this section are the preparation and monitoring of the DPW's Operating Budget of approximately \$47.6 million, a Capital Improvement Budget of \$49.9 million and federal/state grants of \$36.6 million. Included as part of the Fiscal section primary duties are the coordination and compilation of the DPW's projected six-year CIP requirements, which are updated annually. This Section is responsible for the payroll of approximately 294 employees, providing support for the Solid Waste and Wastewater billing program, the Department's inventory of approximately \$201,734,619 and also for the preparation of the required financial reports and the reimbursement of federal funds for capital improvement projects including:

- American Recovery and Reinvestment Act (ARRA) stimulus funds
- Housing & Urban Development (HUD)

- Community Development Block Grant (CDBG)
- Federal Emergency Management Agency (FEMA) Hazard Mitigation Grants
- Federal Highway Administration (FHWA)
- Natural Resources Conservation Service (NRCS)
- Environmental Protection Agency (EPA)

For Fiscal Year 2013, a total of 2,629 man-hours of salaries were reimbursed under federal grants. Continued recovery of salaries is expected as we continue to move into construction of roadways, bridges, bike/pedestrian paths, wastewater treatment plant upgrades and distribution systems of R-1 treated water funded through federal grants in FY 2014. Additionally, the Fiscal section will be tasked in the preparation of the required financial reports and reimbursement requests from State agencies that include the Department of Health, Department of Transportation, and the State Civil Defense.

PERSONNEL

Staffed with one Personnel Officer and one Departmental Personnel Assistant, the Personnel Section is committed to working strategically with the Department's division managers in identifying and responding to their changing personnel needs. The Section assists its managers in:

Meeting staffing needs by promoting and supporting recruitment and selection strategies that attract, select, and promote employees based on merit.

- Increasing organizational effectiveness by ensuring the proper and uniform alignment of positions and to recognize and record position changes.
- Identifying and coordinating training to enhance employee skills, performance and job satisfaction.
- Ensuring fair and equitable administration of union agreements, personnel policies and procedures, and civil service rules and regulations.
- Managing employer-union relations that include grievance handling, union consultations and communications, and contract interpretation and administration.
- Effectively administering employee benefit, leave, personnel file maintenance, and workers compensation programs.

As we transition towards the new HR section of Personnel Services for the entire County, DPW will be losing our Personnel Officer and be left with one department personnel assistant who will administer the day to day needs of the department within the limitations of a clerical function. Department heads and division heads will be absorbing more direct duties of the management of the functions of personnel actions with HR available as we see is required to support our mission.

AUTOMOTIVE DIVISION

I. MISSION STATEMENT: The DPW Automotive Division strives to update and maintain the vehicle and equipment fleet of the Department of Public Works and other County Agencies, enabling the County of Kaua'i to provide core services to all communities on the island.

II. DIVISION GOALS:

1. Modernize the County's vehicle and equipment fleet, providing all agencies with economical and reliable vehicles and equipment, allowing the County to operate effectively and efficiently.
2. Provide rapid vehicle and equipment service and repair turnaround, enabling all agencies to perform their duties and responsibilities.
3. Offer support and disaster relief services to all agencies and the community in emergency situations.

Automotive Division personnel include:

- 1 – Superintendent
- 1 – Repair Shop Supervisor
- 1 – Program Support Technician II
- 1 – Storeroom Clerk
- 4 – Heavy Vehicle & Construction Equipment Mechanic I
- 1 – Auto Mechanic II
- 6 – Auto Mechanic I
- 2 – Welder
- 2 – Auto Body Repairer
- 1 – Machinist
- 1 – Field Service Attendant
- 1 – Lubrication Worker
- 1 – Utility Worker

New Hires: (1) Heavy Vehicle and Construction Equipment Welder

Retirees: None

Total Personnel: 23

III. PROGRAM DESCRIPTION: The Automotive Division performs all aspects of Automotive and Construction Equipment repair and includes the following services:

A. PROGRAM OBJECTIVES:

- Repair and maintain all DPW vehicles and heavy equipment.
- Repair and maintain all KPD vehicles and equipment.
- Repair and maintain vehicles from other agencies including Parks Dept., Planning, Housing, Finance, AEA and Real Property, etc.
- Perform D.O.T. inspections for all County vehicles, including Department of Water vehicles.
- Assist Fire Dept. with maintenance and repair issues periodically

- Fueling and servicing of field equipment.
- Tire repair services.
- Welding services.
- Machine shop services.
- Auto body repair and repainting of vehicles and equipment.
- Management and maintenance of four (4) island wide gasoline and diesel fuel distribution stations.
- Emergency callout services on weekends and after-hour emergencies.
- Support all County agencies in emergency situations.
- Service and maintain all emergency standby generators.
- Service and maintain generators at all four (4) major 800 mhz. repeater sites.
- Service and maintain levee pumps and flood gates at Hanapēpē and Waimea levees.
- Repair and maintenance of Refuse Compacting Transfer Stations at Hanalei, Kapa‘a and Hanapēpē.
- Monitoring, maintenance and management of a Fleet maintenance program for all County owned vehicles.
- Operation, monitoring and maintenance of the Fuelmaster computerized fuel management system.
- Provide generator power for community events.

IV. PROGRAM MEASURES:

1. We strive to promote safety and provide safe working conditions within the facility for all employees and visitors.
2. Perform preventive maintenance on all vehicles and equipment to prolong service life and minimize costly repairs.
3. Update the fleet with the most technologically advanced vehicles and equipment available, enabling the County to conserve fuel and reduce greenhouse gas.

V. ACCOMPLISHMENTS / EVALUATION: The Automotive Division continues to pursue training opportunities for our service technicians to keep abreast with the ever changing technology of the automotive and equipment industry. Various workshops have been attended by our office staff to keep up with the constantly updated software which controls our Fleet management system. A Fuelmaster computerized fuel management system has been purchased and installed and is operational, replacing the obsolete Gasboy system previously in operation. Fence line improvements have been made to keep our facility secure. Structural repairs to both buildings have been done to keep our aging facility safe and operational. A 54’ Spray Booth has been installed in the newly renovated Kapaa Baseyard complex and is operational. Finally, a column relocation project, including an additional twin post hoist, has been completed to re-configure a 2 man working bay into a 3 man working bay, allowing us to accommodate additional repairs.

New Equipment Received in FY13 includes:

- 3 – Pickup Trucks for Park Rangers
- 1 – 4x4 Pickup Truck for Parks Dept.
- 1 – Pickup Truck for Parks Lifeguard

- 1 – 6 Man Crew Cab Pickup Truck for Parks Dept.
- 1 – Pickup Truck with Liftgate for Parks Dept.
- 1 – 2.5 ton Forklift for Parks Dept.
- 1 – Wheel Loader for Roads Division
- 1 – 3 Ton Vibratory Roller for Roads Division
- 1 – Toyota 4Runner SUV for Planning Dept.
- 2 – Peterbilt Rear Load Refuse Trucks for Solid Waste Division
- 1 – Autocar 22cy Side Load Refuse Truck for Solid Waste Division
- 1 – 38’ Rear Load Refuse Transfer Trailer for Solid Waste Division
- 1 – Backhoe/Loader for Solid Waste Division
- 1 – Toyota Tacoma Pickup for Building Division
- 2 – Prius Sedans for Building Division
- 1 – Utility Pickup Truck with Compressor and Liftgate for Automotive Division
- 1 – Rubber Track Loader w/Backhoe Attachment for Wastewater Division
- 1 – Dodge Caravan for IT Division
- 2 – Toyota Highlander SUVs for Engineering Division
- 1 – Tahoe Hybrid SUV for Mayor
- 1 – Toyota Highlander Hybrid SUV for Civil Defense
- 3 – Toyota Prius Hybrid Sedans for AEA

BUILDING DIVISION

I. MISSION STATEMENT

The Division of Buildings is responsible for code enforcement, facility development, building construction and maintenance, and janitorial services. All programs are responsible for providing the people of Kaua`i with safely constructed public and private facilities, and well-maintained County facilities.

II. DIVISION GOALS

1. To develop new facilities and replace old, dilapidated, overcrowded buildings and structures.
2. To ensure compliance with the minimum construction standards contained within the current Kaua`i County Codes and referenced building trade codes.
3. To continually update the Kaua`i County Code to reflect the latest industry standards, changing technologies, and local conditions.
4. To provide effective training and adequate staffing to increase the efficiency of services to the public in the review, issuance, and enforcement of building, electrical, plumbing, and sign permits.
5. To clean and maintain County office buildings and neighborhood centers.
6. To provide repair and construction services to prolong the life and maintain the value of all County facilities.

7. To provide necessary services in the preparation and management of construction and service contracts.

III. PROGRAM DESCRIPTION

ADMINISTRATION

The Building Division's Administrative Section manages facility development and construction. The Section also oversees the operation of the Facility Maintenance Section, and the Building Codes Enforcement Section.

PROGRAM OBJECTIVES: The Administrative Section is currently tasked with the development of new facilities for the Fire Department, Council Services, and the Parks and Recreation Department. The Section also is required to implement the modification of existing facilities to meet the American's with Disabilities Act (ADA) requirements.

PROGRAM HIGHLIGHTS: Construction completed for the Piikoi Fire Administration Offices and Lihue Civic Center Food Market Hazardous Material Removal. Construction ongoing for the Historic County Building, Kapa'a Baseyard Structural Renovation, Lydgate-Kapa'a Bike/Pedestrian Path Phases A & B, and Lihue Civic Center Site Improvements.

Procurement completed for Hardy Street Improvements. Design and procurement work is ongoing for Pono Kai Seawall and Moanakai Seawall.

Other major projects, for which the Section is providing planning, design, and construction management work include Lydgate-Kapa'a Bike/Pedestrian Path, Ahukini-Lydgate Bike/Pedestrian Path, Kuna Bay-Anahola Bike/Pedestrian Path, and the Nāwiliwili-Ahukini Bike/Pedestrian Path.

REPAIR & MAINTENANCE AND JANITORIAL SERVICES SECTION

The Facility Maintenance Section consists of building trades repair and maintenance workers, and janitorial services workers. The personnel are responsible for providing necessary services to repair, maintain, and clean County facilities located between Kekaha and Haena. Additionally, the program has also been called upon to handle various new construction and major renovation projects for the County.

PROGRAM OBJECTIVES: The Repair & Maintenance and Janitorial Services Section are directly responsible for the maintenance and cleaning of all multi-agency County facilities. The Section also provides requested maintenance and janitorial support to the Parks and Recreation Department, Wastewater Division, Police Department, Fire Department, Civil Defense Agency, the Housing Agency, and Agency of Elderly Affairs with various construction, repair, and janitorial needs.

PROGRAM HIGHLIGHTS: The Section managed and assisted with the construction work to complete major repair contracts at various County facilities. In addition to the completed projects, the Section has also been tasked with the development of plans, specifications, and

contract documents for new Capital Improvement Projects, with an estimated cost of approximately 1 million dollars. The Section continued on work to upgrade the County's Energy Management System at our major office facilities, to help with monitoring and controlling our energy usage and cost.

The Section's electrical trade personnel continued with the lighting retrofits at various County facilities. Energy efficient types of light fixtures, bulbs, and equipment are continually being installed or upgraded, replacing older fluorescent and incandescent equipment. Work to upgrade the County's traffic signal equipment, lights, and activation devices were completed with the installation of ADA compliant, user friendly pedestrian button controls and LED signals. A significant effort was made to ensure that County facility lighting was retrofitted to meet 'bird friendly' requirements. With the installation of newer, more efficient equipment, the staff has been able to direct more of their job hours to preventive maintenance types of work. This has reduced the amount of emergency and/or urgent repairs arising throughout the County, and has also reduced the amount of general maintenance repairs job orders being requested by the users.

The plumbing trade personnel continued with work to replace old plumbing fixtures at County park facilities. Major projects were started at two very popular and high usage park facilities, Lydgate Beach Park and Poipu Beach Park. With the completion of the individual wastewater system upgrades to various types of septic systems at many of the County facilities, the staff has taken on additional work with training, and developing a systematic procedure for the inspection and maintenance of all the new systems.

Required work to repair and/or replace items due to vandalism continues to be a major problem, requiring many man-hours and material cost, which could be spent on a multitude of other projects and facilities. Many community groups have assisted with needed man-power in painting over graffiti, and doing minor repair work at numerous sites around the island to help address the increased amounts of work associated with these acts of vandalism.

BUILDING CODE ENFORCEMENT SECTION

The Building Code Enforcement Section is responsible for the review of projects, plans, specifications, and related documents to ensure compliance and enforcement of all applicable building codes and ordinances associated with building construction. As the central coordination agency in the building permitting process, the program is responsible for the circulation, tracking, and consolidation of comments from County, State, and Federal agencies, prior to permit approval. The program is also responsible for building, electrical, plumbing, energy, and sign code enforcement, as well as inspections of the above as part of the overall process.

PROGRAM OBJECTIVES: The ongoing objectives of this program are to:

- provide the highest level of customer service to our customers.
- address fire, life, health, and safety concerns through the use of locally adopted model codes.
- promote the design of safe residential and commercial buildings from conception through the plan review and inspection process.

- ensure that these structures are built according to the approved set of plans.
- assist the public in their understanding of the County's adopted codes and ordinances and the process that will ultimately result in safe buildings for our community.
- issue Certificates of Occupancy and Certificates of Inspection

PROGRAM HIGHLIGHTS: The Building Division has made significant progress this year towards the implementation of its new electronic plan review (EPR) system. In order to further promote the electronic plan process, as of May 1, 2013, the highest priority for plan check submittals now goes to those individuals who submit plans electronically. Paper plans will still be accepted, but the plan review process will greatly favor electronic submittals. Eventually, paper plans will be phased out altogether.

In support of the EPR system Building Division Staff produced a 29-page Applicant User Guide to aid users as they upload electronic plans. Building Division Staff has given two presentations to the Kaua'i County Chamber of Commerce and one presentation to the Contractors Association of Kaua'i in an effort to spread-the-word about electronic plan review. Currently, approximately 20% of our applicants submit plans electronically. We look forward to a significant increase this figure in the coming fiscal year.

In coordination with the EPR system a Virtual One Stop Center within the Building Division in the Mo'ikeha Building has been established replacing the operation of the One Stop Permitting Center at the Kapule Building. With the advent of electronic plan review the Building Division can better manage human resources while maintaining customer service by continuing One Stop operations from its new location. Applications that meet prescribed guidelines are submitted to the appropriate State and County agencies for processing in a timely manner.

This Section processes all Board of Appeals applications and coordinates meetings with the seven members of this commission.

Staff members of this Section actively participate in the Hawai'i Association of County Building Officials (HACBO). Code officials from all four counties get together annually to discuss code related issues and to explore practical solutions for common problems facing our industry. This year's annual event took place in Kaua'i on May 30 – 31.

Looking to the future:

1. There have been ongoing discussions with the IT Division about upgrading to Sungard's version 8.1 of our electronic plan review software. Version 8.1 is reportedly much easier to use.
2. Staff will recommend that the County implement on-line electronic applications.
3. Staff will recommend that the County implement on-line payment of plan check and permit fees.

Representing the County of Kaua'i in the State of Hawaii Building Code Counsel, we are currently updating our building, energy, electrical and plumbing codes with the goal to have complete uniformity of codes throughout the State of Hawaii. Ordinance 929 adopted the 2006

International Building Code and the 2006 International Residential Code on June 14, 2012. Efforts to adopt the 2006 Uniform Plumbing Code are well underway.

In conjunction with the adoption of the new codes, a number of training seminars have been offered to provide updated code information to County code officials as well as interested persons from the design and construction community

IV. PROGRAM MEASURES/EVALUATION

REPAIR & MAINTENANCE AND JANITORIAL SERVICES

Facilities Managed by Building Division	<u>Actual</u>
West/South District	0
Central District (square feet)	153,256
East/North District	0
Facilities w/ Maintenance Assistance	
West/South District (square feet)	206,844
Central District (square feet)	297,267
East/North District (square feet)	114,810
Job Orders Processed	3,002
Job Orders Completed	2,939

BUILDING CODES ENFORCEMENT

Number of days for building code enforcement review of permits to be responded to:

	Estimate	Actual
Residential	5	14.1
Commercial	20	6.8

Number of days for permits to be approved by all reviewing agencies:

	Estimate	Actual
Residential	30	69.1
Commercial	50	38.5

Code Enforcement Inspections	Estimate	Actual
Building Code Inspections	7,000	7,355
Electrical Code Inspections	5,000	5,218
Plumbing Code Inspections	6,000	4,997
Sign Code Inspections	100	8
Total Code Inspections	18,100	17,578

Code Permits Issued	Estimate	Actual
Building Code Permits	1,400	2,091
Electrical Code Permits	1,400	2,298
Plumbing Code Permits	1,400	1,445
Sign Code Permits	180	318

Total Code Permits Issued	4,380	6,152
New Building Permits	700	1,265
Addition/Alteration Building Permits	700	493
Building Permit Valuations	\$200,000,000	\$311,699,460

For all programs within the Building Division, the program objectives were met this past fiscal year. Our goal to meet or exceed the estimated program measures had varying results.

The Administration Section has continued to develop new facilities for the county agencies and oversee the Code Enforcement and Repair & Maintenance and Janitorial Sections. New facilities for the Police Department, improvements to Lihū'e Civic Center and Hardy Street are being worked on. Work is also continuing for compliance to the Americans with Disabilities Act requirements.

The Repair & Maintenance and Janitorial Services Section have kept pace with the ever increasing amounts of work order requests being made. The Section initiated over 3,000 job orders, and completed more than 2,900 job orders, for work requests submitted for our services during the past fiscal year. However, the increasing amounts of new construction projects assigned to the maintenance section, staffing shortage issues, and the continued problems with vandalism remains a concern, taking away valuable man-hours and funding that could be directed towards preventive maintenance.

The Building Codes Enforcement Section continues to provide efficient and timely service to the public. With the hiring of temporary staff through the use of the revolving fund and increased training of existing staff, the permit response and approval time have been maintained at a reasonable level. The number of actual permits issued, as well as the building permit valuations which coincide with revenue generation, have increased.

The Building Division concentrated its efforts to provide adequate and efficient services to the public. Our overall mission of providing the people of Kaua'i with safely constructed public and private facilities, and well-maintained County facilities was accomplished.

V. BUDGET BY PROGRAM

ADMINISTRATION & FACILITY DEVELOPMENT

Equivalent Personnel (includes 5 \$1.00 funded positions)	7
Salaries & Wages	\$ 246,235
Operations	\$ 10,650
Equipment	\$ 0
PROGRAM TOTALS	<u>\$ 256,885</u>

REPAIR & MAINTENANCE AND JANITORIAL SERVICES BUDGET

Personnel	46.5
Salaries & Wages	\$ 3,228,501
Operations	\$ 2,359,644

Equipment	\$ 341,179
PROGRAM TOTALS	<u>\$ 5,929,324</u>

BUILDING CODES ENFORCEMENT

Equivalent Personnel (Includes 2 contract hires)	20
Salaries & Wages	\$ 1,306,163
Operations	\$ 7,500
Equipment	\$ 36,608
PROGRAM TOTALS	<u>\$ 1,350,271</u>

VI. HOLO HOLO 2020 PROJECTS & STATUS

The Division is working on the following Holo Holo 2020 Projects:

- Increase Use of Alternative Energy Sources
 - Līhu‘e Police/EOC/OPA Solar Energy System – Procurement methodology under study.
- Implement Complete Streets
 - Completed construction of complete street components at Papaloa Road as part of the Lydgate-Kapa‘a Bike/Pedestrian Path Phase A
 - Completed the procurement for Hardy Street Improvements which is a complete streets demonstration project.
- Lydgate and Po‘ipū Beach Park maintenance and updates – Assisted the Parks Department on Po‘ipū Beach Park comfort station improvements.
- Extend Ke Ala Hele Makalae coastal path
 - Lydgate Park – Kapa‘a Bicycle/Pedestrian Phases A & B construction ongoing.
 - Land acquisition started for the Nāwiliwili-Ahukini Bicycle/Pedestrian path
 - Environmental planning on going for the Ahukini-Lydgate Park Bicycle/Pedestrian and Nāwiliwili-Ahukini Bicycle/Pedestrian paths projects.
- Increased (Leadership in Energy and Environmental Design) LEED certified buildings – LEED certification Silver obtained for Kaiākea Fire Station.

ENGINEERING DIVISION

I. MISSION STATEMENT: Protection of the public’s health, safety, property and the environment through proper planning, development, maintenance, and operation of the County’s infrastructures, and administration of the sediment and erosion control, storm water runoff system, driveway approach and land use codes and ordinances.

II. DIVISION GOALS:

1. Protection of public health and safety by planning and developing safe and cost-effective roadway, bridge and drainage systems.
2. Protection of public safety and assurance of high quality of life by administering and enforcing subdivision, grading and drainage ordinances and regulations.

3. Protection of public safety and investment through effective maintenance of County facilities, roadways, bridges and drainage systems through systematic planning, systems, processes and programs.

PERSONNEL

Division Chief

- (1) Civil Engineer VII
- (2) Clerical Assistant

Regulatory/Design/Permitting:

- (3) Civil Engineer VI
- (4) Civil Engineer III
- (5) Civil Engineer II
- (6) Civil Engineer I
- (7) Engineering Support Technician III
- (8) Engineering Support Technician I

Construction Inspection/Project Management:

- (9) Engineering Program Administrator Project Management
- (10) Civil Engineer V
- (11) Civil Engineer III
- (12) Civil engineer II
- (13) Civil Engineer VI
- (14) Supervising Construction Inspector
- (15) Construction Inspector II
- () Construction Inspector I (\$1 Funded)
- () Construction Inspector II (\$1 Funded)

Plans and Survey:

- (16) Land Surveyor III
- (17) Engineering Drafting Technician II
- (18) Engineering Support Technician III
- () Engineering Aide

Total Number of Personnel: 18: plus 2 dollar funded positions; 1 vacant position.

III. PROGRAM DESCRIPTIONS:

The Division of Engineering provides civil and general engineering services primarily for, and as required by, the Department of Public Works. It is responsible as well for maintenance and repair projects for roads and bridges, parks, drainage and flood control facilities. Project design and construction management is accomplished by in-house personnel, sometimes utilizing professional consultant services, depending on the complexity and scope of the project and the

availability of project funding. The Division is tasked with the administration of the following Ordinances.

1. Storm Water Runoff System Ordinance. This Ordinance replaced the Storm Drainage Standards dated February 1972. The Ordinance provides guidelines and standards as to the handling of drainage runoff system for the County of Kaua`i.
2. Sediment and Erosion Control Ordinance. This ordinance regulates the construction of all grading, grubbing, and stockpiling activities in the County as well as agricultural exemptions that fall under an approved conservation plan approved by the East and West Kaua`i Soil and Water Conservation Districts.
3. Driveway Approach Ordinance. This ordinance regulates the construction of driveway approaches within the County Road right of ways.
4. Speed Hump Ordinance. This ordinance regulates the construction of speed humps and speed tables on County roadways.
5. Work within County Road Right of Way Ordinance. This ordinance controls and regulates all construction work within the County Road right of way.
6. Flood Plain Management, Ordinance No. 831. This ordinance regulates the County's flood plain management program: The County of Kaua'i is a participant of the National Flood Insurance Program which enables property owners in flood-prone areas of the County to obtain flood insurance and to assure future federal financial assistance for the County. The purpose of the ordinance is to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions.

In addition, the Division of Engineering provides the following support services:

1. Assist the Planning Department in the administration of the Subdivision Ordinance and Comprehensive Zoning Ordinance by (a) providing review and comments and recommendations on subdivision applications, including full review and approval of subdivision construction drawings for roadways and utility improvements; (b) providing review comments and recommendations for all zoning changes and amendments, use permits, shoreline management permits and variances.
2. Assist the Building Division in the review process of all building permits including, sediment and erosion control and driveway approaches and conditions imposed by the Planning Department and Planning Commission as it relates to zoning, use and SMA permit conditions for which the Engineering Division is responsible for.
3. Respond to personal requests and inquiries from the County Council. Provide testimony as required.
4. Respond to requests for solutions to engineering problems, definition of land boundaries, mapping for land acquisitions, easements, right-of-ways and other land matters.
5. Respond to requests for changes and/or relocation of traffic regulatory signs, pavement markings, street light activation, traffic control devices, parking stall layout, school bus stops, and public transportation bus stops, drainage, flooding, etc.

PROGRAM HIGHLIGHTS:

1. **Kamalu Road Bridge Erosion Control Repair.** Federal Aid Project **BR-0581 (005).** Construction contract for this project has been awarded to Goodfellow Brothers.
 2. **Northerly Leg of the Western Bypass Road.** The Environmental Assessment for the project was finalized and a Notice of a Finding of No Significant Impact (FONSI) was issued in January of 2013. The design for this project has been deferred to a later date.
 3. **Kokee Road Resurfacing Federal Aid Project STP-0552(2).** Construction for this project was completed in July of 2013. Engineering Division provided the construction management and inspection services for this project.
 4. **Kawaihau Roads Safe Routes to Schools.** The project will assess the needs for improvements to Kawaihau Road in the area around Kapaa Elementary, Kapaa High, and St. Catherine schools. Phase I of the project which includes public involvement in the planning process is currently underway.
- Other projects of importance:
 - Kōloa Road Safety Improvements: Design Contract was awarded to RM Towill Corporation. Preliminary design to install safety improvements such as guardrails, pavement markings, and signage along Kōloa Road is underway. Fed Aid 90/10.
 - Hanapēpē Bridge Repairs: The project was advertised in December of 2013 but has not yet been awarded pending completion of a review by the State Historic Preservation Division. Fed Aid 80/20.
 - Kapahi Bridge Improvements: Project is currently in the National Historic Preservation Act (NHPA) Section 106 process. Fed Aid 80/20
 - `Ōpae ka`a Bridge Improvements: Project is currently in the NHPA Section 106 process. 80/20
 - Pu`u`ōpae Bridge Improvements: Project is currently in the NHPA Section 106 process. Fed Aid 80/20
 - Lae Road Guardrails: Design contract was awarded to BOW Engineering. Project is in the preliminary design stage.
 - `Aliomanu Road: Design of this project is ongoing. A Right-of-Entry agreement between the Department of Hawaiian Homes Lands and the Department of Public Works is being developed.
 - Kanaele Road Improvements: Design contract was awarded to RM Towill Corporation. The design of improvements for the roadside shoulder areas is currently in the preliminary design stage.
 - Hanapēpē Road Improvements: Design contract was awarded to AECOM. Preliminary design phase has just started and will include a public involvement component.
 - Līhu`e-Hanamā`ulu Mauka By-Pass and Circulation Study: Consultant contract was awarded to SSFM International. The study is in its data collection phase. FAP No. SPR-0100(34)
 - Puhi Road Resurfacing: Design contract was awarded to RM Towill Corporation. Project is in its preliminary design phase.

- Assisted various Departments and Divisions with the following survey requests:

Black Pot Park Surveys
 Hoala Road Right of Way
 Kamalu Road-Bridge survey
 Kaneiolouma Heiau Boundary Survey
 Kapa‘a Football Field Topo Survey
 Kapaia Swinging bridge
 Laukona Road Right of way
 Lāwa‘i Road Right of Way
 Maka Road Right of Way
 Malama Road Right of Way
 Maluhia Road Survey
 Olohena Road Right of Way
 Olohena Road Subdivision
 Po‘ipū Road Stake out
 Tunnel Location Survey (Hoala Road Housing)
 Vegas Boundary TMK 2-5-03
 Waipouli Courtyard Topo
 Wawae Road Right of Way Boundary Adjustment

IV. PROGRAM MEASURES:

- Ongoing development of Policies and Standard Operating Procedures setting formal performance standards to better manage processes within the division along with the development of systems to manage capital improvement projects. Evaluating options to improve and expand digital document development and archiving.
- Construction Plan review is ongoing for the following large subdivisions:
 - S-2005-39 Molokoa IV (Wailani)
 - S-2005-41 Ahukini Makai
 - S-2009-13 Waiola I
 - S-2009-14 Waiola II
 - S-2009-15 Waiola III
 - S-2006-49 `Ele`ele Luna Phases 2 & 3, Increments 1, 2 & 3
 - S-2013-04 Kukuiula Premier Estate Lot
 - S-2013-07 Kukuiula Lot 32
 - S-2011-21 Kukuiula Subdivision U-AA
- The following subdivision construction plans were approved:
 - S-2006-12 Kohea Loa (Hanamā'ulu Triangle)
 - S-2004-45 Kukuiula Major Project Road Phase 2A

- The following construction plans were reviewed and/or approved by the Engineering Division for the following agencies:

Department of Water:

Job 10-01 Pipeline Kīlauea to ‘Anini. Plan review is ongoing.
 Job No. 02-03 HW-02, HW-03 Wainiha Booster Pump Sta. & Hā‘ena Steel Tank;
 Plan review is ongoing.
 Job No. 02-06 WKK-15, 1.0 MG Storage Tank Kilauea Water System Drill and Test
 Kilauea Well #3. Plans approved.
 Job No. 04-02 WK-14 Pipeline Replacement for Vivian Heights and Kanaele Road,
 Phase II. Plans approved.
 Job No. 04-03 Pipeline Replacement along Waipouli Road and Olohena Road. Plan
 review is ongoing.
 Job No 05-02 (H8, HW-12) Drill & Test Hanalei Well #2 TMK 5-6-002-001: Plan
 review is ongoing.

State Department of Transportation, Highways Division:

Kaumualii Highway Phase I, Lihue Mill Bridge to Rice Street, Project No. ARR-050-
 1(036). Plans approved.
 Kūhi‘ō Hwy Resurfacing Hardy Street to Laukini Street Project Number 56A-01-
 13M. Plans approved
 Kūhi`ō Hwy Intersection Improvements at Kapaka Street, Project No. 56D-01-13.
 Plans approved.
 Kūhi`ō Hwy Safety Improvements Hanalei River Bridge to Waikoko Stream Bridge
 FAP #HRR-056-(12). Plans approved.

- **Grading, Grubbing and Stockpile Permits:**

Grading, Grubbing and Stockpile Permits:

Issued: 13

Inspected and Closed Out: 2

Road Permits:

Issued: 41

Inspected and Closed Out: 7

Driveway Approach Permits:

Issued: 37

Inspected: 37

DIVISION OF ROADS

I. MISSION STATEMENT

To maintain County roadways in a manner that will safely convey vehicular and pedestrian traffic; to maintain major drainage facilities and levees; and to provide county wide support with equipment and labor.

II. DIVISION GOALS

1. To make County roadways and bridges safe for public use
2. To anticipate and address road, bridge, drainage and levee needs
3. To make the best and most efficient use of the Division's resources
4. To improve internal and public communication
5. To instill pride in the jobs that we perform

III. PERSONNEL

- 1 - Chief of Field Operations & Maintenance
- 1 - Assistant Chief of Field Operations & Maintenance
- 1 - Civil Engineer
- 1 - Administrative Services Assistant
- 1 - Principal Projects Manager (Contract - IWRR)
- 1 - Projects Coordinator / Construction
- 2 - District Road Overseer (Hanapepe, Hanalei)
- 2 - Highway Construction & Maintenance Supervisor II (Hanapepe, Kapaa)
- 6 - Highway Construction & Maintenance Supervisor I (Hanapepe, Kapaa, Hanalei)
- 3 - Field Operations Clerk (Hanapepe, Kapaa, Hanalei)
- 1 - Equipment Operator IV
- 4 - Equipment Operator III
- 13 - Equipment Operator II
- 3 - Equipment Operator I
- 5 - Tractor Mower Operator
- 1 - Baseyard Attendant (Hanalei)
- 2 - Laborer Working Supervisor
- 16 - Laborers
- 1 - Equipment Logistics Mobilization Supervisor
- 1 - Equipment Operator IV
- 2 - Equipment Operator III
- 1 - Bridge Maintenance Worker II
- 2 - Bridge Maintenance Worker I
- 1 - Traffic Signs & Markings Supervisor
- 1 - Traffic Sign Painter
- 1 - Traffic Signs & Markings Crew Leader
- 1 - Traffic Marker
- 2 - Traffic Signs & Markings Helper
- 1 - Traffic Signs & Markings Laborer
- 78 - Total Personnel**

FUNCTIONS

The Roads Division is composed of four sections: Administrative, Technical, Field Operations and Projects. Field Operations consists of the following branches: Roads Maintenance, consisting of District Base Yards; Roads Construction, consisting of Equipment Logistics Mobilization, Bridge & Road Construction, Traffic Signs & Pavement Markings. Roads Division manages approximately 308 miles of roads: 305.8 paved and 2.2 unpaved. Notes: 1.) Private roads are not managed by Roads Division. 2.) Refuse Collection (20 employees) Section is not included in this report as it will be relocated from Roads to Solid Waste Division by end of 2013 upon consummation of union agreement.

IV. PROGRAM DESCRIPTION

The Roads Maintenance and Construction Division performs maintenance and repair of road pavements, shoulders, bridges, sidewalk/driveway/curb/gutter, levees and appurtenances maintenance and repairs; installation and maintenance of traffic and safety devices; installation and maintenance of traffic signs, pavement markings and guardrails. The Roads Maintenance and Construction Division support the Solid Waste Division and the Department of Parks and Recreation on a regular basis and support other agencies on an as needed basis.

PROGRAM HIGHLIGHTS

- Island Wide Roads Resurfacing Projects, designed in house. County Roads for the first time aggressively implemented pavement preservation program.
- This fiscal year, the Roads Division crews have consistently implemented utilization of the bucket truck in tree trimming and removal of dead trees in the County road right-of-ways. A new 12" drum wood chipper has been procured and will be on Island soon to assist and improve the productivity of the tree trimming crews. We are not specialized in pruning trees and beautification. We do road maintenance "rough" vegetation control. We are planning in this next fiscal year to have our Levee Crew in specialized training for pruning trees and beautification.
- Heavy concentration and effort in right-of-way vegetation control.
- New Vac-Con truck on island, Automotive Division prepping. The specialized crew will commence training on operation and safety shortly. County to be relieved of any plugged drains. Upon completion of training, and district schedules are in-place, Roads will aggressively pursue a drain line maintenance program.

V. PROGRAM MEASURES/ACCOMPLISHMENTS

- Island Wide Roads Resurfacing FY 2011-2012 Project in progress to be completed by end 2013. Training on-going with MicroPaver Program.
- Provided emergency response services for a major rainstorm this past March 2012. Applied for \$3+ million Disaster Projects to be managed. (Roads managed and completed the 3 major projects totaling \$2+ million. Assumed Engineering Division projects

totaling over \$1+ million, Roads will managed and complete construction with in-house crews in seven of the eight projects, and sub-contracted the eighth project to Grace Pacific on paving. The eight projects to start soon and scheduled for completion in October 2014.

- Roads Division field staff are cross trained and certified as back-up heavy equipment operators and dump truck drivers to ensure continuity of operations. Training with field staff on-going.
- Roads Division personnel have completed annual training in Excavation & Trenches, Confined Space & Fall Protection, NPDES/BMPs, Personal Safety & Workplace Violence. On-going continuance training.
- Roads Division's staff soon to start Phase II (Final) implementing the Road Maintenance Management Information Systems program and the initial MicroPAVER pavement maintenance management program. Training to be completed October 2014.
- Inspection and Inventory Identification of Kaua'i County Existing Roads. Identify existing:
 - 1) County roads and distressed pavement areas, 2) traffic signs, 3) pavement markings, 4) guardrails, 5) bridges and drainage systems, 6) water, storm drain, sewer, CATV, electric, telephone, and gas lines, 7) manholes, gratings, survey monuments, and miscellaneous on County Right-of-Way have been completed. Road pavement core sampling training has also been completed by County staff personnel. Roads has negotiated a change order with Consultant on Federal mandate of roads traffic signage for compliance of Retro-reflectivity. Crews in three months will replace required signage to be in- compliance.
- Roads Division assisted with on-going implementation of the Complete Streets/Safe Routes to Schools island wide, providing maintenance and installing traffic signs and pavement street markings with County Public Works Staff and Planner.
- Roads Division conducted an in-house reorganization to create and ensure the proper dedicated manpower and equipment are available to complete work tasks with the various crews: 1) A dedicated Levee Maintenance Crew to be responsible with levee compliance with U.S. Army Corps of Engineers Regulations; 2) Bridge/Road Construction and Maintenance Crew to handle specialized work with skilled craftsmen; and 3) Equipment Logistics Mobilization Crew specialized with heavy equipment to mobilize/demobilize Island wide per requested scheduling.
- Continuing development of Roads Operations and Maintenance Policy Manual; and Roads Safety and Health Manual.

ENVIRONMENTAL SERVICES

The Environmental Service Officer is committed to providing special emphasis and attention on services that have a direct impact on the sustainability of our islands environment through the proper management of Solid Waste and Wastewater. The Environmental Service Officer provides strategic direction and oversight on the Solid Waste Division and Wastewater Division managers to ensure that long range plans and top priorities are realized to:

- Ensure a clean, safe environment for all future generations,
- Reduce costs and increase operational efficiencies of the Solid Waste and Wastewater Divisions
- Create a sustainable future where wastes or byproducts will be transformed into future resources
- Move towards a sustainable financial enterprise fund for both the Solid Waste and Wastewater Divisions.
- Commit to investments necessary to implement important programs that will provide the transition necessary to achieve sustainability.

DIVISION of SOLID WASTE MANAGEMENT

I. MISSION STATEMENT: Maintain Public health, safety, and the environment by providing reliable programs to properly manage municipal solid waste (MSW) for the Island of Kaua'i, and maximize waste diversion on Kaua'i by providing cost-effective, convenient, and reliable waste diversion opportunities to Kaua'i residents through source reduction, reuse, and recycling programs.

II. DIVISION GOALS:

1. Maintain a balance of reliability, efficiency, and cost effectiveness for County solid waste disposal and diversion programs.
2. Identify and implement appropriate integrated programs to divert solid waste from the County landfill. In concert with the recently adopted "Zero Waste Resolution", the goal of the Division is to achieve 70% waste diversion source reduction, reuse, recycling and composting by the year 2023.
3. Further maximize waste diversion by promoting all existing waste diversion opportunities to the residential and commercial sectors as appropriate. Provide technical assistance to the commercial sector and private recyclers. Provide public education in schools and to the community at large.
4. Conduct County solid waste management programs and operations in accordance with applicable government regulations.

DUTY AND FUNCTION.

The County of Kaua'i, Division of Solid Waste Management (DSWM) plans and implements solid waste disposal operations and integrated solid waste management (ISWM) programs within the scope of Departmental and Divisional policies and applicable Hawai'i State regulations. ISWM programs incorporate modern concepts of diversion and disposal to responsibly manage solid waste on the island of Kaua'i.

III. DESCRIPTION OF DSWM PROGRAMS

1. Administration. The DSWM administrative section oversees solid waste management operations and integrated program activities.

- a. Objective

- Provide administrative support to further progress towards achieving DSWM goals.

- b. Highlights

- Tasks include: (1) develop and administer operating and capital improvement project (CIP) budgets, (2) develop and administer policies and standard operating procedures for DSWM programs and employees, (3) maintain appropriate records, (4) develop and maintain systems to compile data, information, and monitor progress on programs/ projects/ various contracts and agreements, (5) regulatory compliance, (6) inter-governmental/public relations.

2. Solid Waste Management Operations. This Section oversees the day-to-day operation of the County's various solid waste management facilities and operations.

- a. Objectives.

- Provide reliable and sanitary disposal and diversion services to manage solid waste
 - Operate facilities within regulatory requirements

- b. Highlights

- Phase II of Kekaha Landfill. The Kekaha Landfill accepted 77,566 tons of municipal solid waste during Fiscal Year 2012-2013. This figure includes solid waste from residential and commercial sources. This is an increase of 6,621 tons from the previous fiscal year.

Operations continued with Waste Management of Hawai'i (WMH) d.b.a. Sanifill of Hawai'i with primary oversight responsibility over the management of the landfill daily operations. County provides the equipment operators and labor workforce to perform operations to accept and compact solid waste in the landfill and for site maintenance. The County the GPS and software system fixed to the landfill compactor and self-cleaning compactor wheels to aid landfill operators in achieving optimum compaction of waste.

Effective July 1, 2012, landfill operations and landfill employee work schedules changed from a 10-hour work day to an 8-hour work day. The revised Landfill operating hours were 8am to 4pm, daily except County Holidays. The schedule change was made to reduce the ratio of employee overtime hours to employee leave hours (OT hours : leave hours) by accrual of fewer overtime hours while still maintaining the daily manpower requirement for the landfill operation. With FY 2012 budget for overtime as a reference, we achieved the goal to reduce overtime cost in FY 2013 by \$78,669.

See CIP project section narrative for activities related to the Lateral Expansion of Phase II of the Kekaha landfill.

Refuse Transfer Stations (RTS)s. Effective July 1, 2012, the RTS operating hours were modified from a 10-hour work day to an 8-hour work day. The revised RTS operating hours were 9:15 am to 5:15 pm, daily except County Holidays. Similar to the landfill, the schedule change was made to reduce the ratio of employees overtime hours to employee leave hours (OT hours : leave hours) by accrual of fewer overtime hours while still maintaining the daily manpower requirement for all four RTS operations. With FY 2012 budget for overtime as a reference, we achieved the goal to reduce overtime cost in FY 2013 by \$187,533.

There were some initial challenges associated with the change in operating hours. Some members of the public were inconvenienced by the change, and there were issues with collection trucks disposing of their loads before the RTS’s could open. However, the public has now acclimated to the later start time, and operational challenges with refuse collection crews have since been resolved.

Table 1, below, provides tonnage of mixed solid waste received and transported to the landfill during the reporting period and also provides the change in quantity transported compared to the prior Fiscal Year.

Table 1

<u>RTS Location</u>	<u>Total MSW Received FY13 (Tons)</u>	<u>Tonnage Change from FY 12</u>
Hanapepe	7,4358	-183
Lihue	11,902	+100
Kapaa	9,466	+1,083
Hanalei	4,988	-469

- Greenwaste Diversion Operations. Greenwaste diversion sites maintained operations as normal. The County renewed the right of entry agreement with Princeville Mauka Villages to allow for the continuation of greenwaste diversion operations at the Hanalei RTS. See “Greenwaste Management Program” under “Integrated Solid Waste Management Programs” for information on management of diverted greenwaste.
- Refuse Collections at County Facilities. The DSWM continued refuse collection services with the semi-automated side-loader. A total of 29 County facilities are serviced. Twenty Five (25) locations are serviced daily; the Hanalei Fire/Police Station and Kilauea Neighborhood Center are provided three times per week pickup.

- Island-Wide Curbside Refuse Collection.
As of June 30, 2013, the curbside collection program has 18,170 resident accounts and 203 business accounts, including Transient Vacation Rentals.
 - Heavy Equipment Purchases in FY 2013. one (1) each Rear Load Refuse Trucks; one (1) each Transfer Trailer; one (1) Truck Tractor; and one (1) 125KW Generator .
3. Integrated Solid Waste Management Programs. Integrated solid waste management programs are implemented to manage materials that are prohibited from the landfill and also to divert recyclable material from the Landfill.
- a. Objectives
- Provide the public with reliable and convenient options to divert and recycle materials and manage special solid waste.
 - Decrease the volume of recyclable solid waste landfilled
- b. Highlights
- Residential Refuse Collection Assessment (RRCA): As recommended in the Integrated Solid Waste Management Plan, County Ordinance 902 passed in September 2010 allowing the Division to assess charges for refuse collection.
 - In the second year of the RRCA the public were more aware of the charges appearing on their Real Property Tax bill with fewer complaints. In December 2012, notices were sent to all property owners to inform them of pending charges on their 2013-2014 Real Property Tax Bill and to provide them the opportunity to make any necessary changes to their account. As of May 15, 2013, DSWM has received fewer cancellations and reductions in service for FY 2013, compared to FY 2012.
 - In June 2013, Tyler Technologies added a note screen to our Integrated Assessment System (IAS) which allows our staff to add and view notes regarding RRCA changes made on a property. This feature allows for greater efficiency in recording and accessing account activity and history.
 - The RRCA revenue for FY 2013 is estimated at \$2.8 million on 18,170 parcels. The RRCA fees will continue to be collected through Real Property Tax Collection.
 - Beginning July 1, 2012 pursuant to Section 21-9.1 (a) of Ordinance 905, TVR's were no longer eligible for refuse collection service under the Residential Refuse Collection Assessment which was established for residential accounts. To date we have 203 combined TVR & Business accounts with the county at a rate of \$84.00 per month. These Commercial Refuse Accounts will generate estimated revenue of \$214,704 in FY 2013.
 - Kaua'i DSWM Staffing.
 - In August of 2012, we were able to fill our vacant Senior Account Clerk position. Our Senior Account Clerk is a big part of assisting in the billing and customer service of the Residential Refuse Collection Assessment, commercial refuse accounts, and landfill billing.
 - In November of 2012, we were able to hire a Recycling Specialist III. Our new Recycling Specialist's initial tasks were to increase recycling education

- and promotion of waste diversion. Competitive bid for a graphic designer resulted in development and creation of the What Goes Where, eWaste and Household Hazardous Waste informational flyers. The Recycling Specialist developed image-based educational handouts that could be understood by limited English-speakers, children, the elderly and non-technical people.
- Kaua'i Resource Center. The two Recycling Specialists working on the Deposit Beverage Container program continued to conduct office functions out of the Kaua'i Resource Center (KRC).
 - Recycling Operations: Garden Isle Disposal (GID) continued to provide services at this facility under concession contract 7495. The operator pays the County \$1,000 per month to use the space to provide a public drop point for segregated recyclables, a certified redemption center for residential and commercial use, and a drop point for commercial recyclables at no charge to individual businesses as well as haulers.
 - During this fiscal year, the KRC diverted a total of 955 tons of material from the landfill, which is down by 180 tons compared to last year. The breakdown was as follows: tons (T) 140 cardboard, 19 T newspaper, 54 T mixed paper, 26 T non-deposit beverage container (DBC) glass, .3 T #1 molded plastic, 2.3T #2 non-DBC plastic, .08 T plastic bags, 524 T DBC glass, 82 T DBC aluminum, 107 T DBC plastic.
 - Home Composting
 - 503 Earth Machine Home Composting Bins were distributed to Kaua'i residents, through Recycling Specialist at the Kaua'i Resource Center and at satellite distribution center Aiyah's Garden in Kapa'a. Currently, 664 bins remain in stock for distribution. We have budgeted to purchase approximately 800 additional bins in FY 2013.
 - Continued distribute of bins at Kaua'i Resource Center, and via our successful satellite distribution partnership with Aiyah's Garden using a 20 minute training video and registration process. Electronic surveys will be used to assess program participation.
 - Each bin diverts an average of 1,500 lb. of additional food and yard waste per year. This is our most economical waste diversion program at an estimated cost of \$6 per ton over the 10 year life of the bin.
 - Kaua'i Recycles Residential Recycling Program
 In 2012, we signed a new, three (3) year contract with two (2) one year options to extend with Garden Island Disposal. There are eight drop bins located throughout the island for Kauai's residential recycling convenience. One significant development to the contract includes the collection of aluminum food/beverage cans, foil plates and pans, and steel food cans. Glass, corrugated cardboard, aluminum, newspaper, #1 & #2 plastic containers, and mixed paper continue to be accepted for recycling. Due to the high volume of mixed paper, the Kapa'a and Lihu'e sites are now equipped with 10-cubic yard mixed paper bins, which replaced the 3-cubic yard bins under the prior contract. The existing 6-cubic yard bins are used for plastics #1 and #2 collection only:

Līhu'e and Kapa'a sites:

- One compartmentalized 34-cubic yard bin for source separated cardboard, newspaper, and glass
- One 6-cubic yard bins for plastic #1 & #2
- One 3-cubic yard bin for aluminum and steel
- One 3-cubic yard bin for mixed paper
- One additional, up to 34-cubic yard bin for cardboard on the weekends

There are a maximum number of 42 hauls per week at all eight locations; however we have the flexibility to increase or decrease the number of hauls per week within the range indicated below:

Location	# Hauls per week
Hanalei	6-8
Kapa'a*	7-9
Līhu'e*	7-9
Po'ipū	2-4
Lāwa'i	2-4
'Ele'ele	2-4
Waimea	1-2
Kekaha	1-2

*Figure includes weekends when two sets of containers are left on site to accommodate the public.

The average monthly tonnages for each recyclable collected under the program are as follows:

- Corrugated cardboard: 55.24 tons
- Newspaper: 11.56 tons
- Glass: 24.68 tons
- Aluminum: .02 tons
- Steel: 2.37 tons
- Plastic: 5.54 tons
- Mixed Paper: 38.44 tons

Under the current contract, we were more stringent with enforcement the maintenance of the drop-off site areas, making it clear that it is the contractor's responsibility to thoroughly clean drop sites every time the containers are hauled. In addition to radio and television ads placed by the vendor, the County recycling office continues to field calls and provide program information.

- Acceptable Non-Deposit (ADF) Glass Recovery and Recycling Contract
 - The State Department of Health provided annual funding under ASO Log 11-006 Modification No. 2 in the amount of \$53,500 to support non-HI5 glass recycling efforts on Kaua'i. The County had a carryover surplus funds from the prior fiscal year, and received a total of \$68,404 from the state to support the non-HI5 glass recycling under the Kaua'i Recycles drop bin program.

- Deposit Beverage Container (DBC) Program
 - The State Department of Health provided annual funding under ASO Log 13-008 in the amount of \$265,000 to support local administration of the DBC program. The contract covered essential services only, and paid for two County staff positions that ran the program, reimbursement of administrative oversight of the grant, and the contracting of two certified redemption centers in Koloa and Kekaha.
 - The Recycling Specialist positions working on this program were paid through State DOH grant funds and implemented local program administrative and inspection tasks. These positions are being utilized to oversee all recycling projects that are related to DBC recycling, including school education, parks recycling, special event recycling, and general public education.
 - Specialists perform island-wide compliance inspections of retail outlets selling beverage containers at a rate of 16 per month. They also conduct 4 Certified Redemption Center (CRC) inspections per month.
 - There are 8 CRC operations throughout the island, of which, 5 are privately operated and 3 are contracted by the County
 - County contracted CRC operations continue at the Kekaha Landfill, the Koloa Fire Station, and the Kaua`i Resource Center.
 - An Invitation for Bid was issued for a new contract for services to operate CRC's across from the old mill in Kekaha and adjacent to the Koloa Fire Station. The current contractor, Kaua`i Community Recycling Services, was the only responsive and responsible bidder. Their new bid price was \$312 per event, which is significantly lower than the current contract price at \$420 per event. The new contract starts July 8, 2013.
 - The County has a Right of Entry agreement with Kekaha Agriculture to lease the space for the Kekaha CRC. The monthly lease price is \$500 and is paid through the State DBC contract.
 - School Presentations: 45 minute classroom presentations targeted to pre-school to grade 3 are performed upon request. Throughout the period, 8 classroom presentations were conducted, reaching a total of 210 students. Promotional pens made from recycled plastic bottles containing HI5 program contact information are distributed at the presentations.
 - Continue to manage various HI-5 recycling bin programs under which HI5 bins were distributed at all County parks and neighborhood centers, given to schools and non-profits upon request to be used for their HI5 collection activities, provided for use in business break rooms, and loaned out for special events.
 - According to the latest published State annual report, the statewide redemption rate for HI5 recycling was 76.87%.
 - At the end of the FY, State Department of Health (DOH) staff indicated that FY 2014 funding could have been cut, but was preserved at reduced levels. Further grants for the HI5 program will be based on a yearly evaluation. We have serious concerns about the County's continued obligation to serve the public if grant funding is cut, and as to whether certain CRC operations can

stay in business without the subsidy provided by the grant. The County will continue to take action to preserve future grant funds.

- Household Hazardous Waste (HHW) Collections
 - Vendor Contract- Contract for collection events took place at the Hanalei Refuse Transfer Station and Kapa‘a Roads Baseyard on September 22, 2012 and the Līhu‘e and Hanapēpē Refuse Transfer Stations on September 23, 2012.
 - 101 automotive batteries, twenty-seven 55-gallon drums of oil base paints and ignitables, twenty-one 55-gallon drums, and four 20-gallon drums of corrosive liquid acidic and basic, four 20 gallon drums of oxidizers, one 1-gallon drum of mercury, one 5-gallon drum of lithium batteries, 432 fluorescent lamps, and five 55-gallon drums of household batteries were collected and recycled at a cost of \$52,498.85.
- Processing of Junk Vehicles, White Goods (Appliances), and Scrap Metal
 - Resource Recovery Solutions Operations continued to provide service at the Puhi Metals Recycling Center under Contract 8593. Under this contract, approximately 200 tons of metals per month was collected and processed at a contract price of \$46,500 per month. This Contract ended on May 31, 2013.
 - A Request for Proposals for a new contract was issued during the fiscal year. One proposal was received from Resource Recovery Solutions. The County negotiated a new contract to pay a flat fee of \$55,000 per month for a 5 year term under Contract 8930 which commenced on June 1, 2013.
 - As of June 1, 2013, services for the towing of derelict vehicles are procured separately.
- Clean Up of Puhi Metals
 - In December 2012, Grove Farm started the cleanup work of the debris stockpile left on the Southwest corner of the property by Abe’s. The material was first screened of all salvageable materials (i.e. metals, tires, etc.). The bulk of the screening work was just completed in July 2013. The remaining removal work consists of the removal of the stockpiled salvageable materials as well as the screened dirt that will be hauled to Kekaha Landfill. The remaining dirt stockpile will be tested to confirm that it can be taken to the Landfill and also to confirm that no additional screening work need to be done. The final cleanup work of the debris stockpile should be completed before the end of this year. Grove Farm is also following up on excavating and removing any contaminated material from isolated areas that have been determined to require more work,
 - The County will secure a consultant to test the remaining area after all the debris is removed to develop a final cleanup plan of the entire Puhi Metals site. This work is projected to start early 2014.
 - The County will continue to work closely with Grove Farm on the final cleanup plan.
- Household Battery Recycling Program
 - Per the permit requirement, batteries are being accepted in 55 gallon plastic barrels in 3 separate categories:
 - Lithium batteries (9-volt, C, AA, coin, button, rechargeable).

- NiCad batteries
- Dry Cell batteries to include alkaline and carbon zinc (9-volt, D, C, AA, AAA), mercuric-oxide (button, some cylindrical and rectangular), silver-oxide and zinc-air (button)
- On September 22 and 23, 2013 EnviroServices and Training Company collected batteries in conjunction with our Household Hazardous Waste Collection Event. Six 55 gallon drums of Dry Cell batteries, one 55 gallon drum of Lithium batteries, and one 55 gallon drum of NiCad batteries were removed by the contractor and transported to Total Reclaim in Seattle Washington.
- Image-based signage was developed and created by a Recycling Specialist and Graphic Designer and has been placed at the collection site. We are hopeful that this new signage will result in decreased contamination at the drop site.
- Disposal of Abandoned Vehicles and Derelict Vehicles
 - Compliance per HRS 290, Kaua'i County Code Chapter 16- The abandoned vehicle coordinator is tasked to run each abandoned vehicle through the disposition procedure outlined by the statute and the Kaua'i County Code.
 - An average of 25 abandoned and derelict vehicles are towed each month.
 - The Abandoned Vehicle Coordinator receives an average of 70 complaint calls each month.
- Zero Waste Resolution
 - Zero Waste Resolution adopted 10/19/11 calling upon all County agencies, residents, businesses, and visitors to adopt Zero Waste practices to meet the goal of 70% diversion by the year 2023.
 - County staff attend monthly meetings of Zero Waste Kaua'i to keep abreast of the group's activities and to provide support as needed.
- Plastic Bag Reduction Law
 - Continue to enforce based on customer and retailer complaints. There were no enforcement issues during the fiscal year.
 - Conducted a two-part study to monitor the effects of the Plastic Bag reduction law. Nine major grocery stores on Kaua'i participated in the project. The first part of the study included a short interview with store management to ask questions about paper bag usage and costs and what current efforts and policies exist in stores to increase the use of reusable bags. At the meetings, each store received an 11"x17" glossy "Bring Your Reusable Bag" poster which they were instructed to display at their entrance doors and windows as well as 25 reusable bags to distribute amongst their staff.
 - The second part involved a one hour direct observation of customers at checkout to tabulate bag usage. The results indicated that in all of the stores most of the customers used paper bags offered by the store.
 - Under this project, we were able to dialogue with and educate store managers and cashiers and provide specific tips to increase the use of reusable bags.
- Pay As You Throw
 - The County obtained Environmental Protection Agency granted consultant services from E-Conservation Institute, a leader in the field. DSWM staff worked with the consultant to develop an implementation plan specific to

Kaua'i. The plan has been approved by the administration and presented to Council.

- Electronics Recycling (eWaste Recycling)
 - Received funding from the State Department of Health to operate an eWaste recycling program on Kaua'i. Entered into ASO Log No. 12-126.
 - Participated in the Hawai'i Electronic Recycling Task Force on October 10, November 9, and December 14. Provided feedback during and after the meetings indicating the County's recommendations on various program issues including covered products, financing mechanisms, program requirements, collection targets, additional credits, carry over credits, shortfall fees, and collector and recycler requirements. Provided testimony to the legislature in support of SB 1135 which was tabled.
 - Contract 8886 was executed to provide eWaste recycling events 2 times per month at the County's Kaua'i Resource Center in Līhu'e.
 - Hawai'i State Department of Education hosted an eWaste recycling event on October 26 & 27, 2012 at Kaua'i Community College. Recycling services were courtesy of Apple. It was reported by the State that 4 containers, or approximately 4.5 tons of mixed electronics, were collected at the Kaua'i event.
 - Pacific Corporate Solutions hosted an eWaste event on May 24 & May 25, 2013 Kaua'i at Vidinha Stadium in Līhu'e. The County received a report that they collected four 40' containers of eWaste weighing a total of 44 tons.
 - T&N Computer Recycling Services performed their first under Contract 8886 on June 7& 8, 2013 at the KRC. Eighteen businesses and 154 residents dropped materials at the event. A total of 10,106 pounds of CED's and TV's. 2,347 pounds of Non-CED's and non-TV's were also collected at the event.
- Increased Diversion Efforts:

The Waste Diversion Program Advisor hired on contract in March 2011 continues his work to extend the life of the Kekaha Landfill. His assignments include:

 - Develop a Construction/Demolition diversion ordinance targeting materials where adequate processing capacity and markets currently exist.
 - Develop a commercial recycling ordinance requiring businesses generating a significant amount of Designated Recyclables to set up recycling programs.
 - Initiate the implementation of curbside greenwaste collection in conjunction with the completion of automation of refuse collection.
 - Expedite the construction of a Material Recovery Facility to allow the expansion of existing recycling efforts and the development of island-wide curbside recycling
 - Provide technical assistance to the commercial sector and private recyclers.
 - Provide public education in schools and to the community at large.
 - Assist with Pay As You Throw program planning.
- Programs Operated at Reuse Transfer Stations and the Kekaha Landfill:
 - Limits on Cardboard, Metals and Green Waste – Ordinance 902 was signed in to law in August 2010, restricting the disposal of commercially generated loads that exceed 10 percent of the volume for corrugated cardboard, ferrous

and non-ferrous metal or green waste. The SWMD has developed and implemented policies and procedures for enforcement of this law. At this time, the focus is on educating haulers and generators about compliance instead of penalizing them. During FY 2013, only four loads were flagged as non-compliant. This is a significant reduction from 12 non-compliant loads in FY 2012, and a very low percentage, considering an average of 600 commercial loads are delivered to the landfill each month. The SWMD conducts follow up investigation and education with non-compliant generators to prevent future violations.

- Greenwaste Recycling- Greenwaste collected and/or shredded at all Transfer Stations was tracked at 87,603 yards, which is a slight increase over last FY at 86,686 yards. The landfill tracked 1230 tons collected, which was an decrease from the 1,880 tons collected last FY.
- Scrap Tire Recycling- A total of 12,542 tires were collected at all transfer stations and the landfill. Unitek Solvent Services hauls tires from the refuse centers, containerizes them, and ships all tires to their operation on Oahu. Tires are chipped into crumb rubber and provided to AES Corporation Power Company for fuel.
- White Goods Recycling
 - Hooklifts Hawai‘i has been contracted to load and haul white goods from all County RTSs except Lihue and the Kekaha LF. Under this contract, refuse centers are serviced twice per week; Kekaha LF is serviced one per week. A total of 2059 tons of white goods from the RTS’s and Kekaha LF were delivered to the Puhi Metals Recycling Center during this period.
- Propane Tank Recycling
 - Refrigerant Recycling is under a formal Contract for services to remove and recycle propane tanks from the transfer stations.
 - A total of 630 propane tanks were collected at RTSs and were recycled throughout the course of the FY.
- Lead Acid Battery Recycling- DSWM personnel transported lead acid batteries on an ongoing basis, to PS&D. PS&D accepts batteries at no charge. Lead acid batteries are abandoned at County refuse transfer stations on a regular basis.
- Do-it-Yourselfer (DIY) Used Motor Oil Recycling at the Kekaha Landfill and RTSs.
 - State Funding Contract- awarded \$55,000 plus another \$8,000 to spend on promotions.
 - 15,829 gallons of used Spec Oil Recycling was collected and recycled over the period. Unitek Solvent Services provided services for removal and recycling of recovered oil. Oil is shipped to Oahu, where it is recycled.
 - No Off-spec Oil Disposal- No contaminated oil was reported.
- Motor Oil Filter Recycling – Motor oil filter collection drums continue to be in place at all RTSs. Public participation in the program is increasing. DSWM is planning to conduct promotional radio aids this FY to increase awareness and participation.

➤ Used Cooking Oil

- 100 gallon collection tanks were located at Hanapepe and Lihue RTSs. Used oil is pumped and transported to Kaua'i Farm Fuels for conversion into biodiesel.
- A total of 2,395 gallons was collected over the course of the FY.
- Unfortunately, due to budget constraints, the program will be discontinued in FY 2014.

4. Capital Improvement Projects (CIP) and Other Major Planning Activities

• Infrastructure Improvements, Phase II of the Kekaha Landfill.

- Earthworks Pacific substantially completed construction work to modify the landfill's leachate collection system for Phase II of the Kekaha Landfill. This project was necessary to reduce the level landfill gas that became an issue due to its explosive nature and excessive volumes. Significant reduction in landfill gas levels have been achieved with the improvement.
- Lateral Expansion Cell 2 design and permitting tasks continued through the reporting period. The Solid Waste Management permit application was submitted to the DOH Solid & Hazardous Waste Branch (SHWB) in August 2012, following the completion of Engineering work including draft design plans for LE Cell 2 and receipt of the Special Management Area (SMA) and Conservation District Use (CDU) permits. Since the LE Cell 2 overlaps the closed Phase I landfill, baseliner stability and groundwater monitoring requirements became major issues. On April 29, 2013, the DSWM received the draft permit for LE Cell 2 expansion. However, the remaining life in the landfill did not afford sufficient time needed to finalize the permit and procure a contractor to construct the LE Cell 2 baseliner and infrastructure.

The remaining landfill life would, however, afford just enough time to permit a vertical expansion of the landfill, which would provide approximately five additional years of landfill life. Following a March 2013 public meeting in Kekaha, Ordinance No. B-2013-747 amended the FY 2013 CIP Budget by added budget line item the vertical expansion project. A June 22, 2013 public meeting was held in Kekaha to review and discuss the draft environmental assessment for the project. Public response in both meetings reflected general support for the vertical expansion project.

In the meantime, the LE Cell 2 design will be revisited in an effort to reduce associated cost and risks posed by the draft DOH permit conditions intended to address baseliner stability and groundwater monitoring issues.

- New Landfill. The driving force behind the need for a new landfill is the limited remaining capacity for waste at the Kekaha Landfill, which is estimated to be approximately 10 years depending on the effectiveness of increased waste diversion programs and the degree to which the LE Cell 2 expansion is constructed. Under Contract No. 8561, AECOM completed the updated New Landfill Siting Study, the Resource Recovery Park Feasibility Study, the Final Environmental

Assessment/Environmental Impact Statement Preparation Notice (FEA/EISPN), and conducted several public meetings and one County Council briefing during the reporting period. Issues that are being given due attention among other special studies include traffic and access road impacts as well as Federal Aviation Administration (FAA) requirements related to wildlife impacts on the Līhu‘e Airport. Agencies including the State Department of Transportation, Agribusiness Development Corporation and Grove Farm have been helpful towards the completion of various tasks and milestones for the project. The end of March 2014 is the current tentative date to begin County review of the draft EIS (DEIS). Publishing of the DEIS for public comment is projected to occur towards the end of May 2014.

- Host Community Benefits
 - The Office of Economic Development now oversees the Kekaha Citizen’s Advisory Committee and the associated Host Community Development projects.

IV. PROGRAM MEASURES - ACCOMPLISHMENTS / EVALUATION

The Residential Refuse Collection Assessment program is running smoothly and generating revenue of approximately \$2.8 million per year.

The Waste Diversion Program Advisor continues to provide leadership in the area of waste diversion strategies recommended in the Integrated Solid Waste Management Plan which was adopted in January 2010. With the hiring of a second Recycling Specialist in November of 2012, we have been able to expand our outreach and assistance to the community and local businesses; however as we implement the Increased Diversion Efforts discussed above, additional staff will be required to oversee those programs.

As stated under the Deposit Beverage Container section above, we find it urgent to preserve the State DBC grant to keep certified redemption centers in operation in underserved areas. There will be a public outcry of inequitable access to services should centers close due to the lack of funding. There will also be a continued need for public education and assistance for Kaua‘i residents. The DSWM will continue to request funding from the State and assess the need for County subsidy in FY 2014 should grant funds end.

Progress towards completion of CIP projects continue as various issues are addressed. The complexity of various issues have caused schedules to lengthen due to the time required to formulate resolutions. Close coordination and cooperation from sister agencies on the State level will be increasingly important for the New Landfill Project, especially Department of Transportation – Līhu‘e Airport Division.

V. BUDGET AND PROGRAM RESOURCES FY 2013

RESOURCES

<u>PROGRAM</u>	<u>(FTEs)</u>
1. Administration	10.5*
2. Deposit Beverage Container Program	2

3. Solid Waste Operations	<u>63</u>
TOTAL FTEs	75.5
* Half time position is the Environmental Services Officer	
TOTAL BUDGET	\$14,066,876

DIVISION OF WASTEWATER MANAGEMENT

I. MISSION STATEMENT: To protect the public’s health, safety, and the environment by developing and operating the County’s wastewater infrastructure.

II. DIVISION GOALS

1. Protect public health, safety, and the environment through the efficient operation and maintenance of County wastewater systems.
2. Comply with all permit conditions and applicable regulatory requirements.

III. PROGRAM DESCRIPTION

A. Wastewater Administration and Engineering Program

Administration manages the overall planning and implementation of the Division’s operations and efforts to meet the Division’s goals and objectives; and administers customer accounts and the sewer user charge system, including the monitoring of revenues and expenditures. It also receives, evaluates and responds to correspondence including requests for information and complaints; coordinates the environmental monitoring and regulatory compliance activities; and administers planning, operations and financial activities of the Division. Engineering staff oversee and monitor the Capital Improvement Program (CIP) of the Division, review subdivision construction plans, land use permit applications and building permit plans.

a. Program Objectives

To administer the County’s sewer customer accounts and user charge system.

- To plan for, design and construct the County wastewater CIP construction projects, along with securing the necessary funding for the CIP projects, to ensure adequate wastewater infrastructure is in place to support community development plan objectives of the County.
- To provide for operation of the County’s sewerage systems in full compliance with permit conditions and environmental requirements, including regulation of

wastewater discharges into the County Systems and efficient disposal and reuse of the treated effluent and proper management of sludge and solids.

- To perform reporting and communication with government agencies and the public to inform; communicate wastewater system needs and requirements; comply with the regulatory requirements; and to promote public awareness of the activities of the Division.

b. Program Highlights

- **User Charge System.** Customer billing and account management functions for the Wastewater Division were transferred from the Finance Department to the Division during FY 09/10. Management of the customer accounts is a core function of Wastewater Administration and requires: processing sewer service applications and other account changes; processing bills; customer account-related accounting; and collection efforts. Part of customer account management includes administration of the County's sewer credit program that involves annual application and processing for renewal of qualified customers' sewer credits.

The most recent Wastewater Rate Study was finalized in 2010 and a new schedule of wastewater user fees adopted. Four scheduled annual rate increases went into effect July 1, 2011, and the second increase was effective July 1 2012. The two remaining annual increases are scheduled to go into effect July 1, 2013 and July 1, 2014. Each of these rate increases will yield an approximate 10 percent increase in Division revenues. The purpose of the system of rates and charges is to generate sufficient operational revenue for the County's wastewater utility functions to cover operational costs, with user fees that are consistent with the cost of providing wastewater service to each class of rate-payer.

During FY 12/13, the problem of a lengthy billing lag for commercial customer accounts was tackled. All commercial customers for which billings were lagging several months after the service period were notified and put on a schedule for "catch-up" billings to gradually reduce the billing lag. By the end of the fiscal year, the billing lag has been almost completely eliminated; commercial accounts are now billed for current service in the next billing cycle rather than having the billing lag by possibly several months. Additional revenue has been realized this year as a one-time outcome of eliminating the billing lag.

- **Planning and Plan Reviews.** Planning efforts included management planning for Division operations and design of CIP projects to implement capital improvements. Most current CIP projects were identified in the recent (FY 08/09) update of all four Wastewater Treatment Plant (WWTP) Facility Plans. In addition to a comprehensive summary of the wastewater system, the Facility Plans identified CIP needs for each facility, providing a management tool to schedule and prioritize among various projects.

During FY12/13, additional focus was directed at the energy requirements for wastewater operations, with the assistance of the County's Office of Economic Development. An Energy Services Company (ESCO) conducted energy audits for County Wastewater facilities, and identified capital improvement projects intended to improve wastewater treatment processes, efficiency of operations, and for renewable energy development. During FY 12/13, the County and the ESCO attempted to reach agreement on a design-build contract for implementation of several of the energy projects with funding for the improvements derived from energy savings. Ultimately, we were not able to agree on the contract terms and conditions for the design build contracted funded via guaranteed energy savings. The County will be pursuing energy efficiency improvements via our pending CIP projects with our conventional CIP funding sources.

The Division continued with development of our Maintenance Management Information System (MMIS) for scheduling and documentation of maintenance activities and requirements. This year, work commenced to extend the MMIS database to include the 'Ele'ele and Waimea wastewater system assets. In FY 12/13, a condition assessment project focused on wastewater treatment process equipment at the Līhu'e WWTP was initiated, which will assist with identification of future improvements anticipated to be needed for that facility. Along with the protective coatings condition assessment completed during FY 10/11, the Division continues to compile condition assessment and operational data for management planning of facility improvements.

In addition to planning activities for management of the Wastewater Division, administration and engineering staff perform review of Building Permits, Land Use Permits and Subdivisions along with other similar private developer plans, as one of the County's reviewing agencies for those processes.

- **Design of Capital Improvements.** The Division's CIP project design work generally follows the improvement priorities identified in the Facility Plans, as modified by newly identified priority projects and funded via budget appropriations. FY 12/13 design work included completion of the design for the Eleele Facility Plan identified improvements and the Island-wide SCADA project. New design work was completed this year for Odor Control measures at the Coco Palms Sewage Pump Station (SPS) in Wailua. All three of these projects have moved forward into procurement for construction.
- **Construction of Capital Improvements.** The major construction project this year continued to be the \$15.7 million design build Waimea WWTP Expansion Project, which reached substantial completion in June 2013. Other construction projects completed during FY 12/13 included the Emergency Generator replacement at the Eleele WWTP (\$740,000), the Līhu'e Laboratory Renovation (\$400,000), along with several smaller equipment replacement contracts. Smaller projects completed during FY 12/13 included renovation of the clarifier drive mechanisms at Wailua WWTP (\$400,000), replacement of a return activated sludge pump and modification of the pump station piping at the Līhu'e WWTP

(\$163,000) and replacement of a sewer main in 'Ele'e (le (\$275,000). County Bond funds were used for the Emergency Generator Replacement, the Lab Renovation and the Wailua Clarifier projects.

Design work was completed for the site improvements needed for the Coco Palms Pump Station Odor Control Project during FY 12/13, and the project was put out to bid in July 2013. Under a separate contract, the County is proceeding with the purchase of the odor control equipment (\$210,000). County Bond funding is being used for this project, which is on schedule to be in service during FY 13/14.

Smaller projects funded from the Wastewater Division operations budget that were contracted out for construction and currently underway include: pump and valve replacement projects for pump stations in Waimea and Hanapēpē; and refurbishment of a centrifuge for dewatering sludge; manhole repairs in Līhu'e.

Project funding for larger projects continues to be derived primarily through the State of Hawai'i Department of Health (DOH) administered Water Pollution Control Revolving Fund (SRF) Loan Program, which provides low-interest loans for wastewater infrastructure projects. The funding for the Waimea WWTP Expansion project included a combination of SRF funds, and federal stimulus funds of the American Recovery and Reinvestment Act of 2009 (ARRA). During FY 11/12, all ARRA funds were expended for the Waimea project.

SRF funds along with federal grant funds will be used for the \$2.4 million Wailua Process, Electrical and Disinfection Improvements, Phase 1 which is currently under construction. SRF funds will be used for the approximately \$4.2 million Eleele WWTP Process Equipment, Electrical System and Disinfection System Improvements, which was bid in FY 12/13. The Island-Wide SCADA project was bid for construction in FY 12/13, and will be funded with County Bond funds. Future projects are anticipated to be funded by a combination of SRF and County Bond funds, and smaller projects are funded from the annual operational budget.

- **Energy Improvements.** During FY 11/12, the County's ESCO contractor completed Investment Grade Energy Audits at the County's Wailua, Līhu'e and Eleele WWTPs. A number of Energy Conservation Measures (ECMs) were identified and evaluated to determine whether guaranteed energy saving would justify the capital cost to implement the ECM. Negotiation between the County and the ESCO for the follow-up contract were conducted during FY 12/13, and ultimately the County and the ESCO contractor were unable to reach agreement on Contract terms and conditions. The County will be proceeding with implementation of several identified ECMs using SRF and other conventional funding mechanisms rather than relying on a performance contract funded via guaranteed energy savings.

B. Wastewater Collection and Treatment Facilities Program

The Wastewater Collection and Treatment Facilities Program is focused on operation and maintenance of all County wastewater collection, treatment and

disposal facilities. Program Objectives include consistent and reliable level of performance of the sewer collection system and WWTP's necessary to protect health and the environment. Activities include preventive maintenance, treatment process control, wastewater effluent reuse and/or disposal, solids management, safety and training, and laboratory monitoring for regulatory compliance. Ongoing field activities include daily operation of the four WWTP's and nineteen pump stations, and periodic cleaning and maintenance of the sewage collection systems. Wastewater personnel also routinely respond to after-hour trouble calls either occurring at facilities or generated by sewer service problems from the public.

The Division also routinely provides equipment and manpower support to other County agencies such as Building, Roads and Solid Waste Divisions of the Department of Public Works. There are many situations where our knowledgeable staff and specialized equipment, such as our Vactor truck, crane and camera system, are highly useful to assist other agencies with their operational needs.

a. Program Objectives

- To provide a safe working environment and ensure that all employees are properly trained.
- To comply with all permits and related regulatory requirements.
- To minimize wastewater spills, and odor complaints from the public.
- To efficiently and effectively operate, maintain and repair all County Wastewater facilities.

b. Program Highlights

- **Personnel Safety and Training.** The County sponsors, through ongoing support of the Statewide training program, monthly on-island continuing education opportunities on a variety of topics relevant to operation of wastewater systems. The program offers Continuing Education Credit (CEU's) needed to maintain Operator licensing.

The Statewide Training Center is undergoing a management transition, and is in the process of becoming a service center operated by the University of Hawai'i (UH). It is possible that the program offerings and availability of on-island training opportunities and Continuing Education Unit (CEU) credits from this program will decrease. The need for alternate training opportunities and higher costs associated with training should be anticipated for the future.

During FY 11/12, the Division identified the need for a comprehensive review of our safety programs to be performed. This was reflected in our budget for FY 12/13 with the establishment of a budget for contracted services to assist with this effort. During FY 12/13, a professional services contract was

negotiated with a Safety consultant; the work under this contract has commenced.

- **Collection System and WWTP Operation and Maintenance.** Operation and Maintenance activities for the County's four WWTP's, nineteen SPS's and approximately 50 miles of sewage collection system comprise the majority of the Divisions activities, assets, equipment and staff resources. Of the Division's 35 positions, 26 positions are allocated directly to operation and maintenance crews.

Each WWTP staffing level is between 3 to 5 Treatment Plant Operators and Assistant Operators, most of whom are individually licensed as Treatment Plant Operators by the State of Hawai'i. The WWTP operators are also responsible for the operation of between 3 to 6 pump stations situated within the collection system served by the respective treatment plant. In addition, the plant operators are supported by a crew of mechanics, an electrician, and a crew of sewer maintenance repairers (line crew). The support mechanics, electrician, and line crew, along with the Divisions' two chemists, the field superintendent and field support technician are based at the Līhu'e WWTP, and support all four of the County's wastewater system operational staff.

In an ongoing effort of scheduled maintenance, the Division staff with the assistance of our contractors and suppliers completed various replacements to address ongoing equipment maintenance for wastewater treatment plants and sewage pump stations. Typical replacements include pumps, flow meters, fluid level sensors, etc., all of which are subject to periodic replacement as part of ongoing maintenance expenditures. In addition to completing the day to day plant operations and maintenance activities required to keep the wastewater systems operating properly on a 24/7 basis, our operation and maintenance staff continue to focus on safety, improved work processes, work order scheduling, implementation of maintenance procedures, and maintenance scheduling.

- **Regulatory Compliance and Monitoring.** The County's Wastewater operations are subject to various regulations governing plant operation, management of bio-solids (sewage sludge) and proper management and testing for wastewater plant effluent. Effluent is either reused as irrigation water (Wailua, Līhu'e and Waimea WWTPs) or disposed via injection wells (Waimea, Eleele and Līhu'e WWTPs) or via the Wailua WWTP ocean outfall. Depending on the details of each plant, regulatory compliance requires periodic to daily monitoring of water quality, testing and evaluation of injection well capacity and periodic reporting on various plant operational activities to the State DOH. Annually, the DOH performs inspections of plant operations to document the status of completion of all required activities for each plant.

The required reporting include annual or semi-annual injection well status reports and water quality monitoring reports for Waimea, Eleele and Lihue WWTPs, which the County contracts with a consulting engineering firm to complete. These reports are prepared and completed in conformance with their respective Underground Injection Control (UIC) permit requirements for each respective WWTP. Monthly monitoring reports and annual water quality reports are prepared for the Wailua WWTP's ocean outfall National Pollution Discharge Elimination System (NPDES) permit. Semi-annual and annual reports documenting the management of bio-solids from the WWTPs are also required.

The Division's Sanitary Chemists perform the required sampling and analyses and administers laboratory service contracts for compliance with our NPDES and UIC permits.

IV. PROGRAM MEASURES AND EVALUATION

A. Wastewater Administration and Engineering Program

Program Measures include those measures associated with sewer billing; processing of building and land use permits; administrative support for operations such as budget, purchasing, personnel management, training, regulatory compliance support, etc.; and management of the Division's capital improvement program activities.

During FY 12/13, administrative functions including billings, plan review activities, personnel support, etc. were successfully completed, maintaining existing levels of support and service to customers and other agencies. As mentioned above, a significant improvement in customer billings was completed in FY 12/13 by elimination of the long-present billing lag for commercial accounts. Internal to the Division, budget and purchasing processes were successfully completed, resulting in all major goods and services required by the Division being acquired. All required regulatory compliance reports and activities were completed. Staffing needs were met with several new employees being hired to fill most vacant positions.

With respect to our Capital Improvement Program, the major project at the Waimea WWTP required considerable management oversight. Progress was also made on other design and construction projects. Our pending CIP projects addressing WWTP needs and collection system upgrades will continue modernize facilities, improve system reliability, and improve effluent water quality. These projects lead directly to improving our compliance with environmental regulations and providing higher effluent water quality for reuse as a valuable resource.

B. Wastewater Collection and Treatment Facilities Program

Facility operations continue to meet most or all program measures, and during FY 12/13 the Wastewater Division did not experience many significant weather-related

challenges or significant sewage spills. Wastewater operations staff responded to numerous call-outs for emergency conditions resulting from power outages, equipment failures and other unanticipated conditions. Operations personnel continue to meet all the challenges, responding quickly to emergency conditions in order to prevent or clean-up and mitigate sewage spills and to operate the treatment plants within operational parameters.

V. BUDGET

All revenues for the Division’s routine program costs are from sewer user fees. Approximate actual program costs (rounded) from the FY 2012-2013 budget are summarized for the Division as a whole, including administration and operations.

OPERATIONAL COSTS

• Equivalent Personnel Positions	35
• Wages and Other Direct Costs	\$2,824,000
• Operations (Equipment, supplies, vehicles, etc)	\$2,271,000
• Utilities (Electrical, Water, Gas, Telephone)	\$2,089,000
• Contracted Services (Repairs, Laboratory, etc)	\$ 809,000
• Debt Service	\$2,287,000
PROGRAM TOTAL	\$ 10,280,000

OPERATIONAL REVENUES

Estimated FY 12-13 Revenues	\$ 8,900,000
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VI. STATISTICS

<u>Measure</u>	<u>Number</u>
• CIP Projects under construction	7
• Total number of sewer units	5,291
• Bills processed in FY 11/12	25,095
• Number of customers receiving sewer credits	696
• Spills reportable to DOH	3
• Wastewater processed (average - million gallons per day)	2.4
• DOH unacceptable inspections	1
• DOH acceptable inspection	2
• % of flow being reused (approximate)	70

