

Chapter 1: Long-Range Implementation Program

Vision without action is a daydream. ~Japanese proverb

T*he Long Range Implementation Program establishes a general framework for the implementation of the Maui Island Plan. As part of planning for Maui's future, a financial program is needed that*



Aerial view of Kahului Harbor. Maui, Hawai'i.

contemplates the implementation of identified actions and capital improvements to provide adequate public facilities and infrastructure essential for the growth of communities, the protection of public health and safety, and the enhancement of the natural and built environments. Finally, this chapter seeks to prioritize and implement the plan's actions by identifying priorities, commencement dates, completion dates, estimated costs, funding sources, and lead implementation agencies.

IMPLEMENTATION PROGRAM

The overall responsibility of infrastructure and service delivery on Maui has shifted among the Federal, State, and County government and the private sector. During the early to mid-1900s, the sugar and pineapple plantations and ranching played a major role in community building on Maui. The Federal, State, and County governments began to play a greater role in public facilities and infrastructure with the onset of World War II and the phase-out of plantation camps. From 1959 to the mid 1970s, the Federal government played a significantly greater role than it has in recent decades in funding public facilities and infrastructure, particularly highways and wastewater treatment facilities.

Since the mid 1970s, Federal funding for public infrastructure improvements began to decrease with more of the cost being shifted to State and local governments. This funding trend has added to the financial burden of State and County governments nationwide. Traditionally, Maui County has relied on property tax revenues and water and wastewater fees as its primary revenue sources for funding infrastructure and public facilities. However, with the increased financial burden imposed by the lack of Federal support and community resistance to increasing property taxes, the County has required contributions and/or fees from developers to help mitigate the impacts resulting from their developments.

Today, Maui is facing several infrastructure planning challenges.

- aging infrastructure and public facilities;
- infrastructure demand outpacing revenues; and
- intergovernmental and intragovernmental coordination.

This chapter establishes a broadly defined infrastructure strategy and policy framework to strengthen infrastructure planning and delivery on Maui, and to identify short, medium, and long-term capital projects and costs to address existing service deficits and projected growth to 2030.



Examples of infrastructure/public facilities including water (irrigation ditch), airports (Kahului Airport), parks (Eddie Tam), and roads (Hāna Highway).

IMPLEMENTATION PROGRAM

The County's Capital Improvement Project (CIP) program is an important framework to implement land use policies in the General Plan and various Community Plans as related to public facilities and infrastructure. The CIP process includes annual budgeting, a specific six-year plan, and general longer-term plans that consider 20-year forecasts.

The development of the CIP program falls within the framework of the Countywide Policy Plan, Maui Island Plan, Maui's six (6) Community Plans, and the Molokai and Lāna'i Community Plans. Population forecasts for a 20-year timeframe and urban and rural growth areas identified in the Maui Island Plan will provide the basis for infrastructure planning for Maui Island.



Main Street in Wailuku-Road improvement projects could be funded through the CIP process.

CAPITAL IMPROVEMENT REQUIREMENTS AND FINANCING

The purpose of this section is fourfold:

1. Provide the County's policy regarding the role and responsibility of the public and private sectors for providing infrastructure and public facilities;
2. Identify major regional capital improvement projects necessary to address existing service deficits and projected growth to 2030;
3. Identify potential funding mechanisms to finance future CIP projects; and
4. Ensure that capital improvement projects are scheduled and constructed in a timely manner.

The infrastructure funding strategy provides an efficient and equitable means of planning and financing infrastructure improvements. Major County capital improvement projects and potential funding mechanisms are discussed by each County agency and include solid waste, water, wastewater, roads, transit, parks, and public safety.

Infrastructure Planning and Finance Policy Framework

The County CIP funding strategy is comprised of three policy statements with underlying strategies to effectuate the policies.

1. Infrastructure Services Policy:

The County is responsible for determining areas where infrastructure and public facilities will be supported.

2. Infrastructure Expansion Policy:

Developers are generally responsible for public facility and infrastructure expansion costs associated with their projects.

As a condition of subdivision or development approval, the County often requires new developments to construct on-site water, roads, wastewater, park facilities, and other infrastructure and public facilities pursuant to County standards. Upon completion of construction, the County may require the developer to dedicate the infrastructure/facilities to the County. Developments may also be required to donate easements or other types of partial rights to the County. In addition, developments are often required to provide financial assurance, such as bonding, to ensure enforcement of needed corrective action(s) or uninterrupted operation (in case of bankruptcy, abandonment, or any other default on financial obligation).

The County has also considered the imposition of impact fees, which are designed to mitigate the impact of new development on infrastructure and public facility systems. These one-time payments are made by the development; fees are typically passed on to either the seller of land or homebuyer to pay for the cost of infrastructure caused by new development. While the enabling ordinance for traffic impact fees have been enacted, the required studies that determine the actual fee amounts have yet to be adopted; other impact fee ordinances have been discussed but not enacted.

To ensure that no ambiguities exist regarding infrastructure funding responsibilities, the County may establish an infrastructure funding strategy to ensure that infrastructure improvements are implemented prior to or concurrent with development by the responsible party depending on the nature of the infrastructure project.

3. Existing Deficiencies Policy:

Through its CIP program, the County is responsible for funding operations and capital improvements to address existing deficiencies of County-owned and operated systems.

The Existing Deficiencies Policy shall be implemented by way of the following strategy:

A. Identify existing service deficiencies and project future operations and maintenance needs:

Using the CIP program, needs assessment studies, and adopted level-of-service standards, the County will identify existing service deficiencies and projected operations and maintenance needs. The County will provide revenues sufficient to maintain the minimum acceptable level-of-service standards over the 20-year planning horizon. The County will encourage the State to upgrade its facilities to meet the County's LOS standards.

B. Develop and Utilize Alternative Funding Sources: The County could consider alternative funding sources to be used to finance major CIP projects. Some of these sources are currently available while others would require enabling legislation or voter approval before they could be utilized. Such alternatives include: public-private partnerships, which can save time and costs; strategic budget allocations or trust funds to create special funds for specific purposes; special district financing, such as tax districts or redevelopment districts, where revenues are reinvested in the same geographic area; and peak demand pricing, where the charge for the use of public facilities or infrastructure is increased during periods of heaviest use.

Table 1-1, Sources of Existing Revenues for Infrastructure, describes current revenue sources through which the County raises needed revenues.

Table 1 - 1: Sources of Existing Revenues for Infrastructure

Infrastructure	Operation & Maintenance	Capital Investment (Deficits)	Capital Investments (Growth)
Wastewater	Monthly sewer fees Monthly reclaimed water fees	Wastewater hook-up (impact) fees Bond financing and SRF loans based on rate revenues and fees	Wastewater hook-up (impact) fees Subdivision exactions for on-site improvements Bond financing & SRF Loans based on rate revenues & fees
Water	Monthly water fees Water system development (impact) fees Special District Financing	Water system development (impact) fees Bond financing and SRF loans based on rate revenues and fees	Water hook-up (impact) fees Subdivision exactions for on-site improvements Bond financing & SRF Loans based on rate revenues & fees
Roadways	Federal and State Funding Sources County Gas Tax	Federal and State Funding Sources County Gas Tax	Federal and State Funding Sources Subdivision exactions for on-site improvements ships
Transit	Federal and State Funding Sources County Gas Tax General Fund Farebox/Advertising	Federal and State Funding Sources County Gas Tax	Federal and State Funding Sources Subdivision exactions for on-site improvements
Parks	General Fund revenues	General Fund revenues Bond financing based on GF revenues Maui Open Space Preservation Fund	Subdivision exactions for on-site improvements Impact fees
Solid Waste	Landfill disposal and collection fees Grant Revenues	Landfill disposal and collection fees Grant Revenues User charge & bond financing based on user charge	Landfill disposal and collection fees Grant Revenues Bond financing based on collection fees
Police / Fire	General Fund revenues	General Fund revenues	General Fund revenues Impact fees Bond financing based on GF & alternative revenue sources

Capital Improvements and Financing

The following section identifies major CIP projects necessary to address existing service deficits and projected growth to 2030, and potential funding sources by infrastructure system. Implementation costs and dates provided below are estimates and have not been adjusted for inflation. Identification of projects in this CIP plan does not legally bind the County to implementing these improvements; rather, the plan provides a guide for implementation of major projects to 2030.

WATER – MAJOR CAPITAL IMPROVEMENTS

Major projected capital costs to 2030 will be in the following areas: 1) source development; 2) improvement, replacement, and upgrade of waterlines; 3) construction and replacement of water tanks; 4) expansion and improvement of treatment plants; and 5) construction of new reservoirs. The majority of Maui's water infrastructure systems were constructed decades ago and is in need of major repairs and in some instances complete replacement. According to the Department of Water Supply (DWS), much of the island's water infrastructure is in fair to poor condition, especially transmission lines. Major repairs and replacements will be required to ensure the reliability of the island's water distribution system.

The following is a summary of the major capital improvement requirements for Maui's regional systems as described in chapter 6, Table 6-3. It should be noted that these costs do not include replacement of existing systems reaching the end of their useful lives. Estimated costs for such projects are roughly equal in magnitude for each area.

Table 1 - 2: Major Capital Improvement Projects – Water Systems

Project	Estimated Timing	Estimated Cost
<i>Central Maui Water System</i>		
Source development to meet demand to 2030. A wide range of costs exist for source development depending on the combination of new sources pursued.	On-going	\$100 million
<i>West Maui Water System</i>		
The costs of source development to meet 2030 demand may range significantly due to the sources pursued. These costs do not include the development of new raw water storage reservoirs.	On-going	\$40 million
<i>Upcountry Water System</i>		
Upcountry source development costs are based on satisfying a significant portion of the upcountry water meter waiting list. It should be noted that this demand is far in excess of demand projected in the Maui Island Plan.	On-going	\$100 million
<i>East Maui System</i>		
Various combinations of source, storage and transmission improvements.	On-going	\$10 million

Current Revenues versus Projected Expenditures

Current DWS (Department) resources will not be able to keep pace with projected expenditures as operating and capital expenses increase.

The Department's CIP expenses can be broken down into the following three categories: repair and maintenance; fire flow improvements; and growth-serving capital improvements. Due to the age of the island's water infrastructure extensive repairs and replacements to water lines, tanks, well pumps, treatment facilities, and other water system components will be necessary to address current deficiencies and ensure the reliability of County water supply systems.

As the island's population grows to 2030, water systems will need to be expanded to serve new growth areas. As such, acquiring additional water sources will be necessary to address the growing demand for water.

Funding Strategy

The County will need to raise revenues from current revenue sources and pursue additional sources to fund the Department's growing operational and capital expenses. The Department's funding strategy will follow the policies and strategies outlined at the beginning of this section.

1. Repair and Upgrades of Existing Facilities

Repairs, maintenance, and upgrades of existing water supply facilities and infrastructure should be borne by all service users. These costs are currently paid for through rates charged to individual customers, which make the distribution of such costs more equitable throughout the community. Water service fees are the primary funding source for maintaining existing facilities.

- **Water Service Charges:** Monthly water service charges are the primary revenue source for water supply operations, as well as repair, maintenance, and upgrades to existing systems. To address rising operating and maintenance costs and to continue to strive for self-sufficiency, the Department will need to continually increase its rates. The Department has estimated that the County may need to increase water service rates by more than 50% between 2015 and 2025 to adequately fund maintenance and upgrade projects.

2. Facility Expansion

Costs associated with water supply storage and distribution system expansion should be borne primarily by new development to ensure that costs are distributed equitably to uses benefiting from the improvements. The primary funding mechanisms for funding infrastructure expansion will be subdivision exactions, water system development fees and impact fees and or special taxing districts.

ROADWAYS – MAJOR CAPITAL IMPROVEMENTS

The following is a summary of the major capital improvement requirements for roads for each Community Plan region. The primary source relied upon for this section was the *County of Maui Traffic Impact Fee Study, Final Report 4-5* (March, 2013) prepared by CDM Smith for the County of Maui, Department of Planning. Both State highway and County road improvements likely necessary to accommodate island growth to 2030 are listed. However, State highway improvement costs are only presented for informational purposes and are not the financial responsibility of the County. Cost estimates for County roads will be funded through a combination of Federal, State, and County funds.

Current Revenues versus Projected Expenditures

Capital Improvement Project expenses can be broken down into the following two categories: repair and maintenance; and growth-serving capital improvements. Due to the level of use of many of Maui's roadways, repairs and replacements such as road resurfacing and bridge replacement will be necessary to ensure the reliability of the island's roadway network.

As the island's population grows to 2030, roadway systems will need to be expanded to service new growth areas.

Table 1 - 3: Major Capital Improvement Projects – Roadways

Project	Estimated Timing	Estimated Cost
<i>Central Maui Roadways</i>		
Secure ROW and construct Wai'ale Connector between Waiko Road and Honoapi'ilani Highway	2016-2021	\$10-15 million
Secure ROW and construct Lono Avenue extension to Kuihelani Highway	2016-2021	\$2-3 million
<i>Kīhei-Mākena Roadways</i>		
Secure ROW and construct Kīhei North-South Collector Road	2016-2021	\$37.6 million
<i>West Maui Roadways</i>		
Secure ROW and construct Lahaina Bypass from Hokiokio Road to Launiupoko (State)	2016-2021	TBD
Secure ROW and construct Mill Street extension from Honoapi'ilani Highway to Keawe Street	2016-2021	\$20-30 million
Secure ROW and construct Lahaina Cane Haul Road from Ukumehame to Aholo Street	2022-2030	\$15-20 million
<i>Pā'ia -Ha'ikū Roadways</i>		
Secure ROW for Hāna Highway Bypass (State)	2022-2030	TBD

Funding Strategy

To cover growing operational and capital expenses, revenues will need to be annually evaluated. Depending on the amount of revenue from traditional funding sources, rates and fees may need to be adjusted. Additionally, Federal funds vary from year to year but, overall, have been very consistent for the last 20 years or so.

1. County Funding Sources

Repairs, maintenance, and upgrades of existing roadways should be borne by all service users. These costs are currently paid by the highway fund which is funded by the fuel tax, franchise tax, and weight tax. These taxes need to be evaluated annually, as each revenue source is dependent on fuel consumption, vehicle registration and electricity demand.

- **Fuel Tax:** The fuel tax is based on the number of gallons of fuel purchased. It is one of the most direct user-related sources of funds available since the amount paid by drivers is proportional to trip length and vehicle weight.
- **Franchise Tax:** The franchise tax is collected from a tax on 2.5% of annual gross receipts from electric light and power companies operating as public utilities in the County of Maui. In exchange, Maui Electric Company has the right to use County rights-of-way for the transmission of electricity to their customers.
- **Weight Tax:** The weight tax is collected at a rate of one and one-fourth cents per pound of net weight for passenger vehicles, trucks, and non-commercial vehicles not exceeding 6,500 pounds, and two cents per pound of net weight for all other motor vehicles. This tax is collected as part of the annual vehicle registration process.

2. State Funding Sources

State funds are occasionally available, as certain projects can receive state funding generally as a match to County funding. This funding source is highly variable and unpredictable. Even if funds are placed in the State budget, there is no guarantee that they will be released.

3. Federal Funding Sources

Federal gas tax funds are redistributed to the states, who in turn sub-allocate their allotments to local jurisdictions, such as the County. These funds can only be used on roads designated for Federal funds, which are typically major collector roads. The enabling Federal legislation changes from time to time, but in general, the County has been able to secure between \$8M and \$12M+ annually for new construction, and reconstruction of roads and bridges.

4. Private funding sources

New projects and subdivisions may have requirements to complete new roads or portions of new roads to service the project or subdivision. Such requirements must meet a 'rational nexus' test, i.e. the requirements must be based on a rational evaluation of existing safety and traffic needs. Additionally, the opportunity for public-private partnerships is always a possibility, as new projects that are only required to partially develop a road can partner with the County to fully develop the road.

TRANSIT – MAJOR CAPITAL IMPROVEMENTS

Three major projects have been identified by the County Department of Transportation (CDOT) as necessary to accommodate projected population growth to 2030. Capital improvement projects are discussed from an island-wide standpoint rather than by region due to the interregional applicability of the projects.

Table 1 - 4: Major Capital Improvement Projects – Transit

Project	Estimated Timing	Estimated Cost
<i>Maui Public Bus System</i>		
Acquire land and develop plan for Central Maui transit hub/park-n-ride	2016-2021	\$4 million
Acquire land and develop plan for West Maui transit hub and park-n-ride	2016-2021	\$4 million
Acquire land and develop plan for South Maui transit hub and park-n-ride	2016-2021	\$4 million

Current Revenues versus Projected Expenditures

To accommodate projected expenditures for transit operations, current revenues will need to significantly increase. The transit system primarily operates with one hour headways. As headways decrease across the system to every half hour, operational expenses will double; this necessitates a considerable increase in funding. Additionally, as service routes are added and expanded, operating costs will again increase.

As Maui's transit system matures, service, repair and maintenance expenses are likely to increase as buses age. Transit-supportive infrastructure also requires ongoing upkeep and repairs throughout the island.

Growth-serving capital improvements will place a large burden on the Department's budget as the transit system expands and improves. Three major transit facilities are needed in the near future to address current and anticipated demand. Costs associated with these facilities will be significant due to the need to acquire land and plan, design, and construct the facilities. Current revenue levels will not be able to cover projected capital expenditures.

Funding Strategy

The County will need additional funding to operate and expand the County's public transit system to 2030. The Department's funding strategy includes increasing current funding sources and pursuing new sources to cover system repairs, upgrades, and expansion.

1. Repair and Upgrades of Existing Facilities

To fund operations, repair, and maintenance of the transit system the County will continue to rely on the General Fund, Highway Fund, FTA grants, farebox revenues and advertising revenues.

- **Bus Fares:** One-way bus fares are two dollars for most routes with daily and monthly passess also available. Transit fare revenues are deposited into the General Fund. By charging for all Maui Bus routes and increasing transit rates across the system, transit fare contributions to the General Fund could be significantly increased.

2. Facility Expansion

The primary funding mechanisms for funding infrastructure expansion will be subdivision exactions, impact fees, and could possibly include special tax districts. Other potential funding sources include:

- **Federal Funding:** The County Department of Transportation should continue to rely on FTA grants for both operating and capital expenses. To fund the three major capital improvement projects previously discussed, the Department should apply for FTA grants. Under this program, grant recipients are required to supply matching funds for capital projects. The purchase of the land for the facilities could qualify as the local match, with planning, design, and construction expenses covered by the Federal grant. Funds may also be available once a Metropolitan Planning Organization entity is formed and enabling legislation enacted.
- **Public Private Partnerships:** Many entities in the private sector benefit from the County transit service as an alternate mode of transportation for customers and alternate to providing employee parking. The County should continue to partner with the private sector to establish mass transit within the community. The private sector's involvement can vary from having service clubs maintain bus shelters to the dedication of land for transit purposes.

WASTEWATER – MAJOR CAPITAL IMPROVEMENTS

Major projected capital costs to 2030 will be in the following areas: 1) repair and upgrades to the existing aging plant and collection systems; 2) compliance with Environmental Protection Agency (EPA) Consent Degree requirements for continuing investigations and replacement of aging/leaking transmission lines; 3) expansion of wastewater reuse and distribution in Central, South, and West Maui; and 4) tsunami and shoreline erosion protection.

Although the County's existing wastewater infrastructure was largely constructed during the 1970's and 1980's, the Department of Environmental Management, Wastewater Reclamation Division, indicate that with ongoing maintenance and upgrades to existing treatment plants, collection, and transmission systems can be maintained in fair to good condition.

Table 1 - 5: Major Capital Improvement Projects – Wastewater

Project	Estimated Timing	Estimated Cost
<i>Wailuku-Kahului Wastewater System</i>		
Repairs, upgrades, compliance, expansion, protection	On-going	TBD
<i>Lahaina Wastewater System</i>		
Repairs, upgrades, compliance, expansion, protection	On-going	TBD

Current Revenues versus Projected Expenditures

The Division's CIP expenses can be broken down into the following two categories: rehabilitation and replacement; and growth-serving capital improvements. Due to the age of the island's wastewater infrastructure, extensive repairs and replacements to sewer lines, force mains, pump stations, laterals, and treatment facilities will be necessary to ensure the on-going reliability of County wastewater systems. These CIP expenses will be considerable due to the extensive network of facilities.

Growth-serving capital improvements will also be a large component of the Division's future budgets. As the island's population grows to 2030, system capacity will need to be expanded to treat additional flows. Conservation of portable water resources will also create a greater demand for higher levels of treatment and expanded reuse distribution systems to make treated water available. Both installing new infrastructure and expanding wastewater reuse will increase the Division's budgetary needs considerably.

Figure 1-1 identifies cumulative CIP costs over 5-year intervals from 2000 to 2030. Between 2005 and 2010, cumulative 5-year CIP costs increased from \$44.9 million to \$121.8 million, an average annual increase of 22%.

From 2010, these costs will increase at an average annual rate of 10% to \$197.2 million. To finance the increase in CIP, sewer rates will need to increase considerably to pay additional debt service. In addition to increasing sewer rates, greater use of alternative funding sources should be considered.

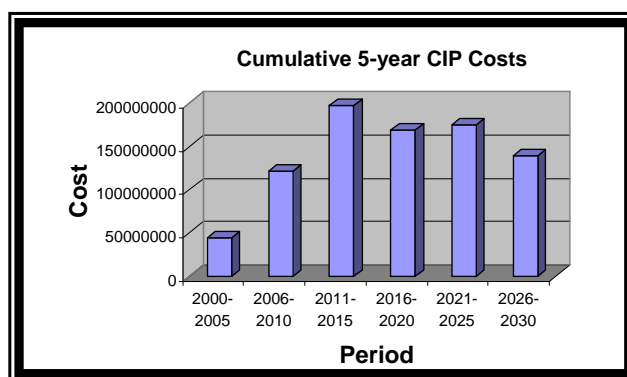


Figure 1 - 1. Cumulative 5-year CIP Costs.

Funding Strategy

To cover the Wastewater Reclamation Division's growing operational and capital expenses, revenues will need to increase. The funding strategy should address costs associated with both repair and maintenance of existing facilities, as well as plant and collection system expansion.

1. Repair and Upgrades to Existing Facilities

Incremental repair, maintenance, and upgrades of existing facilities should be borne by all service users. These costs are currently paid for through sewer and reclaimed water rates. These revenue sources are further described below.

- **Sewer Rates:** Monthly sewer and cesspool fees are the primary revenue source for wastewater operations as well as repair, maintenance, and upgrades of existing systems. Cash from sewer rates is used to pay for capital projects or to pay down debt service associated with these improvements. It is important to note that these funds are not used to finance facility expansion, but only repair and maintenance of existing systems.

Due to rising costs associated with operating and maintaining the County's aging wastewater infrastructure, wastewater fee increases have occurred over seven of the last ten years. Since 2003, wastewater rates have increased by 75%, and are projected to increase by approximately 3% per year for the next five years.

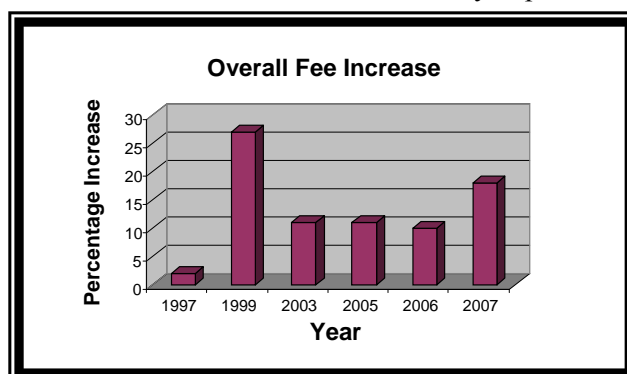


Figure 1 - 2. Overall Sewer Fee Increases.

- **Reclaimed Water Rates:** Like sewer rates, reclaimed water rates need to reflect more of the actual cost of delivering this resource to users. Significant expansion of reclaimed water distribution would require a considerable increase in rates due to debt service and pumping costs. This cost may actually be more than what it would cost to deliver potable water for non-potable uses. However, the external benefits associated with water conservation and reducing the island's reliance on injection wells also needs to be considered.

2. Facility Expansion

The primary funding mechanisms for funding infrastructure expansion will be required subdivision improvements, impact fees, and/or special taxing districts. Table 1-1 (Sources of Existing Revenues for Infrastructure) identifies existing funding opportunities to support wastewater facility expansion.

SOLID WASTE – MAJOR CAPITAL IMPROVEMENTS

Major projected capital costs to 2030 are expected to be in the following areas: 1) solid waste facilities design, permitting, and construction; 2) landfill expansion and closure; 3) recycling facilities and improvements; 4) implementation of the Integrated Solid Waste Management Plan (2009); 5) compliance with State Department of Health (DOH) and Environmental Protection Agency (EPA) permits and legal requirements; and 6) compliance with State and County Special Use permits and conditions.

Table 1 - 6: Major Capital Improvement Projects – Solid Waste

Project	Estimated Timing	Estimated Cost
<i>Central Maui Landfill</i>		
Close Phase IV	2010-2015	\$2.5 million
Acquire land and construct Phase VI	2016-2021	\$10 million
Acquire land and construct Phase VII	2022-2030	\$17 million

Current Revenues versus Projected Expenditures

The Division's budget is driven by the handling and management of solid waste to achieve efficiency, diverting more tonnage of waste from landfills and implementing innovative options for managing waste as well as compliance with State DOH and EPA permits and requirements of State and County Special Use permits. Implementation of the programs and projects identified in the Division's Integrated Solid Waste Management Plan significantly increases the Division's operating and CIP expenses.

Growth-serving capital improvements account for the majority of the Division's CIP expenses. Major growth-serving capital improvement projects include land acquisition and landfill construction. As the island's population grows and the Integrated Solid Waste Management Plan (2009) is implemented to manage growing waste, solid waste capital improvements become necessary and funding will be needed.

Funding Strategy

The solid waste system is different from other County infrastructure and facilities in that implementing the Integrated Solid Waste Management Plan (2009) and construction and expansion of facilities will be needed regardless of population growth. Due to this fact, costs associated with solid waste system operation, repair, maintenance, construction and expansion should be borne by all users to ensure that costs are distributed equitably and the cost of financially sustaining the Solid Waste program and projects is maintained.

Implementation

The County will need to increase revenues to cover the Division's growing operational and capital improvement expenses. Addressing escalating expenses will require a combination of increasing current revenue sources and pursuing additional sources. Currently, general obligation bonds are used to fund the majority of the Division's capital improvement projects. These bonds will likely remain an important CIP funding source. The following solid waste funding strategy will ensure an efficient and equitable means of programming and paying for Solid Waste Division expenses.

1. Repair, Upgrades, and Expansion of Existing Facilities

- **Landfill Disposal Fees:** Landfill disposal fees are charged to commercial dumpers for disposal of waste at the County's landfills. Disposal fees include the tipping fee; green-waste disposal fee; bio-solids disposal fee; fats, oil and grease fees; and the recycling surcharge. To more closely cover the actual expenses of the landfill, rate increases will be needed.
- **Refuse Collection Fees:** Refuse collection fees are charged to residents for curbside waste collection services. The County will need to increase both landfill disposal fees and refuse collection fees as operation and maintenance expenses rise

Table 1-1 (Sources of Existing Revenues for Infrastructure) identifies additional funding opportunities to support the expansion of solid-waste disposal services.

PARKS – MAJOR CAPITAL IMPROVEMENTS

Major projected capital costs to 2030 will be in the following areas: 1) acquisition of undeveloped park lands to address existing deficiencies and accommodate the projected population growth; 2) development of new park facilities and supporting infrastructure; and 3) on-going repair and maintenance of the existing facilities.

The following is a summary of some of the major long-range capital improvement projects being considered by the Department of Parks and Recreation.

Table 1 - 7: Major Capital Improvement Projects – Parks

Project	Estimated Timing	Estimated Cost
Central Maui Park Development	2016-2030	\$160 million
South Maui Park Development	2016-2030	\$70 million
East Maui Park Development	2016-2030	\$60 million
West Maui Park Development	2016-2030	\$140 million

Current Revenues versus Projected Expenditures

With the island's growing population greater demand is being placed on the Department's facilities, the majority of which were constructed an average of 47 years ago. These aging facilities, designed for smaller populations, are maximized to over-capacity, impacting their operations and maintenance. The Department's budget is becoming increasingly inadequate to sufficiently address the island's recreation needs as a result of steadily increasing operating expenses.

Unlike water and wastewater where fees are collected and deposited into a special fund to finance operations and capital expenditures, the Department is funded predominantly through General Fund revenues. Because the General Fund is the primary source of funding for numerous other public programs and projects (such as the police, fire, highways, transit, and housing) it is especially difficult for the Department's projects to compete for limited General Fund dollars. The Department also receives funding from developers through the payment of park assessment fees. However, these monies are only sufficient to mitigate the impact to park facilities caused by new development, and are not intended to address existing deficiencies.

With a growing population, and an economy and lifestyle that are highly dependent upon active and passive recreation, it is important that the Department explore avenues to develop additional revenue sources.

Funding Strategy

The County will need to increase revenues to cover the Department's growing operational and capital expenses. The County can achieve this through a combination of increasing current revenue sources and pursuing additional sources.

Acquisition of Land and Facilities

All Maui Island residents should help fund the acquisition of park land and facilities to address existing deficits. However, new development should bear the cost associated with the acquisition of land and facilities to serve new growth. The following funding strategies are currently utilized to increase park resources, and ensure an efficient and equitable means of programming and paying for the acquisition of park land and facilities.

- **Park Assessment (Impact) Fees:** Based on a level-of-service standard of 10-acres of sub-regional park land per 1,000 resident population, as described in the *Public Facility Assessment Update* (2007), and an average of 2.7 persons per dwelling unit, each new residential unit should contribute approximately 1,176 square feet of land area for parks and playgrounds. This is more than double the 500 square feet per unit that is currently required of new subdivisions. To address this inconsistency, the County should conduct a detailed level-of-service analysis, and thereafter, adopt level-of-service standards for each region of the island. The County's park assessment requirements should be adjusted to reflect the adopted standards.
- **Open Space, Natural Resources, Cultural Resources and Scenic Views Preservation Fund:** In 2002, seventy-three percent of voters in Maui County approved a Charter amendment mandating

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that a *minimum of one percent* of annual property tax revenues be placed into a special fund for the preservation of open space, natural and cultural resources, and the preservation of public access to coastal lands. In 2006, approximately \$1.56 million was placed into the Maui Open Space Preservation Fund, which was established to collect these monies.

- ***State and Federal Funding Sources:*** Certain park land acquisitions may qualify for State and Federal funds. Potential Federal funding sources include the National Oceanic and Atmospheric Administration (NOAA), the United States Department of the Interior, Fish and Wildlife Service (USFWS) Coastal Wetlands Acquisition Program and acquisitions associated with the USFWS Endangered Species Act. The Legacy Land Conservation Program and the Hawai'i Coastal and Estuarine Land Conservation Plan are also important potential funding sources.

PUBLIC FACILITIES – MAJOR CAPITOL IMPROVEMENTS

This section discusses CIP projects and funding for fire control, police, government offices and parking. The following is a summary of the major capital improvement requirements for public facilities to 2030.

Table 1 - 8: Major Capital Improvement Projects - Public Facilities

Project	Estimated Timing	Estimated Cost
<i>Regional Fire Facilities</i>		
A new centrally located fire station which will include a fire training facility, Mechanic Shop, Storage Building, and Administration Building	2016-2021	\$31.2 million
<i>Regional Police Facilities</i>		
Kīhei Police Station (to alleviate hardship to the Wailuku Police Station)	2010-2015	\$35 million
<i>Government Offices and Parking</i>		
Kalana O Maui, Old Courthouse, and Kalana Pāku`i improvements	2016-2021	\$50 million

Funding Strategy

The County may need to increase revenues to cover growing expenditures for public facilities to 2030. The primary funding sources for fire and police facilities together with government offices and parking capital costs are the County General Fund and G.O. bonds. As public facility expenditures increase to address existing facility deficits and projected needs, revenues from these two primary funding sources may need to increase.

PROJECT AND OPERATIONS MANAGEMENT

Implementation of the Maui Island Plan will require a coordinated effort from County and State agencies, the private sector and nonprofits, and the community. Implementation mechanisms include planning and regulatory approaches, capital improvement programming, monitoring and evaluation. Managing and facilitating the plan's implementation will require the establishment of an efficient and comprehensive project and operations management approach.

Planning Department

The Department of Planning will facilitate the implementation of the Maui Island Plan. The Maui Island Plan has many policies and requirements which contain action words such as: "encourage," "support," "ensure," "prohibit," and "protect." The Department will initiate studies, make proposals, and propose legislation to implement the Plan's policies and actions. The Planning Director may also adopt rules to facilitate the implementation and administration of the Maui Island Plan.

The Department will work with other County departments, State agencies, Planning Commissions and other decision-makers to facilitate the Plan's implementation.

Implementation Program Schedule

As part of the Implementation Strategy, MCC Chapter 2.80B.030.G.4 mandates the development of an implementation schedule to facilitate the implementation of Maui Island Plan policies and actions. The Implementation Program Schedule includes all proposals for action from all Maui Island Plan elements as well as major CIP projects. CIP projects identified in the schedule are derived from agency 6-year CIPs and long-range plans. The schedule does not represent a comprehensive list of all CIP projects; rather, major region-serving projects with an estimated cost over \$1 million are included to facilitate capital improvement programming and serve as a guide for forthcoming large infrastructure budget items. The list does not include repair and maintenance projects.

Components of the Implementation Program Schedule include a brief description of the project or initiative, priority, timing, lead implementation agency, and potential funding source(s). The Implementation Program Schedule is attached as Appendix "A".

OTHER IMPLEMENTATION MECHANISMS

The Implementation Program is intended to identify programs and projects that should be developed over the twenty-year planning period to help implement the Maui Island Plan.

In each chapter of the Maui Island Plan, there are implementing actions that set forth a procedure, program, or technique for effectuating the intent of the supporting policy or policies within its subsection. The County's role in realizing an action can vary depending upon how the implementing action is worded, and what resources exist to support its development. In some cases, the County may act as a support mechanism; in others as a direct contributor.

There may be programs, projects and regulations that have not been considered as part of this Plan, but will later be identified and receive support by their own accord or as a result of the policies or programs within this Plan. The Implementation Program should provide enough flexibility over the life of the Plan to allow for reprioritization, re-scoping, and adjustments to level of funding. Implementation of the actions listed within Appendix "A." and within the Maui Island Plan elements are subject to available funding.

Land Use

The primary means of implementing the directed growth strategy will be through the land use regulatory controls and programs. Existing and proposed planning and regulatory controls necessary to realize the recommendations of the directed growth strategy include:

- **State Land Use Law (HRS, Chapter 205):** State land use districting has helped to contain urban development to urban and rural designated areas. The County will need to work with the State to ensure consistency with the directed growth strategy.
- **County Zoning (MCC, Title 19):** Zoning is the primary land planning tool used on Maui to implement the desired pattern of future development. Updates to Title 19 will be necessary to implement this Plan. In particular, the lot size and density permitted in the agricultural district

ordinance and expanding some districts to allow for mixed uses will be necessary to implement this directed growth strategy.

- **Urban Growth Boundaries (MCC, CH 2.80B):** Delineation of future urban, small town, and rural development is a key component of the County's managed and directed growth plan. The UGBs, STBs, and RGBs provide a consistent approach for deciding where urban, small town, and rural growth can occur, indicating the long term limits of development, and where non-agricultural values and land uses should prevail.
- **Urban Service Areas:** Service Areas closely follow UGBs and identify areas to be supplied with County infrastructure and services. Both the UGBs and the Urban Service Areas are major tools for achieving the goals of the Maui Island Plan and will play a key role in guiding future growth on the island.
- **Transfer of Development Rights:** A TDR program allows for the transfer of development rights from an area with important natural, agricultural, or scenic resources to a designated area, which is suitable for development. A TDR program should be designed to support the land use guidance system, particularly agricultural zoning and the establishment of urban growth boundaries and can be utilized to preserve a combination of working farm lands and prime urban fringe agricultural lands that function as greenways and open space buffers.

Environmental Review

Proposals to change land uses and the environment are often accompanied by an environmental assessment (EA) or environmental impact statement (EIS) when triggered by HRS, Chapter 343. These studies provide a standard process and format to acquire, analyze and report the anticipated impact of development on the environment.

The County should ensure that the information provided in all permit and entitlement applications is current and can be used to effectively analyze existing conditions and projected impacts. Therefore, the County may require applicants to update required plans and studies when current data and information is needed to properly assess the impacts of a project.

Development Character & Density

The County's Community Plans, as well as various components of the development review and regulatory process, affect the character and density of new development. Each implementation mechanism provides the opportunity to carry out the development and land use goals and policies of the Maui Island Plan by creating both a framework and rules by which future development must conform. Each implementation mechanism is further described below:

- **Community Plans;**
- **Zoning;**
- **Subdivision Approval;**
- **Building Permits; and**
- **Design Guidelines.**

The six Community Plans on Maui will be updated to reflect Countywide Policy Plan and Maui Island Plan goals and policies as they pertain to each specific region. Community Plans are more detailed than the Maui Island Plan and contain more region-specific policies and actions. Community involvement and input is an integral part of the Community Plan update process which ensures that each plan addresses its community's distinctive needs and concerns. Future updates to the Community Plans will place more emphasis on developing policies and programs to promote the formation of more livable communities at the town and neighborhood scale.

Zoning, subdivision, and building permit requirements are also important elements of the land use regulatory process and have a considerable influence on the character and density of new development. Zoning regulations control the use, intensity, and character of development on the land. The Maui Island Plan makes recommendations for urbanization of certain non-urban lands. These recommendations will require that the zoning on these lands be changed from predominantly agriculture, to a non-agricultural use. Moreover, there are numerous recommendations for revisions to the zoning code to allow for more mixed-use and higher density development within our existing and planned urban areas as well as changes to our rural and agricultural zoning policies and standards. This should comprehensively rezone lands to implement updated community plan map designations.

The subdivision approval process requires project improvements, which may encompass on-site grading, roadways, curbs, gutters, sidewalks, sewer, water, and electric, to conform to zoning and infrastructure standards. Subdivision requirements can have a significant impact on the character and form of development as well as the probable environmental and socio-economic impacts associated with a project. The requirement for issuance of building permits prior to construction helps to ensure that the approved site and architectural design for the project is implemented and that the project complies with the Uniform Building Code (UBC). The Maui Island Plan makes recommendations for revisions to the subdivision standards and building permit process. The Planning Director and the Director of Public Works shall have the authority to adopt rules to facilitate the implementation and administration of some Maui Island Plan policies and actions.