

LONG RANGE IMPLEMENTATION PLAN



Providing adequate public facilities and infrastructure is essential for the growth of communities, public health and safety, and maintaining the quality of the natural and built environments. The overall responsibility of infrastructure and service delivery on Maui has shifted between the Federal, State, and County government and the private sector. During the early to mid 1900's, the sugar and pineapple plantations and ranching played a major role in community building in Maui County. The Federal, State, and County governments began to play a greater role in public facilities and infrastructure with the advent of World War II and the phase-out of plantation camps. From 1959 to the mid 1970's, the federal government played a significantly greater role in funding public facilities and infrastructure, particularly for highways and wastewater treatment facilities. Since the mid 1970's, 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 as its primary revenue source for funding infrastructure and public facilities. However, with 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 & Public Facilities
- Infrastructure Demand Outpacing Revenues
- Intergovernmental and Intragovernmental Coordination
- A Need for a Clear County Policy on Infrastructure Provision and Growth

To meet the on-going challenges of providing public facilities and infrastructure, the County will need to develop alternative funding sources, seek to improve the planning and implementation process, and seek greater private sector participation in the financing of facilities.

The purpose of this chapter is to establish a broadly defined infrastructure strategy and policy framework to strengthen infrastructure planning and delivery on Maui, and to identify major short, medium, and long-term major capital projects, and associated costs, to address existing service deficits and projected growth to 2030.

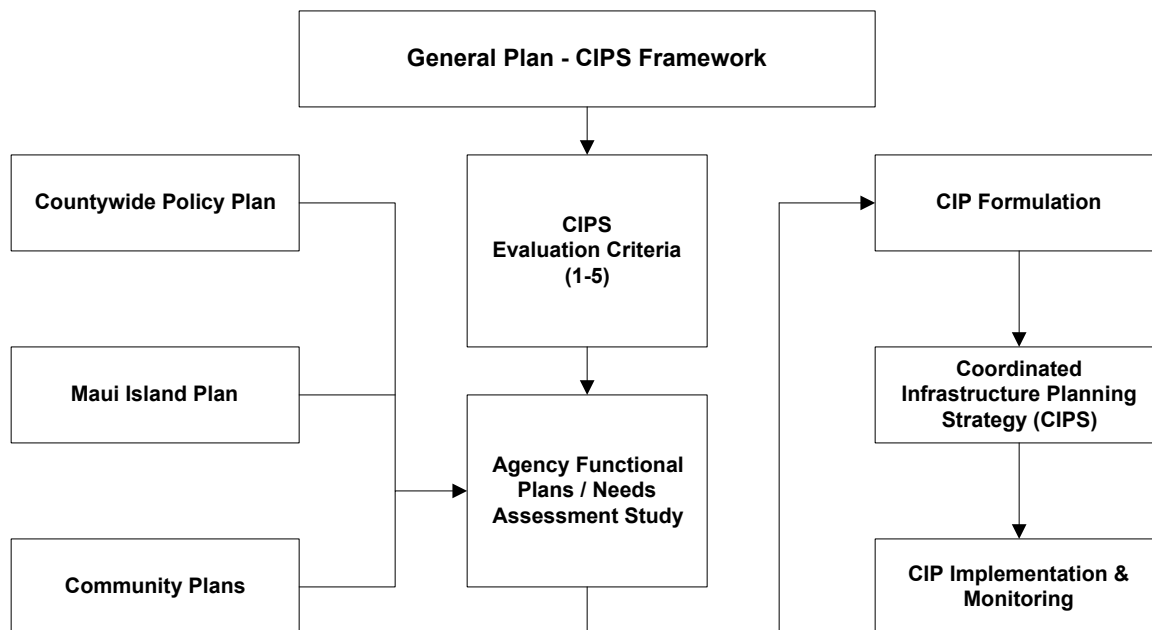
COORDINATED INFRASTRUCTURE PLANNING (CIPS)

The Coordinated Infrastructure Planning Strategy is designed to provide an efficient and equitable means of planning and financing infrastructure improvements. The funding strategy will address infrastructure expansion, existing deficiencies, as well as repair and maintenance of existing systems and facilities.

The Coordinated Infrastructure Planning Strategy (CIPS) is intended to improve the implementation of infrastructure projects by merging long-term planning, project development, and facility maintenance. CIPS is intended to result in a more coordinated, transparent, and efficient process for linking general plan goals with infrastructure investment policy.

Figure III-1 depicts the General Plan - CIPS framework. The Capital Improvement Plan (CIP) 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 would include a 1-year plan (detailed), a 5-year plan (specific), 10-year plan (general) and a 20-year plan (very general).

Figure III - 1: General Plan – CIPS Framework Diagram



The goals of the CIPS are to:

1. Develop a framework to better link and coordinate capital improvement programming and land use decisions with the urban form and design goals envisioned in the General Plan.
2. Create a long term implementation schedule for major CIP projects.
3. Develop a long range budget for major CIP projects and identify major expenditures and controversial or difficult issues in advance.
4. Implement a consistent methodology for planning, design, construction and maintenance of major assets.
5. Predict staffing, equipment, and office space needs and train, empower, and retain staff to accomplish identifiable tasks.

The development of CIPS will fall within the framework of the Countywide Policy Plan, Maui Island Plan, and Maui's six (6) Community Plans and the Molokai and Lanai Community Plans. Population forecasts for a 20-year timeframe and urban growth areas identified in the Maui Island Plan will provide the basis for infrastructure planning for Maui Island. The CIPS will require each department to prepare a 20-year CIP plan for each island within the County and a broad range of estimated budgets consistent with population forecasts and the Countywide Policy Plan, Maui Island Plan, and Community Plans.



The CIP plans will include maps delineating the location of CIP projects, assigned priority, and a summary analysis of the purpose, intent, anticipated cost, and implementation schedule associated with the highest priority regional and *sub-regional* projects. Lastly, the CIPS should have an objective rating system which includes criteria that are appropriate for each facility type. Examples of potential criteria include, as applicable, but not limited to; funding, public health and safety; ongoing reliability major increases to quality of life; efficiency upgrades; planning consistency; and cost-benefit relationship.

In conclusion, the CIPS is proposed as a framework and process to improve CIP implementation in accordance with the Countywide Policy Plan, Maui Island Plan, and Community Plans, development trends and population forecasts. A key emphasis, however, will be placed on flexibility. The plan should be able to respond to changing conditions, taking advantage of new revenue sources and realizing the fiscal constraints of the County and its ability to provide and maintain its facilities.

SYSTEM-WIDE MAJOR CAPITAL IMPROVEMENT REQUIREMENTS AND FINANCING

The purpose of this section is threefold: 1) Provide the County's policy regarding the role and responsibility of the public and private sector for providing growth serving infrastructure and public facilities; 2) Identify major regional County CIP projects necessary to address existing service deficits and projected growth to 2030; and 3) Identify potential funding mechanisms to finance future CIP projects. The infrastructure funding strategy provides an efficient and equitable means of planning and financing infrastructure improvements. Major County CIP projects and potential funding mechanisms are discussed by County agency and include Water, Roads, Transit, Wastewater, Solid Waste, and Public Facilities.

INFRASTRUCTURE PLANNING AND FINANCE POLICY FRAMEWORK

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

1. **Infrastructure Services Policy:**

The County will be responsible for designating new growth areas and the associated areas where infrastructure and public facilities will be supported.

The County Infrastructure Services Policy will be implemented by way of the following strategy:



- **Urban Growth Boundaries.** Through the General Plan process, Urban Growth Boundaries will demarcate the extent to which Maui's urban areas will be allowed to grow. Urban density development will be allowed only within these boundaries.

- **Urban Service Areas.** Urban service areas generally correspond with urban growth areas and will be serviced by infrastructure and public services. Establishing Urban Service Areas allows the County to plan for future growth and make appropriate plans and infrastructure improvements to provide services in the most economical and efficient manner. The County will not support urban density development outside of these areas.
 - **Needs Assessment Study.** Each County agency responsible for infrastructure and facility delivery on Maui will periodically conduct a needs assessment study to assess needed improvements and associated costs to address current infrastructure and facility capacity deficiencies and future requirements generated by new growth. State agencies responsible for infrastructure and facility delivery on Maui will be encouraged to conduct needs assessment studies.
 - **Level-of-Service Standards.** The County will establish community appropriate level-of-service standards, minimum acceptable (baseline) and desired, for each infrastructure and public facility system to ensure adequate services are provided to residents within the urban service areas. The County will encourage State agencies to also establish level-of-service standards.
2. **Infrastructure Expansion Policy:** Developers will be responsible for public facility and infrastructure expansion costs associated with their projects.

The following are several strategies by which the Infrastructure Expansion Policy could be implemented:

- **Subdivision Exactions for On-Site Improvements.** As a condition of subdivision approval, the County will require developers to construct on-site water, roadway, wastewater, park and other on-site infrastructure and public facilities pursuant to County standards. Upon completion of construction, the County may require the developer to dedicate the infrastructure to the County. Developers may also be required to donate easements or other types of partial rights to the County.
- **Impact Fees and/or Special Taxing Districts for Regional Improvements.** Impact fees are designed to mitigate the impact of new development on infrastructure and public facility systems. Impact fees are one-time payments made by the developer, and typically passed on to either the seller of land or homebuyer, to pay for the cost of infrastructure caused by new development. These fees would be assigned on a per unit (residential, visitor accommodation unit) or square footage (commercial/industrial) basis to pay a pro-rata share of the projected cost to expand off-site infrastructure and public facility systems. These fees cannot be used to pay for existing deficiencies outside of the scope of the project. Funds generated from the fees would be placed in a trust to pay for designated capital expansion projects within the service district that the project is located.

Special Taxing Districts can also be established to help fund regional infrastructure projects. The purpose of these Districts is to create a predictable revenue stream that can pay for all or a portion of the debt service associated with large capital projects. Special Taxing Districts provide several benefits, including:

- Removal of high up-front regional infrastructure costs to developers. These costs are financed through the issuance of long-term government bonds and paid back through special taxes paid by the landowner/developer and eventually the homebuyer.
- Reduction in purchase price paid by homebuyers. The special tax paid by the homebuyer may be less than the cost of financing additional debt in private equity markets to support a higher home price. In addition, special taxes are generally structured to be tax deductible on the Federal Tax Return, which also benefits the homebuyer.
- The primary benefit to the County is the avoidance of risk associated with a large capital outlay for infrastructure, since a predictable revenue source is earmarked to pay the debt service.

3. **Infrastructure Concurrency Policy:** Necessary regional public facility and infrastructure capacity improvements will be constructed prior to or concurrently with development of planned growth areas. Improvements will be constructed in accordance with the County's Needs Assessment Study and level-of-service standards.

The following are several strategies by which the Infrastructure Concurrency Policy could be implemented:

- ***CIP Programming.*** The County will have a clear and predictable method for CIP programming based on the Coordinated Infrastructure Planning Strategy (CIPS). The CIPS is prepared by County departments and will be flexible and is subject to final approval, through the budgeting process, by the County Council.
- ***CIPS.*** The CIPS is intended to improve the way Maui County implements infrastructure projects by merging long-term planning, project development, and facility maintenance. CIPS will create a long-term implementation schedule and budget for major CIP projects that is coordinated with land use decisions.
- ***Infrastructure Funding Strategy.*** To ensure that no ambiguities exist regarding infrastructure funding responsibilities, the County will establish an infrastructure funding strategy. This strategy will ensure that infrastructure improvements are implemented prior to or concurrent with development by the responsible party depending on the nature of the infrastructure project.

4. **Existing Deficiencies Policy:** The County will be responsible for funding operations and capital improvements to address existing deficiencies of County owned and operated systems.

The following are suggested strategies to implement the Existing Deficiencies Policy:

- A. Identify existing service deficiencies and project future operations and maintenance needs.** Using the CIPS, Needs Assessment Study, 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*.
- B. Address structural imbalance between revenue needs and expenditures for infrastructure systems.** Through development of traditional and alternative funding sources, the County will address projected revenue and expenditure imbalances necessary to achieve the adopted minimum level-of-service standards. This strategy will be two-fold:
- **Increase Revenues from Traditional Funding Sources.** The County and State may need to raise water service fees, sewer rates, land fill fees, gas taxes, property taxes, and other traditional funding sources to ameliorate existing capacity deficits and provide adequate maintenance of existing service systems. Traditional revenue sources will be easier to utilize during the short- to medium-term because they already exist. However, during the long-term alternative revenue sources may better allocate infrastructure costs to those that are the primary beneficiaries of the investment.
 - **Develop and Utilize Alternative Funding Sources.** Numerous alternative funding sources could 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. Table III-1, Description of Alternative Revenue Sources, and Table III-2, Sources of Existing or New Revenues for Infrastructure, describe alternative revenue sources that the County could pursue to raise needed revenues.

Table III- 1: Description of Alternative Revenue Sources

Funding Source	Description
Public Private Partnerships	Partnering with private sector providers to design, finance, build, and/or operate infrastructure systems and public facilities may be an appropriate and cost-effective alternative to more traditional revenue sources. The chief advantage of such partnerships is that infrastructure can often times be brought to the community faster, and at a significantly lower cost, than projects implemented solely by the public sector. Public-Private Partnerships come in many different forms including Build Operate and Own (BOO), Build Operate and Transfer (BOT), and Private Finance Initiatives (PFI). Depending upon the circumstances, private sector involvement can vary from minimal to extensive.
Strategic Budget Allocations	Strategic Budget Allocations are when a designated portion of a tax bill or a rate bill, such as a sewer rate bill, is deposited into a special fund. The fund is invested, and the interest earned re-invested, with the funds being earmarked for specific future CIP projects.
Trust Funds	Similar to Strategic Budget Allocations, monies in trust funds are generally provided from a percentage of tax revenues that are dedicated to a specific investment area. Trust Funds provide a dedicated funding source and are less expensive in the long-term than bonds or loans. These funds could be established to help pay for major upgrades and repair of existing systems.
Special District Financing	Special District Financing, i.e. Special Taxing Districts, Benefit Assessment Districts, Business Improvement Districts, Redevelopment Districts, can be established to help fund major upgrades to utility services within a designated area. The establishment of these districts often requires the approval of area landowners affected by the improvements. Revenues are typically generated through special levies, assessments, or tax increment financing. This method of funding is equitable since those most likely to benefit from the public investment are those paying for the services. Planned Growth Areas as well as Redevelopment areas are likely candidates for such funding programs.
Real Estate Transfer Tax	Request the State to utilize the real estate transfer tax as a method of having growth pay for itself. A real estate transfer tax is an excise tax on property conveyance. The State could use funds collected from the tax to finance CIP operations and maintenance and expansion projects on Maui.
State and Federal Funding	Although State and Federal funding have declined in the last few years, the County should continue to explore these governmental funding sources to finance major CIP projects. The primary State funding source relied upon by the County is the State Revolving Fund (SRF) for water and wastewater CIP projects. Potential Federal funding sources also include the U.S. Environmental Protection Agency (EPA), Federal Transit Administration (FTA), U.S. Department of Agriculture (USDA), U.S. Department of Housing and Urban Development (HUD), and the U.S. Department of Commerce Economic Development Agency.
Congestion Pricing / Tolls	Congestion pricing is the practice of charging motorists more to use a roadway during periods of the heaviest use. Tolls charge motorists for the use of roadways, regardless of the time of use. Congestion pricing and tolls have a high correlation between those that benefit from roadway use and those that pay for roadway improvements. Congestion pricing reduces automobile use during periods of peak congestion. Congestion pricing and tolls encourage commuters to use <i>alternative forms of transportation</i> .

Funding Source	Description
Urban Road and Rural Road Maintenance Districts	Urban Road Maintenance Districts (URMD) and Rural Road Maintenance Districts (RRMD) could be established to help fund roadway operation and maintenance in both urban and rural areas. Revenues generated within the district can be based upon the assessed value of property.
Street Utility Fees	A Street Utility Fee could be established through the current utility billing system to collect revenue to fund capital projects to address current roadway deficits.
Residential Landfill Disposal Fees	Currently the County does not charge residential customers for ridding their waste at the landfills. If fees were established for residential waste disposal it could generate additional revenues for the Solid Waste Division.
Real Estate Excise Tax (REET)	REET consists of money derived from a dedicated percentage of the selling price of real property. Funds collected through a REET can be placed in a special fund to help fund park related capital projects. REET revenues will fluctuate with the local real estate market, which would affect the amount of money collected annually from this source. Several mainland communities currently use REET to help fund capital projects. Set asides typically range from one-quarter percent to one percent.
Transfer of Development Rights (TDR)	TDR's can be a helpful tool to reduce the cost of acquiring coastal lands and open space. A key strategy of the County's shoreline and open space land acquisition program should be the implementation of a TDR program.
Business Improvement Districts	Business Improvement Districts operate like Benefit Assessment Districts but are directed towards improving the business climate within a defined area. Business Improvement Districts commonly fund activities such as streetscape beautification, park maintenance, and public safety. Maui's various commercial districts, including downtown Wailuku and the surrounding Redevelopment Area, downtown Kahului, Paia, and Kihei could benefit from the establishment of Business Improvement Districts.
Benefit Assessment Districts	Benefit Assessment Districts have become an increasingly popular financing tool used by local governments to help fund park, library, fire, flood control, and other capital projects. Properties within a Benefit Assessment District have an annual levy placed on their properties to help fund projects within the district. Many agencies throughout California have established annual park maintenance and future capital replacement benefit assessments in the range of \$100 to \$300 or more per year. These funds are used to fund capital improvements, land acquisition and related long-term debt service, as well as the costs of on-going maintenance. A Benefit Assessment can be applied to a neighborhood, special district, or larger geographical areas such as a Community Plan District, or the entire island.

Table III - 2: Sources of Existing or New Revenues for Infrastructure

Infrastructure	Operation & Maintenance	Capital Investment (Deficits)	Capital Investments (Growth)
Wastewater	<ul style="list-style-type: none"> - Monthly sewer fees¹ - Monthly reclaimed water fees + Special District Financing 	<ul style="list-style-type: none"> - Wastewater hook-up (impact) fees - Bond financing and SRF loans based on rate revenues and fees + Special District Financing 	<ul style="list-style-type: none"> - Wastewater hook-up (impact) fees - Subdivision - on-site improvements - Bond financing & SRF Loans based on rate revenues & fees + Impact Fees for regional improvements + Public-private partnerships + Special District Financing
Water	<ul style="list-style-type: none"> - Monthly water fees - Water system development (impact) fees - Special District Financing 	<ul style="list-style-type: none"> - Water system development (impact) fees - Bond financing and SRF loans based on rate revenues and fees + Special District Financing 	<ul style="list-style-type: none"> - Wastewater hook-up (impact) fees - Subdivision - on-site improvements - Bond financing & SRF Loans based on rate revenues & fees + Impact Fees for regional improvements + Public-private partnerships + Special District Financing
Roadways	<ul style="list-style-type: none"> - Federal and State Funding Sources - County Gas Tax + Urban/Rural Road Maint. Districts + County Gas Tax 	<ul style="list-style-type: none"> - Federal and State Funding Sources - County Gas Tax + Congestion pricing / tolls + Street Utility Fee 	<ul style="list-style-type: none"> - Federal and State Funding Sources - Subdivision exactions for on-site improvements + Impact Fees + Public-private partnerships
Transit	<ul style="list-style-type: none"> - Federal and State Funding Sources - County Gas Tax - Bus Fares + Urban/Rural Road Maint. Districts + County Gas Tax 	<ul style="list-style-type: none"> - Federal and State Funding Sources - County Gas Tax + Congestion pricing / tolls + Street Utility Fee 	<ul style="list-style-type: none"> - Federal and State Funding Sources - Subdivision - on-site improvements + Impact Fees + Public-private partnerships
Parks	<ul style="list-style-type: none"> - General Fund revenues + Benefit Assessment District 	<ul style="list-style-type: none"> - General Fund revenues - Bond financing based on GF revenues - Maui Open Space Preservation Fund + Benefit Assessment District + Real Estate Excise Tax + Transfer of Development Rights 	<ul style="list-style-type: none"> - Subdivision-on-site improvements - Park Assessment fees + Transfer of Development Rights

¹ Revenues that are currently used are indicated with a minus sign “-“. Revenues that are proposed as potential new funding sources are indicated with a plus sign “+”.

Long Range Implementation Plan

Infrastructure	Operation & Maintenance	Capital Investment (Deficits)	Capital Investments (Growth)
Solid Waste	<ul style="list-style-type: none"> - Landfill disposal and collection fees - Grant Revenues 	<ul style="list-style-type: none"> - Landfill disposal and collection fees - Grant Revenues - User charge & bond financing based on user charge 	<ul style="list-style-type: none"> - Landfill disposal and collection fees - Grant Revenues - Bond financing based on collection fees
Police / Fire	<ul style="list-style-type: none"> - General Fund revenues 	<ul style="list-style-type: none"> - General Fund revenues - Bond financing based on GF & alternative Revenue sources + Special District Financing 	<ul style="list-style-type: none"> - 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. Date ranges include: short-term, 2008 to 2015; mid-term, 2016 to 2023; and long-term, 2024 to 2030. 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) Enlargement and improvement of treatment plants; and 5) Construction of new reservoirs. The majority of Maui's water infrastructure systems were constructed decades ago and are in need of major repairs and in some instances complete replacement. According to the DWS, the overall condition of all 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 Island's regional systems.

Table III - 3: Major Capital Improvement Projects - Water Supply

Project	Timing	Estimated Cost
<i>Maui Island's Regional Water Systems</i>		
Source development to meet demand to 2030. The <i>Water Section</i> of Chapter 7 discussed various source development options for all of the island's water systems. A wide range of costs exist for source development depending on the combination of new sources pursued. Costs for the development of individual sources ranged from \$6 million to \$126 million, with total cost for source development likely falling in the upper range, or more, due to the need for a combination of new sources.	On-going	TBD

CURRENT REVENUES VERSUS PROJECTED EXPENDITURES

Current DWS revenues 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 two categories; repair and maintenance, 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 service new growth areas. Additionally, 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 in the beginning of this section.

Repair and Upgrades to Existing Facilities

Repairs, maintenance, and upgrades to 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 makes distribution of such costs more equitable throughout the community. The primary funding sources for maintaining existing facilities include:

- **Water Service Fees.** Bi-monthly water service fees 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 will need to increase water service rates by 70% between 2007 and 2025 to adequately fund maintenance and upgrade projects.

Facility Expansion

Costs associated with water supply storage and distribution system expansion should be borne 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, impact fees and or special taxing districts. Tables III-1, Description of Alternative Revenue Sources, and Table 10-2, Sources of Existing or New Revenues for Infrastructure, identify additional funding opportunities to support water facility expansion.

ROADWAYS - MAJOR CAPITAL IMPROVEMENTS

The following is a summary of the major capital improvement requirements for roadways for each Community Plan region. The primary source relied upon for this section was the *Maui Island Traffic Impact Fee Report and Comprehensive Roadway Master Plan* (November 2006) prepared by Kaku Associates for the County of Maui, Department of Planning. Both State and County roadway improvements necessary to accommodate island growth to 2030 are listed. However, State roadway



improvement costs are only presented for informational purposes and are not the financial responsibility of the County. Cost estimates for County roadways will be funded through a combination of Federal, State, County and private funds.

Table III - 4: Major Capital Improvement Projects – Roadways

Project	Timing	Estimated Cost
<i>Central Maui Roadways</i>		
Secure right-of-way (ROW) and construct Kahului Airport By-Pass (State)	Mid-term	(\$13 million)
Secure ROW and construct Waiale Connector between Waiale and Maui Lani	Mid-term	\$13.7 million
Secure ROW and construct Lono Avenue extension to Kuihelani Highway	Mid-term	\$1.3 million
<i>Kihei-Makena Roadways</i>		
Secure ROW and construct Kihei North-South Collector Road	Mid-term	\$37.6 million
<i>West Maui Roadways</i>		
Secure ROW and construct Lahaina Bypass from Keawe Street to Lahainaluna Road (State)	Short-term	(\$45 million)
Construct Keawe Street extension	Short-term	\$4 million
Secure ROW and construct Honoapilani widening from Aholo Street to Lahainaluna Road (State)	Short-term	(\$11.5 million)
Secure ROW and construct Lahaina Bypass from Lahainaluna Road to Launiupoko (State)	Mid-term	(\$56.2 million)
Secure ROW and construct Mill Street extension from Aholo Street to Keawe Street	Mid-term	\$23.8 million
Secure ROW and construct Lahaina Cane Haul Road from Ukumehame to Aholo Street	Long-term	\$17.5 million
<i>Paia-Haiku Roadways</i>		
Secure ROW for Hana Highway Bypass (State)	Long-term	(\$12.4 million)

CURRENT REVENUES VERSUS PROJECTED EXPENDITURES

Capital Improvement Project expenses can be broken down into 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. In addition, as the island’s population grows to 2030, roadway systems will need to be expanded to service new growth areas.

FUNDING STRATEGY

To cover growing operational and capital expenses revenues will need to increase. Addressing escalating expenses will require a combination of increasing current revenue sources and pursuing additional sources.

Repair and Upgrades to Existing Facilities

Repairs, maintenance, and upgrades to 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 could be increased to provide more funding for repairs, maintenance, and upgrades to existing roadways.

- **Fuel Tax.** The fuel tax is based on the number of gallons of fuel purchased. It's one of the most direct user related source of funds available since the amount paid by drivers is proportional to trip length.
- **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.
- **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.

Facility Expansion

The primary funding mechanisms for funding infrastructure expansion will be subdivision exactions, impact fees and or special taxing districts. Tables III-1, Description of Alternative Revenue Sources, and Table III-2, Sources of Existing or New Revenues for Infrastructure, identify additional funding opportunities to support roadway expansion.

TRANSIT - MAJOR CAPITAL IMPROVEMENTS

Three major projects have been identified by the Maui Department of Transportation 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 III - 5: Major Capital Improvement Projects – Transit

Project	Timing	Estimated Cost
<i>Maui Public Bus System</i>		
Acquire land and construct transit center/baseyard in Central Maui	Short-term	\$12 million
Acquire land and construct transit hub and park-n-ride in Maalaea	Mid-term	\$4 million
Acquire land and construct transit hub and park-n-ride in Central Maui	Mid-term	\$4 million

CURRENT REVENUES VERSUS PROJECTED EXPENDITURES

To accommodate projected expenditures for transit operations, repair and maintenance, and growth serving capital improvements, current revenues will need to significantly increase. The transit system is currently operating at one hour headways. As headways decrease across the system to every half hour, operational expenses will double, requiring a considerable increase in funding. Additionally, as service routes are added and expanded, and as higher capacity vehicles are needed, operating costs will again increase.

Due to the infancy of Maui's transit service, repair and maintenance expenses have been minimal. However, these expensive are likely to increase as buses age and require repair and maintenance. Additionally, as transit supportive infrastructure is installed throughout the island, these facilities will also require ongoing upkeep and repairs.

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.

Repair and Upgrades to Existing Facilities

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

- **Bus Fares:** One-way bus fares are one dollar for most routes. 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.

Facility Expansion

The primary funding mechanisms for funding infrastructure expansion will be subdivision exactions, impact fees and or special taxing districts. Tables III-1, Description of Alternative Revenue Sources, and Table III-2, Sources of Existing or New Revenues for Infrastructure, identify additional funding opportunities to support transit expansion. Other potential funding sources include:

- **Federal Funding:** The Department 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 Section 5311 grants. Under this program, grant recipients are required to supply 20% matching funds for capital projects. The purchase of the land for the facilities could qualify as the 20% local match, with planning, design, and construction expenses covered by the federal grant.
- **Selling Advertising Space:** Advertising space inside and outside of buses and on shelters and benches could be sold to increase revenues for the Department.

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; 4) Tsunami and shoreline erosion protection; and 5) Major repair, upgrades, and plant expansion to the Lahaina WWRF.

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 upholds that with ongoing maintenance and upgrades the existing physical plant, collection, and transmission systems can be maintained in fair to good condition.

The following is a summary of the major capital improvement requirements for each wastewater system.

Table III - 6: Major Capital Improvement Projects – Wastewater

Project	Timing	Estimated Cost
<i>Maui Island’s Wastewater Systems</i>		
Continue to maintain and replace existing infrastructure, and expand as required, for the Central, West and South Maui WWRF. A wide range of costs exists for repair, maintenance and expansion of the systems depending on the type of work required. Costs range from \$30 million per year to \$100 per year	On-going	TBD

CURRENT REVENUES VERSUS PROJECTED EXPENDITURES

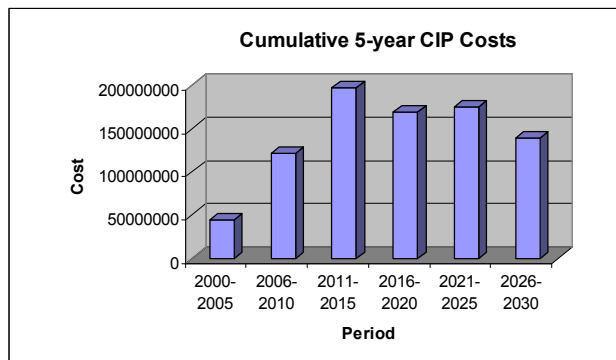
The Division’s CIP expenses can be broken down into two categories; rehabilitation and replacement, and growth serving capital improvements. Due to the age of the island’s wastewater infrastructure, extensive repairs and replacements to sewer lines, force mains, pump stations, laterals, and treatment 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.

As the island’s population grows to 2030, system capacity will need to be expanded to treat additional flows. Conservation of potable 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 10-2 identifies cumulative CIP costs over 5-year intervals from 2000 to 2030. Between 2005 and 2010 cumulative 5-year CIP costs are anticipated to increase from \$44.9 million to \$121.8 million, an average annual increase of 22%.

Figure III - 2: Cumulative 5-year CIP Costs

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 in order to pay additional debt service. In addition to increasing sewer rates, greater use of alternative funding sources should also be considered.



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 and plant and collection system expansion.

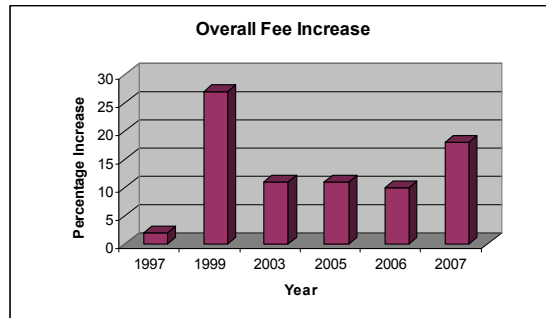
Repair and Upgrades to Existing Facilities

Incremental repair, maintenance, and upgrades to 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 to 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 six of the last ten years. Since 2003 wastewater rates have increased by 50%, and are projected to increase by approximately 8% per year for the next five years.

Figure III - 3: 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 will 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.

Facility Expansion

The primary funding mechanisms for funding infrastructure expansion will be subdivision exactions, impact fees and or special taxing districts. Tables III-1, Description of Alternative Revenue Sources, and Table III-2, Sources of Existing or New Revenues for Infrastructure, identify additional 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) Landfill design, permitting, and construction; 2) Landfill closure; and 3) Recycling facilities and improvements. The Department of Environmental Management, Solid Waste Division is currently updating their Integrated Solid Waste Management Plan (ISWMP) and completion is anticipated in 2009. Once the plan is completed, the capital costs should reflect the direction and goals stated in the ISWMP.

The following is a summary of the major capital improvement requirements for the Department of Environmental Management, Solid Waste Division to 2030.

Table III - 7: Major Capital Improvement Projects - Solid Waste

Project	Timing	Estimated Cost
Central Maui Landfill		
Acquire land and construct expansion phases of the Central Maui Landfill and close phases as required. Additional improvements include a maintenance facility, a materials recovery facility, and the implementation of curbside recycling. Costs for the development of these projects range from \$4 million to \$100 million.	On-Going	tbd

CURRENT REVENUES VERSUS PROJECTED EXPENDITURES

The Division’s CIP budget is largely allocated for growth serving capital improvements rather than repair and maintenance projects. Unlike water supply and wastewater that have a large amount of infrastructure in need of repair or replacement, the Solid Waste Division has a considerably smaller infrastructure system with minimal needed maintenance. One potential project that could significantly increase the Division’s expenses is the implementation of a curbside recycling program. As waste generation grows on the island and programs such as curbside recycling are initiated, the Division’s operating expenses will increase.

Growth serving capital improvements account for the majority of the Division’s CIP expenses. Major growth serving capital improvement projects include land acquisition, landfill construction, and materials recovery facility construction. As the island’s population grows and solid waste capital improvements become necessary, additional funding will be needed.

FUNDING STRATEGY

The solid waste system is different from other County infrastructure and facilities in that expansion of facilities will be needed regardless of population growth. Due to this fact, costs associated with solid waste system operation, repair, maintenance, *and* expansion should be borne by all users to ensure that costs are distributed equitably. The County will need to increase revenues to cover the Division’s growing operational and capital expenses. Addressing escalating expenses will require a combination of increasing current revenue sources and pursuing additional sources. Currently, G.O. 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 Department expenses.

Repair, Upgrades, and Expansion of Existing Facilities

- **Landfill Disposal Fees.** Landfill disposal fees are charged to commercial haulers for disposal of waste at the County’s landfills. Disposal fees include the tipping fee, green-waste disposal fee, bio-solids disposal fee, and the recycling surcharge, all of which are proposed to increase for FY08. These rate increases are needed to cover rising operating costs and more closely cover the actual expenses of the landfill.
- **Refuse Collection Fees.** Refuse collection fees are charged to residents and businesses 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 due to increasing waste generation from the growing population.

Tables III-2, Description of Alternative Revenue Sources, and Table III-3, Sources of Existing or New Revenues for Infrastructure identify 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 Parks Department.

Table III - 8: Major Capital Improvement Projects – Parks

Project	Timing	Estimated Cost
<i>Central Maui</i>		
Maui Lani Park	Short-term	\$4.5 million
Waihee Beach Park Expansion	Mid-term	\$4 million
Central Maui Regional Park and County Fairgrounds	Mid-term	\$50 million
Kanaha Beach Park Expansion	Long-term	\$4 million
<i>Kihei-Makena</i>		
South Maui Community Park Phase IA & B	Short-term	\$23.5 million
South Maui Community Park Phase II	Mid-term	\$20 million
Kamaole III Expansion	Mid-term	\$3 million
Kihei Beach Reserve	Long-term	\$3 million
<i>West Maui</i>		
Wainee Park Expansion	Mid-term	\$7 million
<i>Paia-Haiku</i>		
Baldwin Park Expansion	Long-term	\$2 million

Other major park projects, or related projects, include the realignment of North Kihei Road (Kealia), the Hookipa Expansion and Highway Realignment, the Pali to Puamana Park and the Kaanapali District Park.

CURRENT REVENUES VERSUS PROJECTED EXPENDITURES

With the island’s growing population greater demand is being placed on the Department’s facilities. 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 Parks 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 Police, Fire, Highways, Transit, and Housing, it is especially difficult for parks 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 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. New funding sources should be targeted to the acquiring land and facilities for active and passive recreation, including shoreline lands

Acquisition of Land and Facilities

All Maui Island residents and new development shall 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 service new growth. The following funding strategy is suggested as a means of increasing increase park resources and insuring 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 of resident population, as described in the *Public Facilities Assessment Update*, 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. 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 that a *minimum of one percent* of annual property tax revenues be placed into a special fund for the protection 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.
- **Real Estate Excise Tax (REET).** REET consists of money derived from a dedicated percentage of the selling price of real property. Set asides typically range from one-quarter percent to one percent. Assuming Maui County had such a program, in 2003 approximately \$9.2 million (1/4%) to \$36.8 million (1%) could have been generated to fund park projects based on the value of land transactions that year. If given the authority by the State, REET could be considered as a potential funding source to support park land and open space acquisition programs.

- **Benefit Assessment Districts.** Benefit Assessment Districts have become an increasingly popular financing tool used by local governments to help fund park projects. Many agencies throughout California have established annual park maintenance and future capital replacement benefit assessments in the range of \$100 to \$300 or more per year. These funds are used to fund capital improvements, land acquisition and related long-term debt service, as well as the costs of on-going maintenance. The County could consider establishing such districts on a regional scale to help fund sub-regional park facilities and at an island-wide scale to fund regional, or island-wide, park facilities.
- **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 the USFWS Endangered Species Act. The Legacy Land Conservation Program and the Hawaii Coastal and Estuarine Land Conservation Plan are also important potential funding sources.

Streetscape Beautification and Landscape Maintenance

- **Business Improvement Districts.** Business Improvement Districts operate like Benefit Assessment Districts but are directed towards improving the business climate within a defined area. Maui's various commercial districts, including downtown Wailuku and the surrounding Redevelopment Area, downtown Kahului, Paia, and Kihei could benefit from the establishment of Business Improvement Districts. Business Improvement Districts commonly fund activities such as streetscape beautification, park maintenance, and public safety.

PUBLIC FACILITIES – MAJOR CAPITAL IMPROVEMENTS

This section discusses CIP projects and funding for fire control, police, and government offices and parking.

The following is a summary of the major capital improvement requirements for public facilities to 2030. The primary sources relied upon for this section were personal interviews with the Fire and Police Departments and general cost estimates for expanded government office and parking facilities.

Table III - 9: Major Capital Improvement Projects - Public Facilities

Project	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	Mid-term	\$31.2 million
<i>Regional Police Facilities</i>		
Kihei Police Station (to alleviate hardship to the Wailuku Police Station)	Short-term	\$40 million
<i>Government Offices and Parking</i>		
Improve the Kalana O Maui, Old Courthouse, and Kalana Pakui buildings and redevelop or construct new office space and parking within the Wailuku Civic District. Costs for the development of these projects range from \$3.5 million to \$50 million.	On -Going	tbd

FUNDING STRATEGY

The County will need to increase revenues to cover growing expenditures for public facilities to 2030. The primary funding sources for fire and police facilities and 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 will need to increase. However, since these two funding sources are also heavily relied upon by numerous other County agencies it would be prudent for the County to pursue alternative sources of funding to augment the General Fund and G.O. bonds.

Facility Expansion

Tables III-1, Description of Alternative Revenue Sources, and Table III-2, Sources of Existing or New Revenues for Infrastructure, identify additional funding opportunities to support public facility expansion.

PROJECT AND OPERATIONS MANAGEMENT

Implementation of Maui Island Plan goals and policies will require the coordinated effort from numerous groups including County and State agencies, the private sector, and the community. Managing and facilitating this complex process will require the establishment of an efficient and comprehensive project and operations management approach.

Implementation efforts will be overseen by the Department of Planning, working closely with other State and County agencies. Key elements of the management approach include the establishment of a General Plan Implementation Committee (GPIC), initiating the CIPS, and establishing a monitoring and evaluation program.

General Plan Implementation Committee (GPIC)

The Department of Planning will form a General Plan Implementation Committee (GPIC) comprising the Directors of applicable State and County Agencies and necessary technical staff. The purpose of the GPIC will be six-fold:

1. Facilitate agency compliance with MCC Chapter 2.80B.030.I “Status Reports”, which states *“Each agency shall prepare a status report on its implementation and enforcement of the General Plan, which shall be transmitted to the planning director at the same time the agency submits the third-quarter budget implementation report pursuant to section 3.04.050 of this code. The planning director shall also contact persons outside County government for status reports on appropriately assigned implementation actions. The planning director shall issue a report annually providing a detailed explanation of the implementation and enforcement of the General Plan and the community plans to the mayor and the council.”*
2. Provide the necessary venue to support greater intergovernmental and intragovernmental coordination, information sharing, dialogue, and collaboration on General Plan implementation
3. Assist the Department of Planning with monitoring and evaluation of plan implementation and attainment desired outcomes
4. Disseminate information to the public through the County web-site, and other appropriate means, regarding the on-going status of General Plan projects

Coordinated Infrastructure Planning Strategy

The Mayor's Office should have primary responsibility to initiate and oversee the CIPS process. The CIPS will be developed within the framework of the Countywide Policy Plan, Maui Island Plan, and the Community Plans. The CIP plans will include maps delineating the location of major CIP projects and an assigned priority based on established criteria and the ability to double-up or "piggy-back" projects where possible. In addition, the Finance Department will need to coordinate with the Mayor's office and various departments to develop long-range funding plans for the CIP projects.

Monitoring and Evaluation

The Department of Planning will conduct monitoring and evaluation of plan implementation through its annual progress report to the Mayor and County Council. At least every five years the Department of Planning will attach an addendum to this report measuring the plan's progress against a series of implementation benchmarks and environmental, cultural, and socio-economic indicators designed to measure the attainment of Maui Island Plan goals and objectives. This effort will require close coordination with stakeholder agencies, community groups, and the private sector. The Monitoring and Evaluation Program will be further discussed in the following section.

IMPLEMENTATION PROGRAM SCHEDULE

As part of the Implementation Strategy, MCC Chapter 2.80B030.G.4 mandates the development of an implementation schedule to facilitate the implementation of Maui Island Plan polices 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 \$2 million are included to facilitate capital improvement programming and serve as a heads-up for forthcoming large infrastructure budget items.

Components of the Implementation Program Schedule include a brief description of the project or initiative, timing, priority, rationale for the action, lead implementation agency, order of magnitude cost estimate, and potential funding source(s). Projects are identified as either *High* or *Medium* priority. Projects that are identified as high priority provide immediate relief or mitigation to address a critical issue, significantly enhance quality of life, and/or could be potentially more difficult to implement at a later date in time. Projects that are identified as medium priority are not as time sensitive as high priority projects, are likely to take more time to achieve desired results, and/or are considerably expensive. The Implementation Program Schedule is attached as Appendix C.

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