

## 6.0 FISCAL MODULE

### 6.1 Overview

The Fiscal Module of the CCIAM estimates the potential cost of user-defined development scenarios and the resulting impact on government expenditures. The primary indicators of a governmental entity's fiscal condition are revenues, expenditures, operating position, debt structure, unfunded liabilities, and the condition of capital facilities, infrastructure, and community need. The module uses annual government expenditures per capita as the primary indicator of the fiscal impact of development. The essential underlying assumption for this approach is that local governments will set *ad valorem* tax millage rates at levels necessary to meet expenditures. Therefore, a scenario that results in a higher per capita government expenditure indicates pressure on government to increase revenue, including increasing taxes.

In this module, current expenditures are adjusted for unfunded liabilities and condition of capital facilities, infrastructure, and community need. "Unfunded liabilities" reflect the cost of those programs or improvements the government has committed to pursue, but that are not yet funded. Adjusted expenditures are expressed as both capital and operating expenditures. This breakdown provides a means of immediate analysis of whether the expenditures are for typical governmental operations or for establishing capital facilities or infrastructure.

Government expenditures are expressed on a per capita basis, which is a measure readily adaptable to modeling. The main assumptions made for this module are as follows:

- Local government annual expenditures drive local government annual revenues. Typically local governments project non-*ad valorem* tax revenues based on historical trends, adjusted for particular events, and then establish *ad valorem* tax millage rates at the level necessary to meet approved expenditures included in the budget.
- Local government annual expenditures include the annual debt service costs for existing capital facilities and the annual debt service costs for new capital facilities required to meet additional capacity resulting from new development.
- The annual cost of funding any existing major unfunded liabilities (e.g., capacity deficits, and substandard facilities) can be projected.
- Projected per capita local government annual expenditure is the most comprehensive single indicator of the fiscal impact measures.

## 6.2 Module Structure

The Fiscal Module is a “spreadsheet” model of projected government expenditures and projection of expenditures on a per capita basis for both local governmental jurisdictions and Wastewater Planning Units. Expenditures are derived from a combination of operating costs and debt service costs. In addition, expenditures are also projected and adjusted for unfunded liabilities for current needs. Unfunded liabilities include supplemental expenditures necessary to address current deficiencies that are above currently funded levels of government budgets (e.g., necessary improvements to school structures or actions necessary to comply with the Wastewater and Stormwater Master Plans).

The Fiscal Module consists of three related components (Table 6.1). The Per Capita Governmental Expenditures and Per Capita Government Expenditures Adjusted for Unfunded Liabilities components feed directly to the Allocation by Planning Area Component. The output of the first component is the unadjusted government total expenditure and per capita expenditure for each jurisdiction. The second component adjusts this value for current unfunded liabilities and then re-adjusts the number for scenario based unfunded liabilities. The third component distributes the expenditures across planning areas and jurisdictions.

**TABLE 6.1**  
**FISCAL MODULE COMPONENTS**

<b>Component</b>	<b>Elements</b>
Per capita governmental expenditures	Annual operating expenses and debt service. Adjustment to per capita basis.
Per capita governmental expenditures adjusted for unfunded liabilities	Adjustment of existing per capita expenditures for unfunded liabilities. Revision of per capita expenditures for unfunded liabilities for scenario conditions.
Expenditures by planning area	Adjustment of per capita expenditures by planning area.

The endpoint of this module is an estimate of government expenditures, adjusted for unfunded liabilities, for user-defined scenarios. This result is compared to the governmental expenditures adjusted for unfunded liabilities for the existing condition, and for the unadjusted expenditures for the current conditions. This allows a comparison of the effects of the scenario and of current unfunded liabilities. Results allow the evaluation of potential tax rate costs for individual citizens within jurisdictions or wastewater planning units, and the evaluation of total costs for each governmental jurisdiction.

This module interfaces directly with the Socioeconomic Module and the Integrated Water Module, receiving inputs from both of those modules in terms of population and of per capita costs of water supply and treatment respectively.

Data for this module was identified and acquired from the local governments in Monroe County; local government annual financial reports provided to the Florida Department of Banking and Finance, Bureau of Accounting for the 1998-1999 and 1999-2000 fiscal years; and fiscal indicators included in the International City Managers Association Fiscal Impact Analysis Manual. This module uses the following inputs:

**Population Estimates.** The functional population estimate is taken from the socio-economic component of the model.

**Government Jurisdiction Expenditures Data.** Each local government jurisdiction's total annual expenditures for the 1999-2000 Fiscal Year, taken from the Annual Local Government Financial Report provided to the Florida Department of Banking and Finance, Bureau of Accounting was summarized and provides initial conditions.

**Government Jurisdiction Expenditures Not Presently Funded.** These are projected expenditures necessary to meet current government commitments. They include additional space for the Monroe County School System (Monroe County 2001), and the implementation of the provisions of the Wastewater (CH2M HILL 2000) and Stormwater (CDM 2000) Master Plans. These unfunded liabilities are added to current expenditures.

**Wastewater Planning Area/Government Jurisdiction Relationship.** This includes a GIS layer of the wastewater planning areas included within each government jurisdiction.

**Fixed Capital Costs/Annual Debt Service Expenditures Conversion Tables.** These tables project bond financing of fixed capital facilities for a 20-year term at 5.5 percent financing including bond transaction costs, thereby resulting in the annual debt service expenditure that would be incurred by the appropriate government jurisdiction.

The CCIAM geodatabase includes a GIS layer relating wastewater planning units and governmental jurisdictions. This layer is regenerated if either set of boundaries is altered in the GIS database. Data from the Annual Local Government Financial Report was input as data in the model to establish the expenditure base. When combined with the population data, current expenditures per capita are generated by governmental jurisdiction.

Outputs of this module include numerical tables and charts describing:

- Existing condition on per capita governmental expenditures,
- Existing condition on per capita expenditures adjusted for unfunded liabilities, and
- Per capita expenditures adjusted for unfunded liabilities for the applicable scenario.

### 6.3 Per Capita Governmental Expenditures

The following government jurisdictions have revenue-generating authority that includes the ability to levy *ad valorem* taxes:

- City of Marathon;
- Islamorada, Village of Islands;
- City of Key Colony Beach;
- City of Key West;
- City of Layton;
- Monroe County;
- Florida Keys Mosquito Control;
- SFWMD;
- Monroe County Housing Authority;
- Monroe County School Board; and
- Lower Florida Keys Hospital District.

The annual governmental expenditure figure for each local government jurisdiction was summed from the categories in the annual operating budget (Table 6.2), including public schools. Annualized fixed capital costs were included under the debt service category. The annual operating (everything other than debt service) expenditure amount and annual fixed capital (debt service) expenditure amount for each governmental jurisdiction were calculated from these data. Per capita expenditure was obtained by dividing the annual operating and fixed capital expenditure by the functional population for current conditions.

**TABLE 6.2  
GOVERNMENT EXPENDITURE CATEGORIES**

<b>General Government</b>	<b>Public Safety</b>
Legislative Executive Financial and Administrative Legal Counsel Comprehensive Planning Debt Service Payments Pension Benefits Other General Government	Law Enforcement Fire Control Detention and/or Correction Protective Inspections Emergency and Disaster Relief Ambulance and Rescue Medical Examiners Consumer Affairs Other Public Safety
<b>Physical Environment</b>	<b>Transportation</b>
Electric Utility Services Gas Utility Services Water Utility Services Garbage/Solid Waste Control Sewer/Wastewater Services Water-Sewer Combination Land acquisition, Conservation and Resource Management Flood Control/Stormwater Management Other Physical Environment	Road and Street Facilities Airports Water Transportation Systems Transit Systems Parking Facilities Other Transportation Services
<b>Economic Environment</b>	<b>Human Services</b>
Employment Opportunity and Development Industry Development Veteran's Services Housing and Urban Development Other Economic Development	Hospitals Health Mental Health Public Assistance Developmental Disabilities Other Human Services
<b>Culture/Recreation</b>	<b>Other Uses</b>
Libraries Parks and Recreation Cultural Services Special Events Special Recreation Facilities Other Culture/Recreation	Interfund Transfer Installment Purchase Acquisitions Capital Lease Acquisitions Payment to Refunded Bond Escrow Agent Transfer Out from Constitutional Officers
Other Non-Operating	Non-Operating Interest
Extraordinary Gain or Loss	Court Related Expenditures
Debt Service	

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## 6.4 Per Capita Governmental Expenditures Adjusted for Unfunded Liabilities

Adjustment for unfunded liabilities includes all possible expenses associated with future projections or conditions. This establishes the baseline for all liabilities, rather than just those accounted for in current governmental budgets. This also allows a comparison of the effects of currently un-funded liabilities and the effects of the scenario conditions to determine the dominant effect on future expenditures. The expenditure data of each governmental jurisdiction was adjusted to reflect the following:

- The amount of any existing or foreseeable unfunded liabilities.
- The amount required in any expenditure components to meet any current requirements or standards.
- The amounts that reflect changes in time period, such as increases in the governmental goods and services price index, consumer price index, average rate of inflation, and average increase in the cost of living.
- The amount of any projected extraordinary increases in expenditures resulting from development.

The unfunded liabilities used in this analysis include school deficiencies, and capital costs for stormwater, wastewater, and potable water treatment. The Monroe County School District has a space deficit of 100,000 square feet (Monroe County 2001). In addition, the Wastewater and Stormwater Master Plans provide new technological approaches to addressing wastewater and stormwater issues. Implementing these new technologies will require expenditures for conversion of existing structures. Annual expenditures (debt service) required to address the school district space needs and the wastewater and stormwater capital facilities needs of the current population were calculated. These expenditures were added to the current conditions expenditures and divided by the current functional population to reflect the current conditions expenditures per capita costs including unfunded liabilities.

In order to determine unfunded liabilities for a future scenario condition, a portion of the existing debt load is backed out of the existing load and replaced by revised figures. These figures are based on debt amortization schedules for the revised facility needs, which are derived from scenario conditions.

## 6.5 Allocation of Expenditures by Planning Area

The CCIAM uses GIS to overlay the boundaries of the planning areas and the governmental jurisdictions to determine the amount of each governmental jurisdiction within each planning area. The planning area was expressed as a percentage of the governmental jurisdiction on an acreage basis. Total expenditures across each planning area were calculated by summing the total expenditure of each governmental jurisdiction within the planning area.