

Approved:

Effective: January 29, 2013
Office: Work Program & Budget
Topic No.: 350-090-001-j



Department of Transportation

ECONOMIC FEASIBILITY DEVELOPMENT PROCESS

PURPOSE:

To implement the requirements of **Sections 338.223(1)(a)** and **338.2275, Florida Statutes (F.S.)**, and ensure that a uniform test is used to determine if projects are economically feasible before decisions are made to fund or fully implement such projects. This is a decision making tool required by the Legislature. Proposed projects are included in the Florida Department of Transportation's (Department) Tentative Work Program as provided in **Section 338.2275(1), F.S.**

AUTHORITY:

Sections 20.23(4)(a), and 334.048(3), Florida Statutes (F.S.)

SCOPE:

This procedure affects the Office of Work Program and Budget (OWPB) and Florida's Turnpike Enterprise (FTE).

REFERENCES:

Florida Turnpike Enterprise Law – Sections 338.22 / 338.241, F.S.

DEFINITIONS:

Bond Sizer

The Sizing module of Mun-Ease, The Municipal Bond Manager, a commercially available software package which computes the bond size, and debt service, among other bond issue parameters, needed to cover projected project costs.

Cost Estimates

The projected amounts of cash payouts required to get the project operational. The projected amounts are provided to FTE by their General Consultant. Due to different payout characteristics of certain types of payouts, the projected amounts are grouped as follows so appropriate payout rates can be applied to each grouping:

Construction Costs include: Costs of construction, machinery, contingency reserves, Construction Engineering Inspection (CEI), and CEI Management, as determined necessary by the General Consultant.

Engineering Costs include: Plans, specifications, surveys, preliminary design and engineering, final design costs, **Traffic and Revenue Bond Report** costs, and **Certified Engineer Cost Estimate Report** costs.

Environmental Mitigation Costs include: Other land acquisition, construction, fees, permits and other expenses associated with meeting environmental mitigation requirements.

Equipment Costs include: Cost of toll equipment necessary to operate the project as a toll facility.

Financing Costs include: Financing charges, fees, legal costs, credit facilities (insurance), and other expenses related to financing.

Operating and Maintenance Costs (O&M) include: Operating costs (related to collection of tolls) and routine maintenance costs. Does not include periodic maintenance costs.

Right of Way (ROW) Costs include: Cost of acquisition of all land, rights of way, real property, easements and interests acquired by the Department for FTE project construction including right of way support costs, legal expenses, and relocation expenses.

Debt Service

The annual amount of cash required to pay interest and principal on proposed bonds.

Economically Feasible

As defined in **Section 338.221(8)(a), F.S.**, estimated net revenues of the proposed turnpike project, excluding feeder roads and turnpike improvements, will be sufficient to pay at least 50 percent of the annual debt service on the bonds associated with the

project by the end of the 12th year of operation and to pay at least 100 percent of the debt service on the bonds by the end of the 30th year of operation. In implementing this paragraph, up to 50 percent of the adopted work program costs of the project may be funded from turnpike revenues.

Estimated Gross Revenues

All projected tolls, charges, rentals, gifts, grants, moneys, and other funds, except for bond proceeds, coming into the possession, or under the control, of the department, and certified by the Traffic and Revenue (T&R) Consultant as being attributable to the project.

Estimated Net Revenues

Estimated gross revenues less estimated O&M costs.

Traffic and Revenue Report

A study of a proposed project to determine projected tolls based on projected traffic counts and appropriate toll rates.

Turnpike Project

Any extension to or expansion of the existing turnpike system and new limited access toll highways and associated feeder roads and other structures, interchanges, appurtenances, or rights as may be approved in accordance with the *Florida Turnpike Enterprise Law*.

1. FINANCIAL ASSUMPTIONS

The following financial assumptions are to be used in every feasibility test: 1) to allow the feasibility of each project to be evaluated independently and be comparable with the feasibility(s) of other project(s) for purposes of assessing relative merits; and 2) to minimize subjective bias in the assessments.

1.1 CAPITALIZED INTEREST

A portion of the bond proceeds may be used to pay interest on the bonds during the construction and, for up to one year after completion of the project.

1.2 PROJECT COST ESTIMATES

Only those estimated project costs funded by the issuance of bonds shall be considered for the purpose of determining economic feasibility.

1.3 TOLL REVENUES

Estimated gross toll revenues shall be certified by the T&R Consultant employed by FTE. FTE shall verify that the revenues are consistent with the project costs and configuration for which the test is being run.

Only projected revenues identified by the T&R Consultant as attributable to the proposed project shall be considered for the purpose of determining economic feasibility.

1.4 DRAW SCHEDULES

All reimbursable costs incurred as of the date of sale of bonds are to be treated as lump sum payments in the month of settlement. A monthly draw schedule must be developed for all other costs based on historical payouts, and production schedules provided by the General Consultant or through the FTE. The first draw for construction costs is to be lagged four months from the anticipated bid letting date.

1.5 LETTING DATE, OPEN TO TRAFFIC DATE, AND PRESENT DAY CONSTRUCTION COSTS

Data to be provided by the General Consultant to the FTE.

1.6 INFLATION RATES

Construction cost inflation shall be based on the anticipated year of the construction commitment and the most current construction inflation indices developed by the Department, as included in the **Work Program Instructions**. Preliminary engineering and construction engineering inspection costs are normally calculated as a percentage of construction and accordingly are inflated to the year of commitment using the rates identified in the **Work Program Instructions**. The **Work Program Instructions** are available on the OWPB's share point site.

ROW costs are to be inflated at the Department's historical rate unless more accurate rates are identified by the General Consultant or FTE, based upon local market conditions.

1.7 BOND INTEREST RATES

Generally, the interest rate to be used is the estimated Bond Buyer's 20 Bond Index rate for the month the bonds are scheduled to be sold. If another rate is deemed to be more appropriate, the decision, and reason(s) for it must be documented in the file by the financial analyst in OWPB's Finance, Program & Resource Allocation (FPRA) section.

For final determinations of economic feasibility, the interest rate used is based upon most current information available. This information shall be documented in the economic feasibility test file by the FPRA section's financial analyst.

1.8 CREDIT FACILITY (INSURANCE) / DEBT SERVICE RESERVE

A credit facility (insurance) will be used to size the estimated bond unless a Debt Service Reserve Fund is determined to be more cost effective, or otherwise preferable, by the State Board of Administration's Division of Bond Finance, FTE management, or as required by bond covenants. The Debt Service Reserve Fund will be funded from bond proceeds or revenues and will be equal to the highest annual debt service. The interest earnings of the reserve fund will be applied to debt service during the term of the bonds.

1.9 SIZE OF ISSUE

The bond sizer software calculates the size of the bond sale (the total amount of principal to be repaid which is the "par" amount) required to provide for all uses of bond proceeds predicated upon input data relative to interest cost, project cost, financing cost, and other variables.

2. FEASIBILITY TESTS

Section 338.221(8), F.S., defines two feasibility tests: one for projects funded, at least partially, with bond proceeds, and one for projects funded entirely with turnpike system revenue. Given the scope of projects that would meet the definition of **Turnpike Project** in **Section 338.221(9), F.S.**, it is unlikely any such project would ever be undertaken without bonds being issued. Consequently, this procedure covers only the feasibility test(s) for projects to be funded, at least partially, with bond proceeds.

2.1 Interim/Planning Tests

In addition to the statutorily required feasibility tests below, interim/planning tests are normally prepared at various stages of project development. FTE may perform these tests as needed for planning purposes, or request the OWPB perform them.

FTE shall provide the financial analyst in the FPRA Section of the OWPB with planning data relative to estimates of project costs, revenues, and production schedules when they request the OWPB to perform such tests.

No formal files are required for interim/planning tests. The economic feasibility reports or results and information from such tests shall be marked to indicate they are preliminary and subject to change, and returned to FTE. Such tests are intended for internal administrative and planning purposes only.

Note: These records are subject to public records disclosure and must be maintained in accordance with Department's retention schedules as prescribed by the Florida Department of State.

2.2 Statutorily Required Feasibility Test – for Legislative Approval

Section 338.223(1)(a), F.S. reads, in part, “Any proposed project to be constructed or acquired as part of the turnpike system and any turnpike improvement shall be included in the tentative work program. A proposed project or group of proposed projects may not be added to the turnpike system unless such project or projects are determined to be economically feasible...”, and “The department may not request legislative approval of a proposed turnpike project until the design phase of that project is at least 30 percent complete.” **Section 338.2275(1), F.S.** reads, in part, “Legislative approval of the department's tentative work program that contains the turnpike project constitutes approval to issue bonds...”

The FTE shall provide the financial analyst in the FPRA section a copy of the most current documentation (*T&R Report, Engineers Report*, etc.) and a copy of their analyses of revenues and cost estimates for all statutorily required tests to be performed. FPRA's financial analyst shall verify that all information is current.

Upon receipt of the documentation, and the request to run the test, FPRA's financial analyst shall establish a file of the documentation provided by FTE and/or developed by the FPRA. Additionally, all assumptions will be reviewed by FTE prior to running the test.

The financial analyst in FPRA shall review the information, checking for consistency of the data required for determination of feasibility. When inconsistencies are noted, they shall be resolved through documented meetings or discussions with FTE.

The FPRA financial analyst's review is not an analysis of the methodology employed to develop the reports but a practical and objective assessment of the reports' findings and conclusions based upon professional judgment and expertise.

The FPRA financial analyst shall develop and document for the file, documentation for input to the bond sizer as follows:

- (A) Prepare a construction draw schedule for the project based on the proposed production schedule and in consultation with FTE staff (when needed). Draw schedules for projects to be funded at least partially from bonds shall be predicated upon the estimates of only those project costs to be funded by the issuance of bonds.
- (B) Determine an appropriate cost of issuance, including underwriters' spreads, in accordance with current market charges.
- (C) Determine the appropriate interest rate for the bonds.

The FPRA financial analyst shall size a bond using the bond sizer and the information provided and developed above. Copies of the reports generated by the bond sizer shall be added to the file.

A determination of economic feasibility shall be made based on the reports generated by the bond sizer as prescribed in the following tests which are required by law:

- (A) **TEST I (*Sections 338.221(8)(a), 338.223(1)(a), F.S.*)**
The estimated net revenues of the proposed turnpike project will be sufficient to pay at least 50 percent of the annual debt service on the bonds by the end of the 12th year of operation.

FORMULA - Compare the 12th full fiscal year annual net revenue (from **T&R Report**) with the debt service on the bonds for the 12th full fiscal year of operation.

Example:

$$\frac{\text{net revenue in 12}^{\text{th}} \text{ year (from T\&R Report) = } \$ 500,000}{\text{debt service in 12}^{\text{th}} \text{ year (from bond sizer) = } \$1,000,000} = 50\%$$

- (B) **TEST II (*Section 338.221(8)(a), F.S.*)**
The estimated annual net revenues of the proposed turnpike project will be sufficient to pay at least 100 percent of the annual debt service on the bonds by the end of the 30th year of operation.

FORMULA - Determine the number of years required for the net revenues (from **T&R Report**) to equal or exceed the annual debt service requirements of the bonds.

Example:

$$\frac{\text{net revenue in 30}^{\text{th}} \text{ year (from } \mathbf{T\&R \text{ Report})} = \$1,000,000}{\text{debt service in } \leq 30^{\text{th}} \text{ year (from computer model)} = \$1,000,000} = 100\%$$

If the Department covenants to pay the operations and maintenance costs of the proposed turnpike project(s) from the State Transportation Trust Fund with no reimbursement from FTE, gross revenue shall be substituted for net revenue in the tests above for determining economic feasibility.

The file with all information provided and/or developed for use in running the test, the reports from the bond sizer, and the feasibility determination shall be delivered to the Manager of the FPRA. The Manager of FPRA shall, after analyzing the information in the file, accept or reject the results of the feasibility test. If rejected, the file shall be returned to the FPRA financial analyst with directions for further action. If accepted, the file shall be returned to the FPRA financial analyst for further processing.

The Manager of the FPRA may decide to have the tests reviewed by the Director of the OWPB, and the Assistant Secretary for Finance and Administration. If so, the file will be provided for their review.

The completed file shall be returned to the FPRA financial analyst for filing. The results of the tests shall be provided to FTE.

2.3 Statutorily Required Test – Final Determination

Section 338.2275 F.S. reads, in part, “Legislative approval of the department’s tentative work program that contains the turnpike project constitutes approval to issue bonds...Bonds may not be issued to fund a turnpike project until the department has made a final determination that the project is economically feasible...based on the most current information available.”.

FTE shall provide the FPRA section a copy of the most current documentation (T&R Report, Engineers Report, etc.) and a copy of their analyses of revenues and cost estimates for all statutorily required tests to be performed. The financial analyst in the FPRA section shall verify that all documentation is current.

Upon receipt of the documentation and the request to run the test, the FPRA financial analyst shall establish a file of the information provided by FTE and/or developed by the FPRA. Additionally, all assumptions will be reviewed with FTE prior to running the test.

2.4 The financial analyst in FPRA shall check the file to ensure the following certifications have been provided by FTE:

- (A) Consistency with Local Government Comprehensive Plans,
- (B) Environmental Feasibility (letter from the Florida Department of Environmental Protection), and
- (C) Certification by FTE that the tests are based upon the most current traffic and revenue studies, production schedules, and engineering consultant cost estimates available at the time of the tests.

2.5 The financial analyst in FPRA shall review the information for consistency of the data required for determination of feasibility. When inconsistencies are noted they shall be resolved through documented meetings or discussions with FTE.

The FPRA financial analyst's review is not an analysis of methodology employed to develop the supplied reports, but a practical and objective assessment of the reports' findings and conclusions based upon professional judgment and expertise.

2.6 The financial analyst in FPRA shall develop and document information for input to the bond sizer as follows:

- (A) Prepare a construction draw schedule based on the proposed production schedule in consultation with FTE staff (when needed) for the project. Draw schedules for projects to be funded at least partially from bonds shall be predicated upon the estimates of only those project costs which are to be funded by the issuance of bonds.
- (B) Determine an appropriate cost of issuance including underwriters' spreads in accordance with current market charges.
- (C) Determine the appropriate interest rate for the bonds.

2.7 The financial analyst in FPRA shall size a bond using the bond sizer and the information provided/developed above. Copies of the reports generated by the bond sizer shall be added to the file.

2.8 A determination of economic feasibility shall be made based on the reports generated by the bond sizer as prescribed in the following tests which are required by law:

- (A) **TEST I (*Sections 338.221(8)(a), 338.223(1)(a), F.S.*)**
The estimated annual net revenues of the proposed turnpike project will be sufficient to pay at least 50 percent of the annual debt service on the bonds by the end of the 12th year of operation.

FORMULA - Compare the 12th full fiscal year annual net revenue (from **T&R Report**) with the debt service on the bonds for the 12th full fiscal year of operation.

Example:

$$\frac{\text{net revenue 12}^{\text{th}} \text{ year (from } \mathbf{T\&R \text{ Report})} = \$ 500,000}{\text{debt service 12th year (from bond sizer) = } \$1,000,000} = 50\%$$

(B) TEST II (**Section 338.221(8)(a), F.S.**)

The estimated net revenues of the proposed turnpike project will be sufficient to pay at least 100 percent of the annual debt service on the bonds by the end of the 30th year of operation.

FORMULA - Determine the number of years required for the net revenues (from **T&R Report**) to equal or exceed the annual debt service requirements of the bonds.

Example:

$$\frac{\text{net revenue 30}^{\text{th}} \text{ year (from } \mathbf{T\&R \text{ Report})} = \$1,000,000}{\text{debt service 30th year (from computer model) = } \$1,000,000} = 100\%$$

If the Department covenants to pay the operations and maintenance costs of the proposed turnpike project from monies in the State Transportation Trust Fund with no reimbursement from FTE, gross revenue shall be substituted for net revenue in the tests above for determining economic feasibility.

2.9 The file with all information that was provided and/or developed for use in running the test, the reports from the bond sizer, and the feasibility determination shall be delivered to the Manager of the FPRA. The Manager of the FPRA shall, after analyzing the information in the file, accept or reject the results of the feasibility test. If rejected, the file shall be returned to the financial analyst in FPRA with directions for further action. If accepted, the file shall be returned to the FPRA's financial analyst, with documentation of the Manager's acceptance, for further processing.

The Manager of the FPRA may decide to have the tests reviewed by the Director, OWPB, and/or the Assistant Secretary for Finance and Administration. If so, the file will be provided for their review and then returned to the FPRA's financial analyst.

2.10 If the Manager of the FPRA accepts the results of the feasibility test, the financial analyst in FPRA shall, upon receipt of the file from the Manager, prepare a letter to be

signed by the Secretary transmitting the results of the feasibility test to the Division of Bond Finance. Additionally, the results of the tests shall be provided to FTE.

2.11 The file, with all information that was provided and/or developed for use in running the test, the reports from the bond sizer, the feasibility determination, and the draft letter for the Secretary's signature shall be delivered to the Manager of the FPRA, the Director of the OWPB, and the Assistant Secretary for Finance and Administration for their review. Once they are satisfied with the file's contents, they will initial and date the correspondence review document covering the draft letter for the Secretary's signature, and the draft will be presented to the Secretary, along with the file, for signature.

2.12 After the Secretary has signed and dated the transmittal letter, the economic feasibility analysis, documentation of consistency with local government comprehensive plans, and documentation of environmental feasibility shall be copied for the file and the originals mailed to the Division of Bond Finance.

2.13 Copies of all documents associated with statutorily required economic feasibility tests/analyses, including documents provided by FTE, developed/prepared by the OWPB, generated by the bond sizer, etc., and a copy of the executed transmittal letter to the Division of Bond Finance shall be retained and maintained in a file by the OWPB.

2.14 It is the responsibility of the financial analyst in FPRA to maintain the file in accordance with these procedures, to retain them in accordance with Department document control procedures, and ensure that project files exist for economic feasibility tests.

3. TRAINING

None

4. FORMS

None