

FINANCIAL PLANS GUIDANCE

Background

Title 23, Section 106(h) requires recipients of federal financial assistance for certain projects to develop an annual financial plan for the Project. There are two types of projects that require the annual preparation: 1) Major Projects and 2) projects with a total cost of between \$100 million to \$500 million. The requirement for Major Project financial plans was established when Section 1305(b) of the Transportation Equity Act for the 21st Century (TEA-21) modified Section 106 of Title 23 by adding subsection "(h)" which requires "... A recipient of Federal financial assistance for a project ...with an estimated total cost of \$1,000,000,000 or more shall submit to the Secretary an annual financial plan for the project." TEA-21 required that the plan be based on detailed annual estimates of the cost to complete the remaining elements of the project and on reasonable assumptions of future increases in the cost to complete the project. In May 2000, *FHWA Financial Plan Guidance* was issued and was the basis of determining which projects would be classified as Major and whether the submitted financial plans satisfied the requirements of Section 106(h).

In 2005, Section 1904(a)(2) of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy For Users (SAFETEA-LU) amended 23USC106(h) by reducing the threshold for the submission of a Major Project annual financial plan to \$500 million or more. SAFETEA-LU also added a new Section, 23USC106(i), which required recipients of federal financial assistance for projects with a total cost of between \$100 million and up to \$500 million to prepare an annual financial plan. A memorandum was issued on December 8, 2005, *Project Financial Plan Requirements under SAFETEA-LU*, which provided details for implementing the Finance Plan requirements. That memorandum and the *FHWA Financial Plan Guidance* issued in May 2000 are superseded by the issuance of this *Guidance*.

Major Projects are often implemented over a number of years and may involve numerous individual elements and segments¹. These individual segments may be progressed as individual contracts but, in total, they make up the Project. The decision to initiate and complete a Major Project will require a commitment of significant future financial resources in order to achieve the transportation benefits of the initial investment. This decision will impact the local community and, often, the entire region and/or State as the Project advances.

¹For the purposes of this document an Element is a category of work, which will be conducted on some, or all of the segments (i.e. design, construction, etc.), while a Segment is portion of the overall project which can be defined by physical limits (i.e. an interchange or bridge).

The Initial Financial Plan will provide information on the immediate and longer-term financial implications resulting from project initiation. The annual updates of the Financial Plan should provide information on actual cost, expenditure, and revenue performance in comparison to initial estimates as well as updated estimates of future year's obligations and expenditures. The annual updates will provide information on cost and revenue trends, current and potential funding shortfalls and the financial adjustments necessary to assure completion of the project. The Financial Plan and its subsequent Annual Updates will also provide assurance that the Project's impact on the State's transportation capital improvement program will have been assessed. The projected uses of funding for the Project must meet the fiscal constraint requirements for the State's planning process.

Purpose

A Financial Plan is a comprehensive document that reflects the Project's cost estimate and revenue structure and provides a reasonable assurance that there will be sufficient financial resources available to implement and complete the project as planned. A Financial Plan provides a description of how a project will be implemented over time by identifying project costs and the financial resources to be utilized in meeting those costs. The plan should clearly explain the assumptions about both cost and revenue upon which the plan is based. In addition, the annual updates to the plan will enable decision makers to track the financial progress of the project over time by highlighting significant deviations from the Initial Financial Plan and the subsequent annual updates and explaining the mitigating actions taken to adjust for those deviations. In essence, the financial plan process is a subset of the overall Project Management Plan that is required for every Major Project.

Which Projects Must Have a Financial Plan?

Major Projects

These transportation improvements are defined as Projects receiving Federal financial assistance 1) with an estimated total cost of \$500 million or more or 2) that have been identified by the FHWA as being a Major Project. The designated projects may include those: 1) that require a substantial amount of a State Transportation Agency's (STA) program resources, 2) that have a high level of public or congressional attention, or 3) that have extraordinary implications for the national transportation system. For the purposes of determining whether the project costs exceed \$500 million, FHWA will look at the total cost estimate for the project limits as set forth in the ROD or final environmental determination. An exception may exist if the "NEPA-defined" project scope is comprised of distinct and operationally independent phases. FHWA may determine that each separate, operationally independent and non-concurrent phase of construction be defined as separate "projects" for the purpose of assigning Major Project status. (Non-concurrent in this context means the phases of work will not be constructed at the same time, and the phase or phases that are scheduled for construction are not functionally dependent

on those that have received NEPA approval but may or may not be constructed.) This determination will require careful judgment and an appreciation for how NEPA commitments will be delivered during the delivery of the NEPA-defined project scope. The Division Administrator will make this determination after consultation with the Major Projects Team (MPT) and the Office of Project Development and Environmental Review.

Major Projects that are initiated as a result of damage from a natural disaster and are funded with federal Emergency Relief (ER) funds will follow the established procedures of the ER Program. Major Project requirements will also be followed using a modified process where financial plan and project management plan actions may occur out of sequence in order for the ER Major Project to progress on a timely basis. FHWA will work with the STA to assure that the project is progressed appropriately and does meet all requirements.

In the case of Major Projects funded jointly by FHWA and FTA it is expected that the Project Owner, generally the STA, will submit a single Financial Plan meeting the requirements of both Federal Agencies to the FHWA Division Office for review and approval. The Major Projects Team will assist in coordinating with FTA to reach this goal.

Projects From \$100 million up to \$500 million

SAFETEA-LU required that Projects in this dollar range have Financial Plans and Annual Updates prepared by the Project Owner. It is expected that these projects will be less complex than Major Projects and will be completed in a shorter timeframe. There will often only be one main construction contract associated with this category of projects. The estimated total cost will be based on the full scope of the project for the limits defined by the environmental process or for the limits that are considered operationally independent. The financial plan content should address the same five sections as those for Major Projects (see **Content of the Financial Plan**). It is anticipated that the level of detail will be more straightforward for these plans. Also, optional reporting formats for these projects that present multiple projects within the Project Owners' geographical area will be considered on a case-by-case basis. FHWA will not approve these financial plans but they will be subject to review. As part of its ongoing stewardship and oversight responsibilities, FHWA will need to assure that they were completed in accordance with Title 23 requirements for content and timeliness.

TIFIA Projects

The Transportation Infrastructure Finance and Innovation Act (TIFIA) program was established in 1999 to provide Federal credit assistance (direct loans, loan guarantees, and lines of credit) to large-scale transportation projects of national significance. The program was created in response to a demonstrated lack of public funding to meet growing transportation needs, and is intended to leverage substantial private co-investment and accelerate schedules to complete the construction. Because the TIFIA program is geared toward large-scale transportation projects, many projects have been applying for and securing TIFIA loans as an additional source to help finance the

construction. SAFETEA-LU lowered the threshold for TIFIA assistance to projects with a total cost of at least \$50,000,000 and Intelligent Transportation Systems (ITS) projects of \$15,000,000 or larger. The TIFIA assistance is limited to a maximum of 33% of the total project costs.

The TIFIA program requires that the Project Owner submit a "Plan of Finance", along with the loan application. Because the TIFIA application is done about the same time as the Initial Financial Plan would normally be done, a process was needed such that the Project Owner would only need to submit one Initial Financial Plan. The Major Projects Team, in conjunction with the TIFIA Joint Program Office (JPO), has developed the following general guidelines, which will apply to all TIFIA funded projects.

The TIFIA "Plan of Finance" will be the only initial financial plan submittal required. The requirements of the TIFIA "Plan of Finance" are for the most part the same as the FHWA Initial Financial Plan Guidance (Sections 1 through 5), but are ordered and formatted differently. During the review of the "Plan of Finance", the Project Owner may be required to submit any additional information that FHWA feels is necessary to fully comply with the *FHWA Financial Plan Guidance*. TIFIA also requires that updated Financial Plan information be submitted within 90 days of the signing of the Secured Loan Agreement. The Secretary of Transportation must approve the TIFIA loan prior to FHWA accepting the "Plan of Finance". FHWA acceptance of the "Plan of Finance" will be required prior to authorization of Federal funding for the project construction or prior to award of any design build contracts. The FHWA Division Office will approve all TIFIA-funded initial financial plan and annual update documents with the concurrence of the JPO and MPT regardless of dollar amount.

For detailed information on TIFIA funded projects, refer to the *TIFIA Project Oversight and Credit Monitoring Guidance* that was issued in January 2005 and is located on the Major Projects website (<http://www.fhwa.dot.gov/programadmin/index.htm>).

When Should The Financial Plan Be Prepared?

The Initial Financial Plan

As described in the Major Project Management Framework, the Initial Financial Plan should be prepared as early in the project development process as practical. As the cost estimate to determine if a Project meets the Major Project cost threshold of \$500 million or more occurs at the completion of the environmental phase, a Financial Plan could be submitted to the FHWA Division Office at the issuance of the Record of Decision if all other elements of the Financial Plan have been completed. The Initial Financial Plan for a Major Project could also be submitted and approved by FHWA prior to right-of-way acquisition, but in all cases, the Initial Financial Plan should be submitted and approved by FHWA before authorization of Federal-aid

funding for mainline project construction. On a design-build project the Initial Financial Plan should be approved prior to FHWA concurrence in the award of the design build contract. If there are questions concerning the timing of the Initial Financial Plan acceptance by FHWA, the Division Administrator (DA) should consult with the Major Projects Team. The FHWA Division Office will approve all financial plan documents even when the Major Projects Team is involved in the review and concurrence process. In those cases, the Associate Administrator for Infrastructure will give formal concurrence to the Division Administrator.

For projects in the \$100-500 million range, the initial financial plan may be developed and completed at the earliest feasible point in the Project development process but it needs to be finalized by the Project Owner prior to construction contract authorization and obligation of federal funds for construction under the design/bid/build process and prior to contract award for design/build projects.

Annual Updates

Financial plans must be updated annually. The scheduled timing of the updates should be shown in the Initial Financial Plan by indication of the annual reporting date of the plan. The Project Owner has the option of determining the effective date of the Annual Update submission. They may choose one year after approval of the initial Financial Plan or, more commonly, the end of the Owner's Fiscal Year, or the end of the Federal Fiscal Year. These updates must reflect changes in total and remaining project cost and/or available funding. The annual update is to be submitted to FHWA for approval no more than 90 days after the effective date established in the Initial Financial Plan.

The scope of the annual update should be sufficient to identify and resolve any cost and/or funding (including cash flow) changes which have occurred since the previous submission. This would include any changes in project scope that impact the cost estimate and/or completion schedule of the project. In the instance of major cost or funding changes the update may need to revise the cost and funding figures for future years in addition to those for the current year.

Methodology

Financial Plans and Updates should be prepared in accordance with the guidelines of this document and with recognized financial reporting standards such as the "Guide for Prospective Financial Information" of the "American Institute of Certified Public Accountants" (see attachment A). In unique or unusual circumstances, alternate formats may be acceptable with prior concurrence of the Division Office and the Major Projects Team.

Project Owner Certification

The content of the Initial Financial Plan (IFP) and each Annual Update (AU) should be certified as “accurate and reasonable to the best of my knowledge and belief” and signed by the Chief Executive Officer of the STA or the Project Sponsoring Agency prior to submission to the FHWA Division Office. These documents are the Project Owners’ opportunities to present the details of the Project to its constituency as well as meeting the federal requirements for financial plan submission. (See attachment B sample Letter of Certification)

FHWA Review and Approval

The Initial Financial Plan and each Annual Update will be submitted to the FHWA Division Office for review and acceptance. The Division Office will coordinate with the Major Projects Team for concurrent review and concurrence of all Initial Finance Plans. Either the Division or Headquarters may request MPT involvement in a concurrent review process for Annual Updates. Acceptance and approval will be based upon a review performed by FHWA. The review will evaluate such items as; the reasonableness of the cost projections, the viability of the identified funding sources including whether they are contained in the fiscally constrained STIP/TIP/Long Range Plan, and the likelihood that the funding commitments will provide sufficient resources to complete the project as planned. The FHWA review and a determination of acceptability should be completed within 30 days from the date the document is received by the Division Office. When the Major Project Team is part of the review process, a concurrence memorandum from the Associate Administrator for Infrastructure (AA, Infrastructure), will be prepared and sent to the Division Office prior to approval of the document. If there is TIFIA funding in the project, the concurrence memorandum will be signed jointly by the AA, Infrastructure and the Director of the TIFIA JPO. In all cases, the FHWA approval of the Financial Plan or Annual Update will be by the Division Administrator.

Content of the Financial Plan

The initial plan should consist of at least five main sections: (1) Cost Estimate - in which the total cost and cost-to-complete for major project elements are presented in year of expenditure dollars, (2) Implementation Plan - in which the project schedule is presented and the cost-to-complete is presented in annual increments in year of expenditure dollars, (3) Financing and Revenues - presented by funding source as annual amounts available for project obligations, (4) Cash Flow - an annualized presentation of cash income and outgo to illustrate how periodic bills will be paid, and (5) Risk Identification and Mitigation Factors.

Annual Updates to the Initial Financial Plan should include revisions to the five main sections mentioned above and should also include data covering: the cost history (initial estimate versus

actual expenditures) of the project, a presentation and analysis of cost and revenue trends that may result in additional funding needs or cost reductions, a discussion of additional funding increases or cost reductions necessary in the coming year to meet funding shortfalls which have become known since the last submission, including a discussion of their cash flow implications (this discussion should include a projection of any potential funding shortfalls in future years, including those based on the cost trends identified in the previous section), a discussion of any significant reductions in cost during the past year and the potential for such reductions in future years, and an identification of significant increases in project costs of \$10 million or more as compared to the original estimated costs both in the past year and projected for the future. The cost changes reported may be for any reason including changes in project scope, design, right of way, construction, and/or changes to financing estimates.

The Financial Plan should include a narrative describing the assumptions used to develop the project cost estimates. All assumptions for the revenue forecasts and cash flow should also be included. The narrative descriptions should include the sources of information for the forecasts, the methodology used for developing the forecasts, and identify whether there has been any independent validation of the forecasts or sensitivity testing.

Any documentation that provides the basis for projected costs/revenues (e.g. revenue studies, feasibility studies, economic forecasts) should be included as attachments to the Financial Plan. They should also be included in the Annual Updates if they represent material changes from the attachments in the IFP.

A more detailed explanation of the content of each of the required sections is as follows.

The Initial Financial Plan

1. Cost Estimate

The purpose of this section is to present the current estimate of the total cost of the project and the remaining cost-to-complete. The total project cost can be considered the equivalent of the project purchase price. This should include all costs and the value of all resources necessary to perform the preliminary engineering including the cost of NEPA and other environmental documentation, right-of-way, environmental mitigation, construction, project management, Transportation Demand Management and Transportation System Management, public outreach, and costs of external third parties such as utility adjustments and railroad relocations. All costs should be calculated in accordance with standard accounting methods and generally do not include the costs of acquiring revenue (taxation, mortgage interest payments, etc). *Major Project Program Cost Estimating Guidance* can be located on the Major Projects website (<http://www.fhwa.dot.gov/programadmin/index.htm>). The total cost of the project should be presented as the sum of the costs for each major segment and element of the project. This section should include a narrative describing the assumptions used to arrive at the cost estimates.

All costs should be presented in “year of expenditure” dollars,² as it is important that the Financial Plan be consistent in presenting both costs and revenues in comparable dollars.

2. Implementation Plan

This portion of the Financial Plan should present the schedule for completing the project. In compiling this schedule, estimated expenditures must be covered by projected revenues. The plan should show the schedule for both the initial financial plan that was established and the latest annual update. The methodology including assumptions for future inflation, cost escalation, etc. and reasonableness of the cost estimate should be described. In developing the implementation plan, the sponsor should discuss the likelihood and possible impacts on the implementation plan from a wide array of potential future cost and or revenue changes. For instance, cost changes might result from unforeseen environmental and subsurface conditions, inflation, litigation, technology/innovations, contractor problems, overtime costs to adhere to the schedule, changes in governmental rules impacting the project, value engineering savings, etc. Revenue changes could result from lower than expected toll or tax collections, or a diversion of funds to other projects on the Statewide program, etc.

3. Financing and Revenues

The plan should describe all funding sources for the project and should clearly describe these funds as committed, or anticipated amounts, with an evaluation of the likelihood of anticipated amounts being realized. It should be noted where the funding sources are identified in the fiscally constrained STIP/TIP/Long Range Plan of the State.

Federal funds should be described by funding category under existing legislation and as potential amounts under future legislation. Projected expenditures of Federal-aid funds should be constrained by anticipated annual limitations on Federal-aid fund obligations.

If special funding techniques such as advance construction are to be utilized, the plan should include estimated annual conversion amounts.

²Year of expenditure dollars are dollars that are already adjusted for inflation. For example, if two identical items each have a current value of \$1000, it may in fact, cost \$1,000 to purchase one of them in the first year of a project, while it is estimated to cost \$1,200 to purchase the other in the fourth year of a project. Using year of expenditure dollars the total cost of these two purchases should be shown in the Initial Financial Plan as \$2200. In some cases financial analyses will attempt to show the present value of a future stream of revenues and expenditures by converting all figures to a base year’s dollars using an assumed discount rate. This method can present a misleading picture of future costs and is not recommended for presenting cash flows in financial plans.

Any portions of the project that are likely to be funded with funds other than Federal-aid should be presented. The amount and sources of revenue for the non-Federal share should be clearly discussed. If the availability of these funds is limited to certain parts or phases of the project, then those limits should be explained. The financial plan should never assume that there would be future discretionary allocation made for the Project. If and when discretionary allocations are enacted, they may be included in the Project revenue at the time of the next Annual Update.

The plan should address the potential for unanticipated changes in expected revenue and the impact on the project. Such changes might include delays or decreases in receipt of project funding, reductions in user fees earmarked for the project, changes in governmental rules impacting the project, etc.

4. Cash Flow

The key feature of this section is to demonstrate that revenue will be available to permit annual project fund obligations and expenditures as presented in the Implementation Plan consistent with the STIP/TIP/Long range Plan.

The plan should include an annual schedule of cash needs versus available cash to meet those needs. This will demonstrate that the project payout schedule for payments to construction contractors and others can be met. The cash flow analysis should extend through the point that all project expenditures have been met, and all Advance Construction conversions have been completed.

5. Risk Identification and Mitigation Factors

This section should discuss the risk analysis done for the Project. It should identify risks to project completion and revenue sufficiency. Identification of those risks and the potential mitigation actions should be described.

Major projects will significantly impact the capital program of the Project Owner, thus the Financial Plan for the project should be coordinated with the statewide long range transportation plan and the Statewide Transportation Improvement Program. This coordination will evaluate the impact to the transportation capital program in the State during the period of analysis covered by the Financial Plan.

All special project cost containment strategies being used or planned for later use should be described. These might include design-to-estimated cost for individual project elements (i.e., limit design so as not to exceed a target construction cost), design-build, use of cost control teams, management cost control strategies, vendor participation via warranties or guarantees, value engineering, incentive and disincentive clauses, etc.

The plan should describe the major responsibilities, financial and otherwise, of the various parties involved in the project and contain evidence of agreements or commitments.

The plan should describe any special or unique agreements, laws, rules, or regulations in addition to NEPA and Title 23, to which the project is subject. These could include compliance with Federal or State project-enabling legislation, financial agreements and covenants, accounting system reports and audits, etc.

If pertinent, the plan should discuss the liability for subsequent operation and maintenance costs as segments of the project come on line. On some major projects the opening to traffic of a segment of the project (for example, a tunnel or complex traffic management system) could require significant operational resources while other elements of the project are not complete and still require significant construction expenditures.

Generally, financial plans will not be approved if they include a State or local revenue source requiring future legislative action. This does not refer to the annual or biennial budgetary process used by most States. When the plan call for mechanisms other than existing revenue streams to meet the non-Federal revenue needs or to meet cash flow demands, the likelihood of implementing the mechanisms must be thoroughly analyzed. This would apply to mechanisms such as new taxes, future toll increases not currently authorized, contributions from third parties, and short or long-term borrowing. The analysis must address whether authority exists to pursue the mechanisms or must be granted through legislation or other means. In evaluating this portion of the finance plan the Federal interest will be in the likelihood of realizing the non-Federal revenues and cash flow as opposed to the choice of mechanism.

The initial submission of the plan will identify the schedule for the future annual updates. It may be advantageous to time the submission of these updates to coincide with the beginning of either the State's fiscal year or the Federal fiscal year rather than the anniversary of the approval of the Initial Financial Plan. If the plan is updated on a schedule that does not correspond to the Federal fiscal year, it will be permissible to display the Federal-aid obligations and expenditures on a Federal fiscal year basis.

The Annual Updates

Each annual update of the Financial Plan should be presented both in total cost (actual cost to date) and cost-to-complete estimates (shown in year of expenditure dollars). These updates should use the same project elements or segment breakpoints to present the cost and revenues as used in the initial Financial Plan estimate. Any significant change in the total project cost or revenue since the last estimate should be clearly presented and the major reasons for these significant changes should be provided. The update should be organized as follows:

Each of the 5 Main Sections should be updated to reflect any changes that have occurred since the approval of the IFP. The following areas should be addressed and incorporated into the appropriate section of the Annual Update

Cost and Revenue History

The presentation should clearly summarize significant cost and/or revenue changes from the Initial Financial Plan estimates and discuss the reason(s) for these changes. Any identified or potential funding shortfall should be discussed in detail along with the steps that have been taken, or will be available if needed, to deal with them. As appropriate, the Update should discuss mitigating measures that increase project funding and/or reduce project costs, including changes in project scope and design that were undertaken specifically in response to revenue shortfall. Significant changes in project scope should also be discussed and their impact on project costs, both to date and in the future, should be explained. Where appropriate, Financial Plan updates should track project milestones and compare initial cost and revenue estimates to the actual costs and revenues at these milestone points.

Cost and Revenue Trends

This discussion should clearly identify the trends that have impacted project costs and revenues in the past year(s), discuss the probable reasons for these trends, and assess the implications of the trends during the remainder of the project. This may be as simple as identifying a change in the anticipated rate of inflation, the availability of materials, the cost of supplies, or the wages paid to project personnel; or as complicated as assessing changes in the competitive arena which have impacted construction bid prices. For each of the trends identified, the Annual Update should discuss the implications of those trends during the remainder of the project and explain any adjustments that have been made to the Financial Plan in consideration of those trends.

Summary of Significant Cost Reductions

A listing of those changes that have reduced the cost of the project by at least \$10 million should be presented. These should be presented individually, showing the original cost estimate, the reduced actual or projected cost, and a brief explanation of how or why the reduction was achieved. These changes should be presented by element and include any scope changes made to the Project.

Summary of Significant Cost Increases

There should be a detailed listing of those items that have increased the cost of the project by at least \$10 million. These should be presented individually, showing the original cost estimate, the increased actual or projected cost, and a brief explanation of why the increase was necessary. In compiling this list, those increases in cost should be grouped by element and/or changes to the project scope.

ATTACHMENTS

Attachment A - Summary of AICPA “Guidelines for Preparation of Financial Forecasts”

Attachment B - Sample Letter of Certification

Attachment C - Financial Plan Checklist

Attachment D - Example Financial Plan Displays (Note: The attachment “D” example is not intended to represent the same detail or the same depth of analysis as would be expected in an actual Financial Plan. Rather, its purpose is to introduce examples of the types of displays that would be useful in presenting typical financial plan data.)

FINANCIAL FORECAST GUIDELINES

The following guidelines for preparation of financial forecasts are excerpted from the American Institute of Certified Public Accountants 's (AICPA) publication, *Guide for Prospective Financial Information*.

1. **Financial forecasts should be prepared in good faith.** *Good faith in this context includes making a diligent effort to develop appropriate assumptions and exercising care not to mislead a third-party reader. Good faith precludes preparing a financial forecast with either undue optimism or pessimism.*
2. **Financial forecasts should be prepared with appropriate care by qualified personnel.** *Appropriate care means that diligence and proper attention should be exercised in the preparation of the financial forecasts.*
3. **Financial forecasts should be prepared using appropriate accounting principles.** *The accounting treatment applied to events and transactions contemplated in financial forecasts should be the same as the accounting treatment expected to be applied in recording the events when or if they occur.*
4. **The process used to develop financial forecasts should provide for seeking out the best information that is reasonably available at the time.** *The reliability of the basic data should be considered in the process of preparing the financial forecasts and the use of an appropriate level of detail is another key consideration.*
5. **The information used in preparing financial forecasts should be consistent with the plans of the entity.** *Financial forecasts should be consistent with the expected economic effects of anticipated strategies, programs, and actions. An indication of the entity's plans can often be found in its budgets, goals, and policies.*
6. **Key factors should be identified as a basis for the assumptions.** *Key factors are those significant matters upon which an entity's future results are expected to depend and are basic to the entity's operations.*
7. **Assumptions used in preparing financial forecasts should be appropriate.** *Recognizing that assumptions are the essence of developing financial forecasts, the quality of the underlying assumptions largely determines the quality of financial forecasts. Assumptions should be reasonable and suitably supported.*
8. **The process used to develop financial forecasts should provide the means to determine the relative effect of variations in the major underlying assumptions.** *Particular attention should be devoted to those assumptions (1) to which the attainment of forecasted results is particularly sensitive and (2) for which the probability of variation is high.*
9. **The process used to develop financial forecasts should provide adequate documentation of both the financial forecasts and the process used to develop them.** *Documentation makes possible review and approval of financial forecasts by the responsible party. It facilitates comparison of the financial forecasts with actual financial results, and it provides the discipline necessary for developing reliable financial forecasts.*
10. **The process used to develop financial forecasts should include, where appropriate, the regular comparison of the financial forecasts with attained results.** *Comparison of prospective financial results with actual results for the prospective period and for prior periods for which financial forecasts were prepared provides an historical measure of success in developing financial forecasts.*
11. **The process used to prepare financial forecasts should include adequate review and approval by the responsible party at the appropriate levels of authority.** *The ultimate responsibility should rest with the responsible party at the highest level of authority. The review should be conducted in sufficient depth to assure the responsible party of the soundness of the process used to develop the financial forecasts.*

Sample

State's Letterhead

LETTER OF CERTIFICATION

The (State) Transportation Department has developed a comprehensive Financial Plan for **Project X** in accordance with the requirements of Section 106, Title 23, and the Financial Plan guidance issued by the Federal Highway Administration. The plan provides detailed cost estimates to complete the project and the estimates of financial resources to be utilized to fully finance the project.

The cost data in the Financial Plan provide an accurate accounting of costs incurred to date and include a realistic estimate of future costs based on engineers estimates and expected construction cost escalation factors. While the estimates of financial resources rely upon assumptions regarding future economic conditions and demographic variables, they represent realistic, estimates of available monies to fully fund the project.

We believe the Financial Plan provides an accurate basis upon which to schedule and fund **Project X**. The Department will review and update the financial plan on an annual basis.

To the best of our knowledge and belief, the Financial Plan as submitted herewith, fairly and accurately presents the financial position of **Project X**, cash flows, and expected conditions for the project's life cycle. The financial forecasts in the Financial Plan are based on our judgment of the expected project conditions and our expected course of action. We believe that the assumptions underlying the Financial Plan are reasonable and appropriate. Further, we have made available all significant information that we believe is relevant to the Financial Plan and, to the best of our knowledge and belief, the documents and records supporting the assumptions are appropriate.

Chief Executive Officer

Date

**FINANCIAL PLAN
CHECKLIST FOR FINANCIAL PLAN COMPONENTS**

1. Cost Estimate

Provide a total cost estimate for the full project. Provide an activity breakdown for feasibility studies, preliminary engineering, environmental assessment, right-of-way acquisition, construction, construction engineering and inspection, project management, contingencies, and ITS activities. Include other cost categories, as necessary. See *Major Project Program Cost Estimating Guidance*.

All cost estimates should be expressed on a year-of-expenditure basis and should include a narrative describing assumptions used to arrive at such estimates.

2. Implementation Plan

Provide a comprehensive description of the project, including, but not limited to, project scope, termini, and interconnections. Describe any proposed phasing for the project and dependencies on other projects. Include a list of all federal, state, and local permits and approvals required for the project and a schedule for obtaining such permits and approvals.

Include the schedule for completing the project, by year, showing estimated costs.

It should be noted that updates to the initial financial plan should ensure consistency in project scope. If costs/schedule change, the changes must be clearly identified to ensure valid comparisons to the initial financial plan.

3. Financing and Revenues

Sources should include separate line items, as applicable, for Federal, state, and local funds; private investment; any other contributions; market value of right-of-way dedications; bond proceeds (general obligation, revenue, GARVEEs, and others); state infrastructure bank loans; other borrowing (specify); investment income; Federal credit assistance (TIFIA). The total of all funding sources should equal the total of the cost estimate. New funding sources developed after the Initial Financial Plan should be incorporated at the subsequent Annual Update.

4. Cash Flow

The cash flow pro forma should indicate the level of cash required to fund the project on an annual basis over the period of the financial plan. The pro forma should include beginning and ending balances, all sources and uses of funds, and show annual change in financial position. Total sources and uses should be equal.

5. Risk Identification and Mitigation Factors

The financial plan should identify risks to project completion and sufficiency of revenues. Examples of risks might include cost escalation, approvals, litigation, construction schedules, ridership/traffic levels, availability of grant funding, and dependence on future legislative action. All risk mitigation strategies should be identified and should include actions that would be taken to address revenue shortfalls including any reserves or other methods of funding which could be applied to this project. There should also be a discussion of any proposed cost containment approaches (e.g. design/build, value engineering, guaranteed maximum price or completion date warranties, or other incentive/disincentive clauses).

The financial plan should identify any performance bonds included in the project financing plan, the level and type of insurance coverage, and any lines of credit and standby financing arrangements.

**ATTACHMENT D
SAMPLE FINANCIAL PLAN
GENERAL ROY STONE MEMORIAL BRIDGE
OCTOBER 2000**

TABLE OF CONTENTS

INTRODUCTION	1
PROJECT DESCRIPTION	1
PROJECT TIMELINE	1
1. CURRENT COST ESTIMATE	2
COST ESTIMATE BY CONSTRUCTION SEGMENT	3
COST ESTIMATE BY MAJOR PROJECT ELEMENT	4
2. IMPLEMENTATION PLAN.....	4
3. PROJECT FINANCING AND REVENUES	7
OVERALL FINANCIAL PLAN	7
DEBT SERVICE/BONDING DETAIL	9
OVERALL REVENUE ANALYSIS.....	10
<i>Federal Funds/Advance Construction.....</i>	<i>11</i>
<i>State Gas Tax</i>	<i>13</i>
<i>Vehicle License Fees.....</i>	<i>13</i>
<i>Local Sales Taxes.....</i>	<i>13</i>
<i>Tolls.....</i>	<i>13</i>
4. CASH FLOW	15
<i>Contingency Fund.....</i>	<i>16</i>
5. OTHER FACTORS	17
6. COST AND REVENUE HISTORY	18
7. COST AND REVENUE TRENDS.....	19
8. REVENUE SHORTFALL MITIGATION	20
9. SUMMARY OF SIGNIFICANT COST REDUCTIONS	21
10. SUMMARY OF SIGNIFICANT COST INCREASES	22
APPENDICES.....	24
APPENDIX A: ADDITIONAL EXAMPLES OF GRAPHICS/SUPPORTING DATA	24
APPENDIX B: LIST OF POTENTIAL ATTACHMENTS (ORGANIZED BY SECTION)	24

INTRODUCTION

This example is not intended to represent the same level of detail or the same depth of analysis as would be expected in an actual Financial Plan. Rather, its primary purpose is to display the format of a Financial Plan and to introduce the types of graphs that should be used in presenting typical Financial Plan data. The example presents numerous exhibits displaying the relevant cost, revenue, financing, and expenditure data that will help document the financial progress of a large, complex project (to best view these exhibits, it is recommended that they be printed in color).

In developing this example, an attempt was made to create a realistic set of circumstances that may actually be encountered in the preparation of a Financial Plan. An example project was created that was in the midst of construction, that had experienced some significant cost changes, and that was dealing with some revenue options; in order to show how to consistently track and illustrate cost and revenue changes throughout the life of a project. In some cases, exhibits are included in both graphical and tabular formats, to show alternative options for displaying similar information.

Throughout this example, comments are included in shaded italics. The numbering system and structure used in this example for the major sections of the narrative and for the exhibits, follows the numbering system for the required sections of the financial plan, as indicated in the Financial Plan Guidance.

PROJECT DESCRIPTION

The General Roy Stone Memorial Bridge is a \$2 billion reconstruction and seismic retrofit of a major highway bridge. The project consists of the bridge and the two major interchanges on either side of the Bridge. The total project length is 5 kilometers. The reconstructed bridge will be widened to include a new HOV lane and a bike lane in each direction, in addition to the seismic retrofit. The interchanges are being reconstructed to add the HOV and bike lanes and improve their resistance to seismic loading.

PROJECT TIMELINE

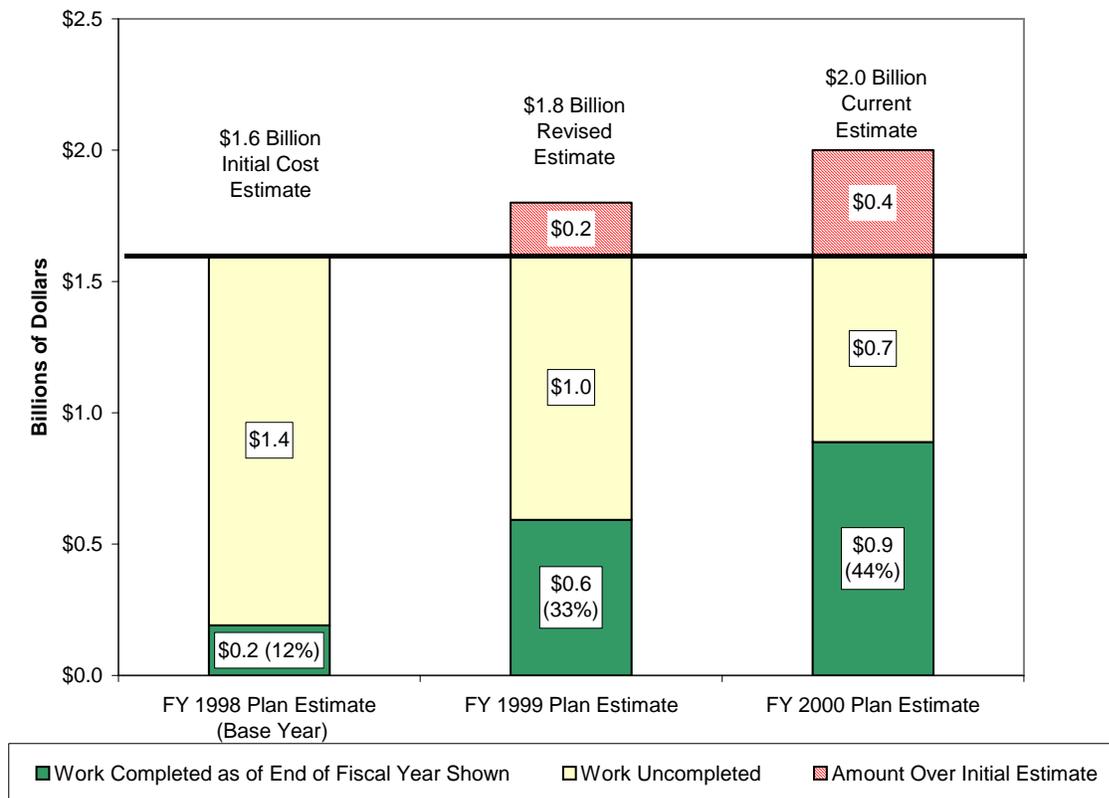
The federal environmental process under the National Environmental Policy Act (NEPA) was completed when the Record of Decision was signed in 1996, and final design began in May, 1997. The initial financial plan was accepted by FHWA in August, 1998. The first construction contract was approved by FHWA late in FY 1998. This example shows the updated annual financial plan for the third fiscal year of implementation (FY 2000). In accordance with the schedule contained in the Initial Financial Plan, this Annual Update was submitted to FHWA for acceptance in October 2000. Construction of the project is scheduled for completion at the end of FY 2003.

1. CURRENT COST ESTIMATE

In the 1998 Initial Financial Plan, total project costs were estimated at \$1.6 billion. As of this report, the estimated total project cost has risen to \$2.0 billion, an increase of \$400 million over the original financial plan. Reasons for this increase are discussed in Section 6, “Cost and Revenue History.”

Exhibit 1a compares the current total cost estimate to cost estimates from the previous financial plan submissions, as well as the percent of the project completed in each fiscal year. Per FHWA guidance, all cost estimates are in year-of-expenditure dollars that already take inflation into account. As of this report, the project is 44 percent complete.

Exhibit 1a
Total Cost Estimates by Annual Financial Plan



COST ESTIMATE BY CONSTRUCTION SEGMENT

The table below shows the current cost estimate and the remaining cost to complete by construction segment. The segments on this simplified project coincide with the construction contracts awarded. These contracts include: construction of the east interchange, construction of the west interchange, the seismic retrofit, and widening of the bridge to provide an HOV lane and the bike lane.

On an actual project, it is likely that each construction segment will have more than one construction contract, and that a project sponsor would need to combine various construction contracts in order to portray the status of a construction segment. The key issue for financial plans is defining the segments that will be tracked in the initial plan, and maintaining consistent definitions for each subsequent Annual Update of the plan, to enable comparison.

COST ESTIMATE BY CONSTRUCTION SEGMENT <i>(in millions of dollars)</i>				
Segment	Initial Cost Estimate (FY 1998 - Base Year)	Current Cost Estimate (FY 2000)	Net Increase Since Initial Estimate	Cost to Complete (as of FY 2000)
<i>West Interchange and Approaches</i>	\$262.5	\$300.0	\$37.5	\$0.0 (complete)
<i>East Interchange and Approaches</i>	\$337.5	\$337.5	\$0.0	\$112.5
<i>Seismic Retrofit of Existing Structure</i>	\$300.0	\$443.0	\$143.0	\$425
<i>Widening of Existing Structure</i>	\$300.0	\$419.5	\$119.5	\$419.5 (not started as of FY 2000)
Total	\$1,200.0	\$1,500.0	\$300.0	\$957.0

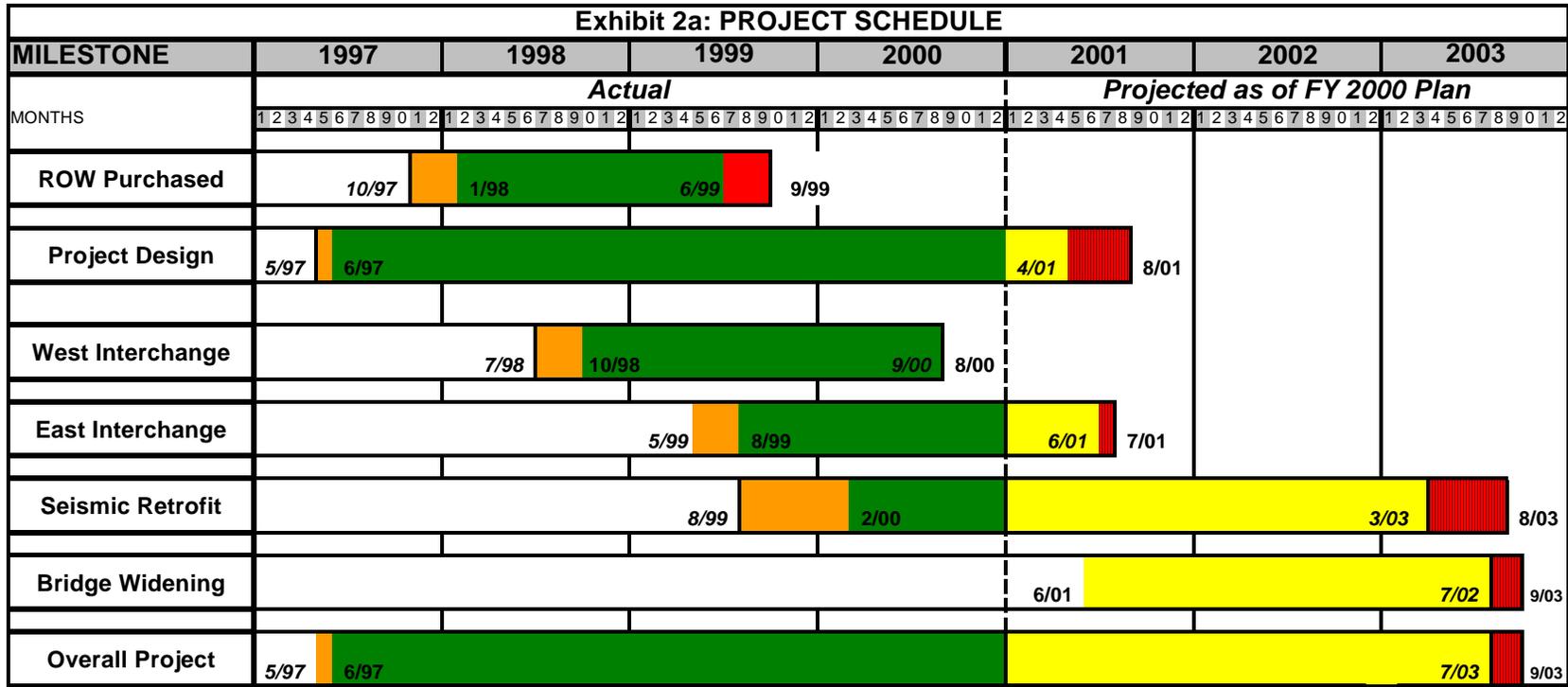
COST ESTIMATE BY MAJOR PROJECT ELEMENT

In this example we have chosen to simplify the exhibits by combining the project elements into four broad categories, and including under the category of "project management" activities such as utility relocation, hazard mitigation, etc. This is a project-by-project decision, and it is likely that an actual project sponsor would choose to have a much more detailed breakdown of project elements. As with construction segments, the key point to remember is to be consistent with the definition of project elements in each annual submission, in order to enable comparison from year to year.

COST ESTIMATE BY MAJOR PROJECT ELEMENT				
<i>(in millions of dollars)</i>				
Element	Initial Cost Estimate (FY 1998)	Current Cost Estimate (FY 2000)	Net Increase Since Initial Estimate	Cost to Complete (as of FY 2000)
<i>Design</i>	\$95	\$100	\$5	\$5
<i>ROW</i>	\$80	\$100	\$20	\$0 (done)
<i>Pro. Mgmt.</i>	\$225	\$300	\$75	\$150
<i>Construction</i>	\$1,200	\$1,500	\$300	\$957
<i>Total</i>	\$1,600	\$2,000	\$400	\$1,112

2. IMPLEMENTATION PLAN

Exhibit 2a (next page) shows the project timeline. As of FY 2000, most of the design of the project is complete, construction is underway on the East Interchange and the Seismic Retrofit segments, and the West Interchange segment is now complete. The bridge widening segment contract is scheduled to be let in FY 2001.



Note: *Italics Represent Estimated Start and Completion Dates: Dates in Regular Font Are Actual Start and Completion Dates*

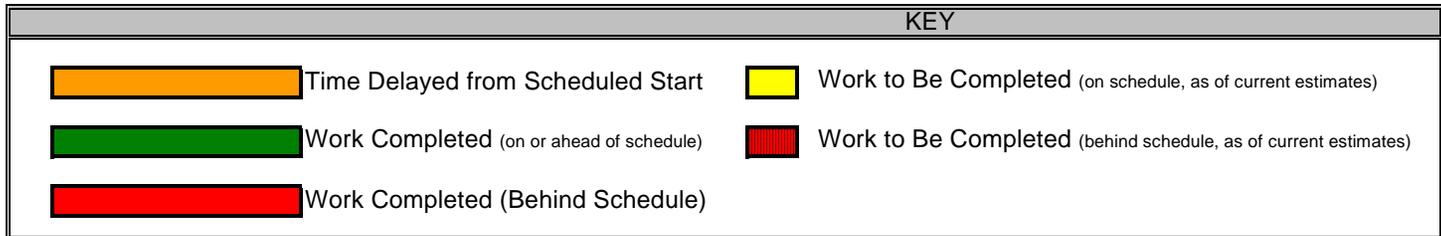
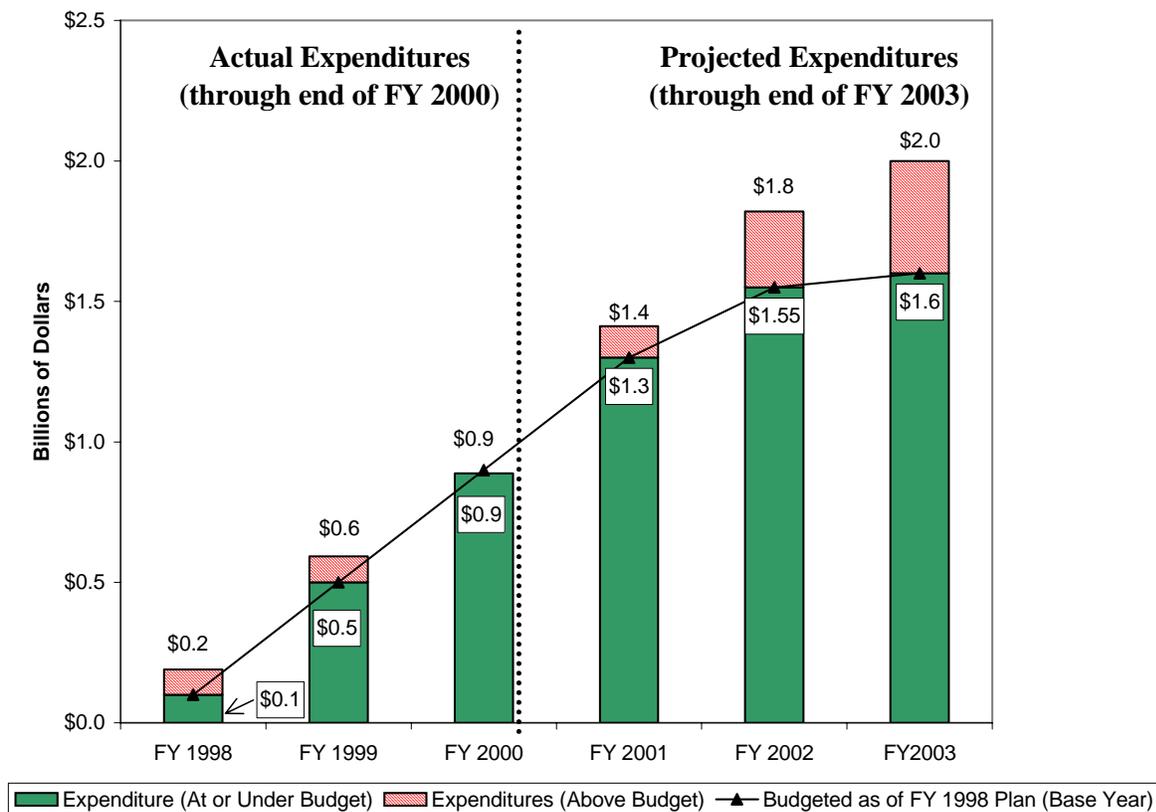


Exhibit 2b shows the actual expenditures versus the budgeted expenditures as shown in the Initial Financial Plan for the period of construction (FY 1998 – FY 2003). For example, by FY 1999, the State had spent \$600 million on the project, \$100 million more than the \$500 million originally estimated in the initial financial plan. The level of expenditures is projected to run ahead of initial estimates, in order to meet the increased costs under the revised cost estimate. The project continues to make substantial progress and construction is now estimated to be completed in Sept. 2003, two months later than initially planned.

Exhibit 2b
Cumulative Project Expenditures vs. Initial Financial Plan Expenditure Estimates
 (does not include debt service repayments during construction period)



3. PROJECT FINANCING AND REVENUES

This section is divided into three components:

- Overall Financial Plan
- Bond and Debt Service Detail
- Overall Revenue Analysis

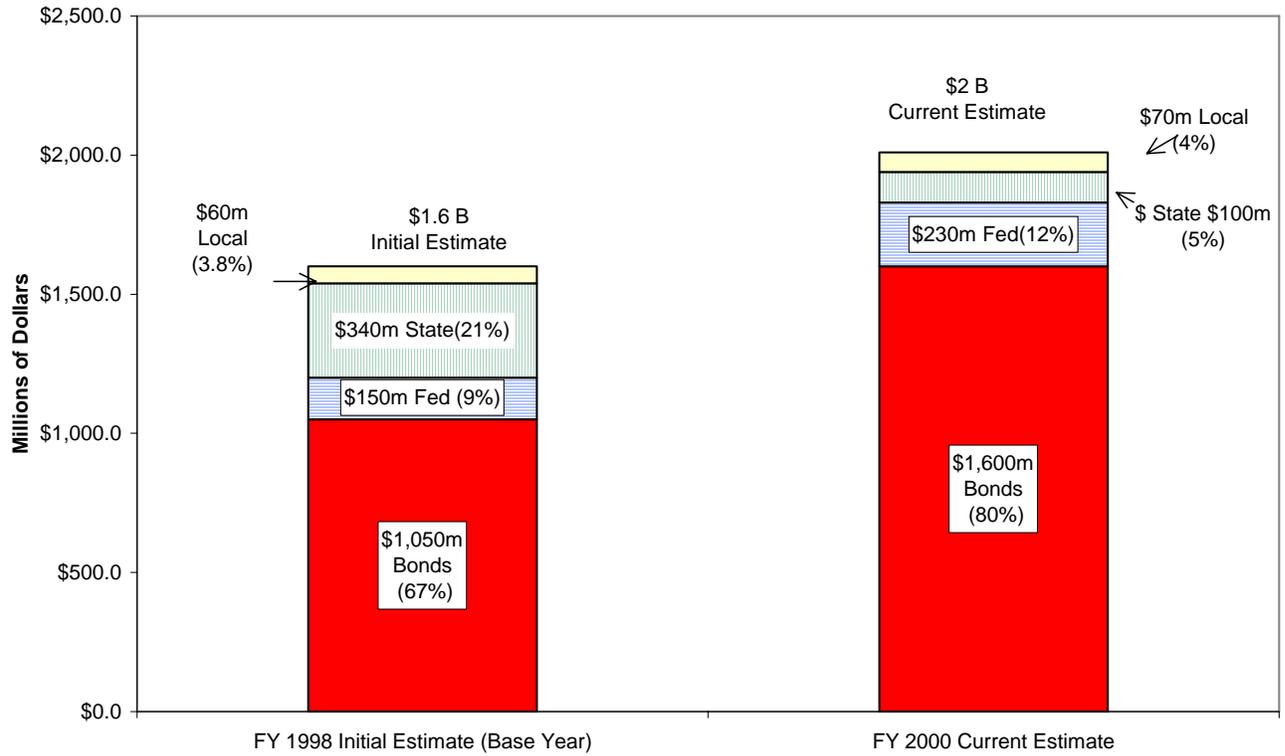
The first component provides an overview of how the project will be financed during the six-year construction period. A large part of the plan of financing is an estimated \$1.6 billion bond issue, to be repaid from a variety of sources. The second component provides details about the planned borrowing, and shows how future debt service commitments will be met. Finally, the last component presents an analysis of the overall revenue sources that will ultimately pay the costs of the project. This section discusses both the direct project expenditures that will be required during the six-year construction period, and the revenues required for the period after construction to repay project debt.

This sample financial plan includes information that extends beyond the period of project construction, because part of the financial plan incorporates borrowing whose repayments will also extend beyond the period of construction. In order to portray the impact of a project on a State's program, and the actual level of funding that will ultimately be provided to a mega-project, both the construction financing plan and the eventual revenue sources that will repay the financing should be presented.

OVERALL FINANCIAL PLAN

The entire project will be financed through a combination of direct cash contributions from federal funds (primarily National Highway System (NHS) and bridge apportionments), state gas taxes, vehicle license fees, local sales taxes and bonds. Exhibit 3a compares the initial project financing plan to the current FY 2000 version.

**Exhibit 3a
Project Financing Plan By Source**



Note: bonds repaid with Federal, state, and local funds (as shown in Exhibit 3b, next page).

In order to address the \$400 million increase in the total cost estimate, the state transportation department (STD) increased its borrowing from \$1.05 billion to \$1.6 billion. While this increased borrowing allowed the state to reduce its up-front (cash) contribution the project, the state will have to increase both Federal and state funding for debt service in future years.

Exhibit 3b presents the breakdown of the current finance plan, and shows the sources of repayment for the bond issuance.

DEBT SERVICE/BONDING DETAIL

The project sponsors initially planned to issue \$1.05 billion in bonds to finance part of the \$1.6 billion cost. The Initial Financial Plan projected that the bonds would be issued in three series:

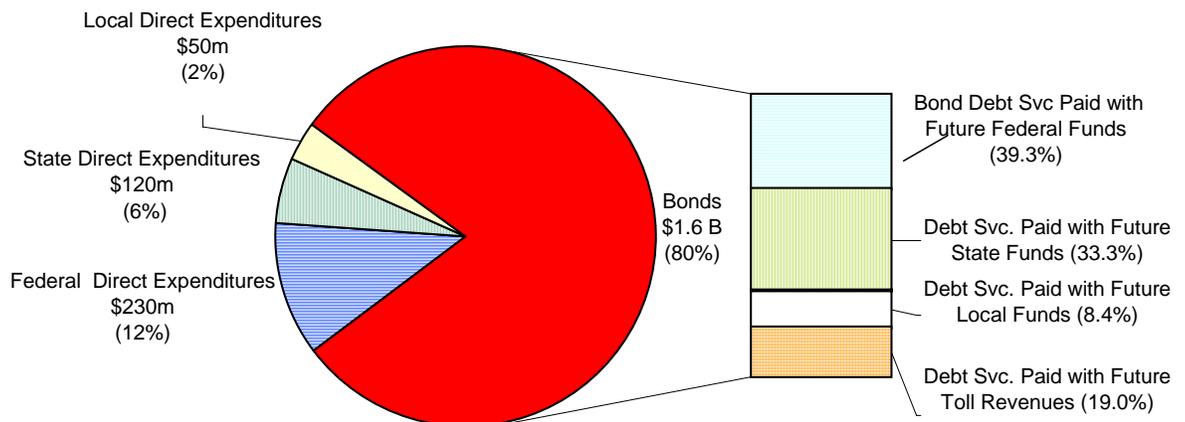
- \$400 million in Series 1998 bonds (15-year term)
- \$450 million in Series 2000 bonds (10-year term)
- \$200 million in Series 2002 bonds (10-year term)

However, in response to the cost increases identified early in the first year, and the reduction in annual state spending, the project sponsors increased the bond issuance to \$1.6 billion, in the following series:

- \$450 million in Series 1998 bonds (15-year term)
- \$770 million in Series 2000 bonds (10-year term)
- \$380 million in Series 2002 bonds (10-year term)

In some years, the annual debt service required by the additional bonds has increased by nearly \$70 million from the initial estimate. However, in the Overall Revenue Analysis below (section C), the state can demonstrate that its available resources are more than adequate to support this

Exhibit 3b
Project Financing Plan:
with Bond Repayment Revenue Source Detail



level of future debt service.

SUMMARY OF KEY ASSUMPTIONS FOR DEBT FINANCING	
ASSUMPTION	JUSTIFICATION/DISCUSSION
<i>Interest Rate 5.4%</i>	This estimate was provided by the State's financial advisers, based on current market conditions as well as the Series 1998 and 2000 bond issues already completed. If interest rates rise or fall substantially prior to bond issuance, interest and issuance costs could change.
<i>Bond Term 10 – 15 years</i>	Maximum allowable term is 15 years.
<i>Total Borrowing \$1.6 billion</i>	Total borrowing was initially capped at \$1.2 billion; however, the revised bond legislation also increased the cap on borrowing to \$2 billion.
<i>Level Debt Service</i>	Standard practice

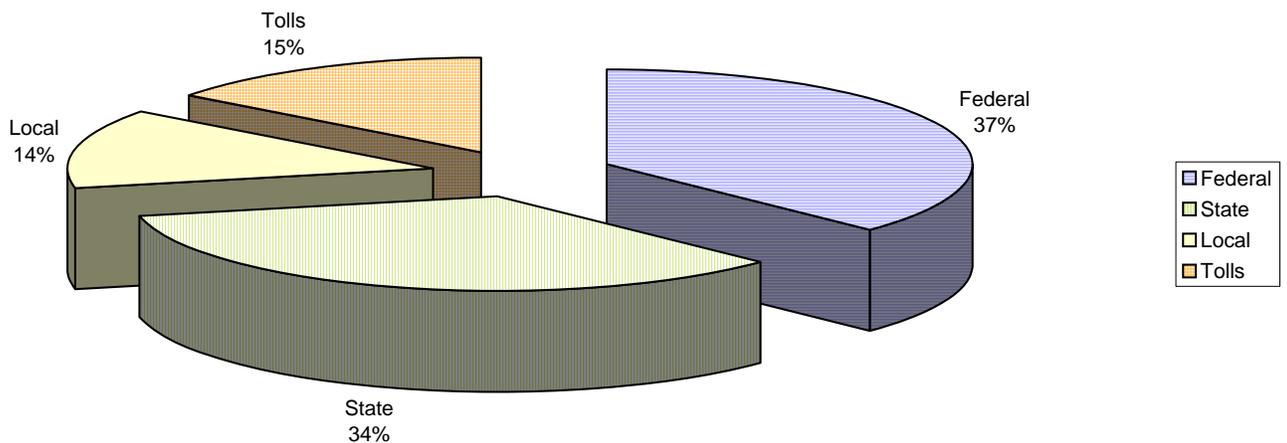
OVERALL REVENUE ANALYSIS

The actual revenues used (for FY 1998-2000) and the projected revenues required through FY 2012 are shown by source in a chart listed in the appendix.

The pie chart in Exhibit 3c below shows the relative contribution of the funding partners to this project, including both up-front contributions during the period of project construction, and planned commitments to fund future debt service payments.

Overall, the revenues that will pay for this project will be 37 percent Federal (primarily apportionments, although a small amount of discretionary funding was received in the initial years of the project), 34 percent state (from gas taxes and vehicle license fees), 14 percent from a local sales tax, and 15 percent from a toll that was approved by the Legislature in order to repay some of the additional bonds needed for the project.

Exhibit 3c
Overall Revenues by Source
(Direct Project Expenditures and Debt Service Payments, FY1998-FY2012)

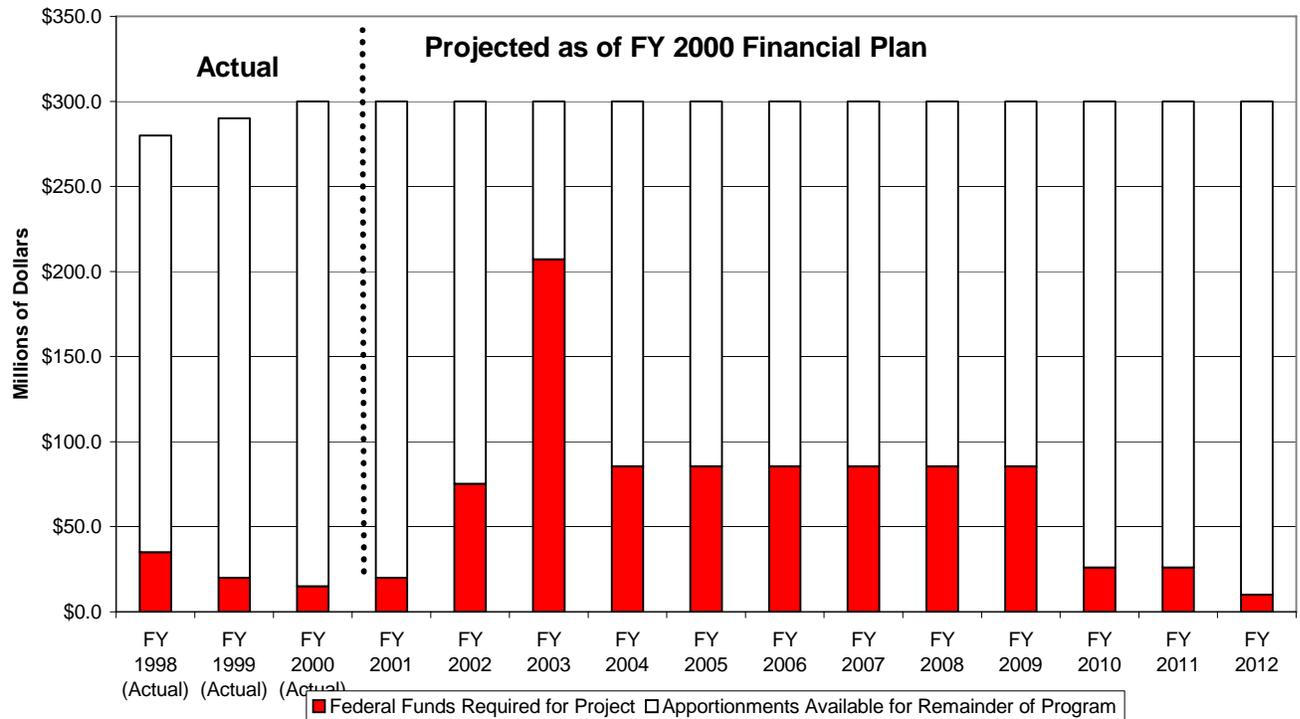


Federal Funds/Advance Construction

Future federal funds are a key aspect of the financial plan for the Roy Stone Bridge. From FY 1998 through FY 2012 (when the project debt will be completely retired) the STD will use an average of \$63 million in Federal funds for this project annually, approximately half of which will be used for payment of debt service.

Exhibit 3d compares the amount of Federal funds required for this project to the State's overall apportionment level. Due to high levels of both construction expenditures and debt service repayments in FY 2003, this project will require nearly 2/3 of the State's apportionment in that year. This situation is accounted for in the State's STIP and long-range plan, and is not expected to affect the remainder of the program.

**Exhibit 3d
Annual Federal Funds Required for Project
vs. Total Annual Federal-Aid Apportionments to the State**



Note: It is assumed that apportionments will be obligated and corresponding outlays will be made in the year the apportionments are shown.

The STD has already put the project under advance construction, and has converted \$127.2 million to regular Federal aid to date. This level of AC is considerably below the maximum level permitted and will not have a significant impact on the rest of the Statewide program in any year except FY 2003, when funding needs for the Roy Stone bridge will require nearly 2/3 of the apportionments for the state. The State Transportation Department and legislature are aware of this situation and are prepared to provide additional state funding if necessary to continue the rest of the state program during that year.

Note that the projected annual Federal-aid apportionments remain constant after the point of expiration of TEA-21. In most cases, it is recommended that apportionments from future Federal-aid legislation be assumed to match the estimated apportionment from the last year of the current bill; no increases should be assumed for future projections. If a State receives an unusually high amount of funding in the last year of an authorization (due to, for example, completion of Interstate projects that will not exist in future authorizations), it may not be appropriate to use the funding from that year as a basis for future projections. Whatever projections of Federal funding that are made should be consistent with past apportionments and approved by the appropriate FHWA Division Office under the STD's existing planning process.

STDs should also be aware of the level of OA and annual AC conversion required to meet the cash flow needs of mega-projects. In many cases, STDs will need to maintain a high level of AC balance in order to convert obligations in time to meet project obligations. If a mega-project represents a large component of a state's program, STDs should closely monitor use of both AC and OA to ensure that project obligations can be met.

Although the project has received discretionary funding in the past, it is not assumed that this

level of funding will continue. If discretionary funds are received in the following 3 fiscal years, the contribution from tolls and other sources of revenue will be reduced.

Note that while this example project did receive discretionary funding in two of the first three years, no discretionary funds are included as projected revenue for the remainder of the project. A financial plan should never assume that discretionary Federal funds will constitute a part of future revenue.

State Gas Tax

Over the years FY 1998 - FY 2012, an average of \$33.5 million in state gas tax funds will be used for this project. The state gas tax in this State is constitutionally dedicated for use in transportation projects, and provides more than \$200 million per year. These funds must be designated for use on a project by project basis each year by the State Transportation Department; however, the Department has a policy of prioritizing support for projects with debt issuances associated with them. In the event that the legislature fails to continue the vehicle license fee, or there is a decrease in state gas tax revenues, the amount of bond proceeds dedicated to this project can be increased.

Vehicle License Fees

The State will use between \$10 million and \$50 million per year of a state-imposed vehicle license fee applied to the county where the project is being constructed. The fee, which will bring in an estimated \$50 million per year, is dedicated by its enabling legislation to transportation. It is scheduled to expire in FY 2003; however, the legislature has never failed to reauthorize this fee and it is anticipated that it will again take action to continue this source of revenue. If the legislature fails to do so, the financial plan assumes that the STD will use additional state gas tax funds to replace the missing revenue.

Local Sales Taxes

The county in the area around the General Roy Stone Bridge has pledged to use a portion of their local sales tax, which is dedicated to transportation, for the project. Each year the county commissioners will have to appropriate this funding; however, due to the strong county support for the retrofit, the State anticipates no difficulty in appropriations. This tax is scheduled to expire in 2003. To replace it, the county and the state have tentatively agreed to levy a toll on the reconstructed bridge; however, the voters will have the option to choose between extending the sales tax or approving the tolls. If the county voters failed to approve either tolls or extension of the sales tax, the county commissioners have committed to appropriating the funds from the General Fund of the county. If the county failed to appropriate its share of funding for the project, the state would explore options to divert state transportation funding currently planned to be used for other projects in this county. The county and the STD have signed an MOU to this effect.

Tolls

Once the local sales tax expires, the county has agreed to seek authority to levy tolls on the bridge. If enacted, starting in FY 2004, tolls will generate between \$30 and \$50 million in

annual revenues, according to the most conservative estimates provided in the toll road feasibility study prepared by an independent consultant to the STD (attached).

The inclusion of a future revenue source based on an anticipation of legislative action must be weighed very carefully and will generally not be accepted. This will be a project by project decision, which will only be made after considering the political climate and the legislative history of the State. To aid in this decision; if a revenue source is scheduled to expire during the life of the financial plan, the plan should disclose the expiration date and legal action required to continue its use. Any available documentation showing intent to continue the revenue source should also be provided.

**SUMMARY OF KEY REVENUE ASSUMPTIONS, RISKS,
AND MITIGATIONS FOR FINANCIAL PLAN**

REVENUE SOURCE	ASSUMPTIONS & JUSTIFICATION	DISCUSSION/ POTENTIAL RISKS	RISK MITIGATION
<i>Federal Funds – Apportionments</i>	Continued funding at current apportionment levels. This is the level of funding FHWA permits us to plan for in our approved, fiscally-constrained STIP, and is consistent with our Long-Range plan.	The project is scheduled for completion in FY 2003, at the end of the TEA-21 authorization. Subsequent authorization lapses could affect debt service repayments.	The STD will maintain a continuous balance of AC program-wide that will cover one year’s worth of project costs.
<i>Federal Funds – Discretionary</i>	No further discretionary funding assumed; State intends to apply for bridge discretionary.	No risk since funds are not part of current financing plan.	
<i>State Funds – Gas Tax</i>	Assumes an average of \$38.7 million per year will be made available by the STD to this project. This is out of a total gas tax fund of approximately \$200 million per year.	STD controls use of gas tax fund (without legislative action); no appropriations risk.	STD does not believe any risk mitigation is necessary.

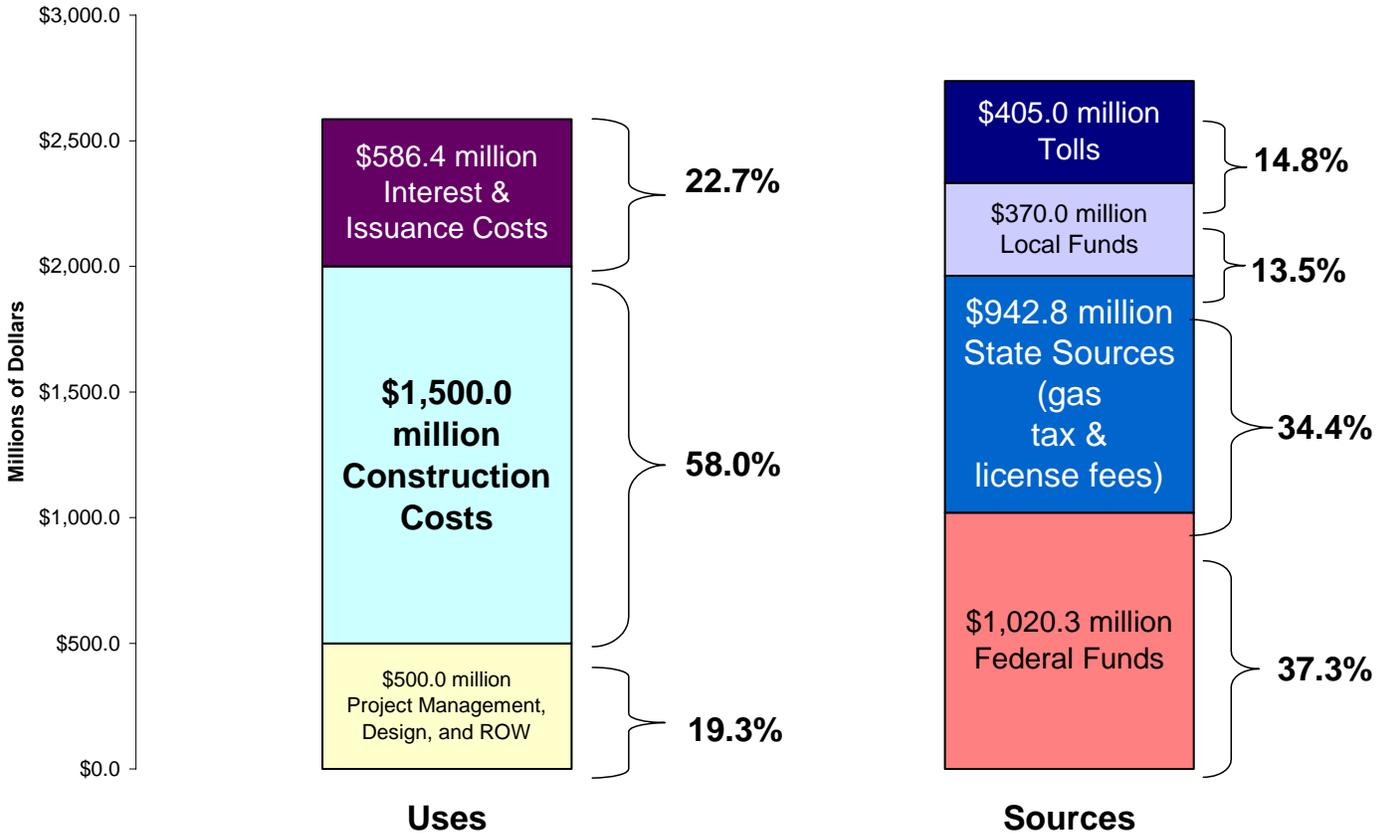
**SUMMARY OF KEY REVENUE ASSUMPTIONS, RISKS,
AND MITIGATIONS FOR FINANCIAL PLAN**

REVENUE SOURCE	ASSUMPTIONS & JUSTIFICATION	DISCUSSION/ POTENTIAL RISKS	RISK MITIGATION
<i>Vehicle License Fee</i>	Assumes \$10 - \$50 million per year in funding out of \$50 million total.	Fee expires in FY 2003.	The STD is prepared to supplement with additional state gas tax funding in the event that the legislature fails to reauthorize the vehicle license fee.
<i>Local Sales Taxes</i>	Assumes \$60 million per year through FY 2003.	Sales tax must be appropriated to project annually by county commissioners.	The State is prepared to withhold other funding from county if county fails to appropriate adequate funds for this project. MOU signed between county and STD reflects this understanding.
<i>Tolls</i>	Assumes \$40-\$50 million per year from FY 2004 - FY 2012.	Legislative authority not yet in place	County has pledged to either renew local sales tax or ensure that toll authority is enacted; if it fails to do so, MOU permits the STD to withhold funding for other transportation projects.

4. CASH FLOW

The revenue projections in the Initial Financial Plan were quickly shown to be inadequate due to construction overruns during the first year of construction. At that time, project officials realized that the originally planned revenue sources would not support the project expenditures and decided to significantly increase their bond offerings. Exhibit 4a presents the anticipated sources and uses of funds for this project.

**Exhibit 4a:
Project Financing: Summary of Sources and Uses**

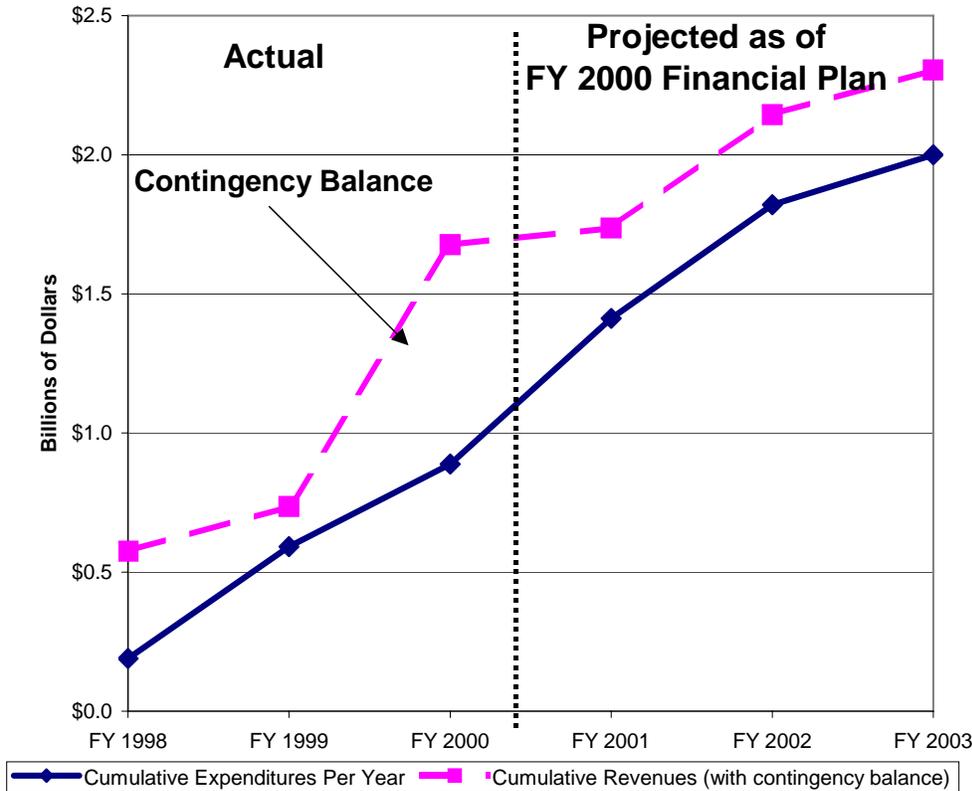


Contingency Fund

After experiencing cost overruns in the first year of project construction, officials decided to establish a contingency fund for the remainder of the project. The fund, which will be a dedicated account within the State’s highway trust fund, will grow to a maximum of \$102 million, and gradually be reduced if not required. Interest earned on this fund will not be counted as a funding source but will be applied to other state projects, if available.

Exhibit 4b shows the actual and anticipated cumulative annual revenues, compared to required expenditures. In this illustration, the balance of the contingency fund is added in each year, to demonstrate the true coverage levels available to the state. As the contingency fund is reduced, the expenditures and revenues match more closely. This coincides with the substantial reduction in project risk after construction.

Exhibit 4b
Cumulative Revenues (with Contingency Balance)
vs. Cumulative Expenditures by Year During Construction
(Excludes Debt Service Repayments During Construction)



5. OTHER FACTORS

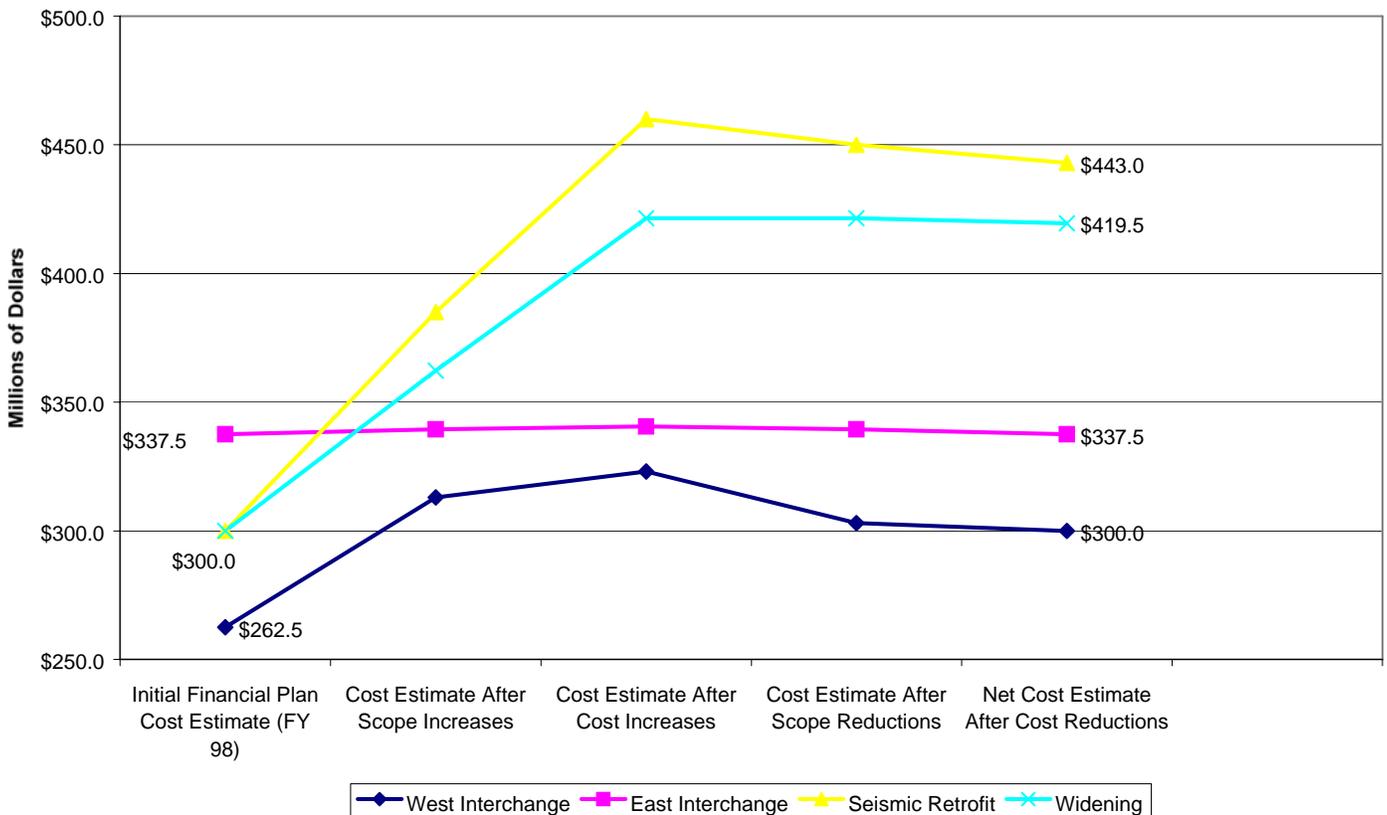
As estimated in the Initial Financial Plan the project cost was shown to be \$1.6 billion. This was fully consistent with the STIP and long range plan figures. However the increase in project cost, now up to an additional \$400 million, had the potential to impact the planned program of projects in the remainder of the state. For that reason, State officials decided to rely more heavily on bonds to support the additional \$400 million in construction costs, and at the same time to reduce their dependence of State gas tax revenue dedicated to this project. This allowed them to increase the state gas tax revenue available to the statewide program and retain the relative balance in funding between the subject project and the remainder of the STIP.

6. COST AND REVENUE HISTORY

Actual annual expenditures almost immediately began running ahead of estimates on this project. Both design and ROW overran initial estimate. Design costs were higher due primarily to the need for additional subsurface investigation and the resulting revisions to the bridge substructure and retrofit plans as well as the structures in the interchange contract. These design revisions resulted in the need for additional ROW in the areas of both the East and the West interchanges. Also, as the project ROW limits were expanded into a heavily developed area, the needed ROW parcels were more expensive than anticipated.

Exhibit 6a shows the net effects of scope and cost changes on the costs for each construction segment. Sections 9 and 10 provide further detail on these changes.

Exhibit 6a
Net Effects of Scope and Cost Changes



COST HISTORY BY CONSTRUCTION SEGMENT
(in millions of dollars)

Project	Initial Estimate	Scope Increases	Cost Increases	Scope Reductions	Cost Reductions	Current Estimate
<i>West Interchange</i>	\$262.5	\$50.5	\$10.0	\$20.0	\$3.0	\$300.0 (complete)
<i>East Interchange</i>	\$337.5	\$2.0	\$1.0	\$1.0	\$2.0	\$337.5
<i>Seismic Retrofit</i>	\$300.0	\$85.0	\$75.0	\$10.0	\$7.0	\$443.0
<i>Widening</i>	\$300.0	\$62.3	\$59.3	\$0.0	\$2.0	\$419.5
Total	\$1,200.0	\$199.8	\$145.3	\$31.0	\$14.0	\$1,500.0

In summary, total projected increases in the cost to complete the project as of the end of FY 2000 are \$400 million over the Initial Estimate as shown below:5/22/2000

\$5 million in design costs (actual)

\$20 million in Right-of-way costs (actual)

\$325 million in construction costs (projected)

\$75 million in management costs (projected)

In the analysis of the project history it is important to distinguish between cost changes due to scope or design revisions to the project and cost changes due to actual costs being different from initial assumptions.

7. COST AND REVENUE TRENDS

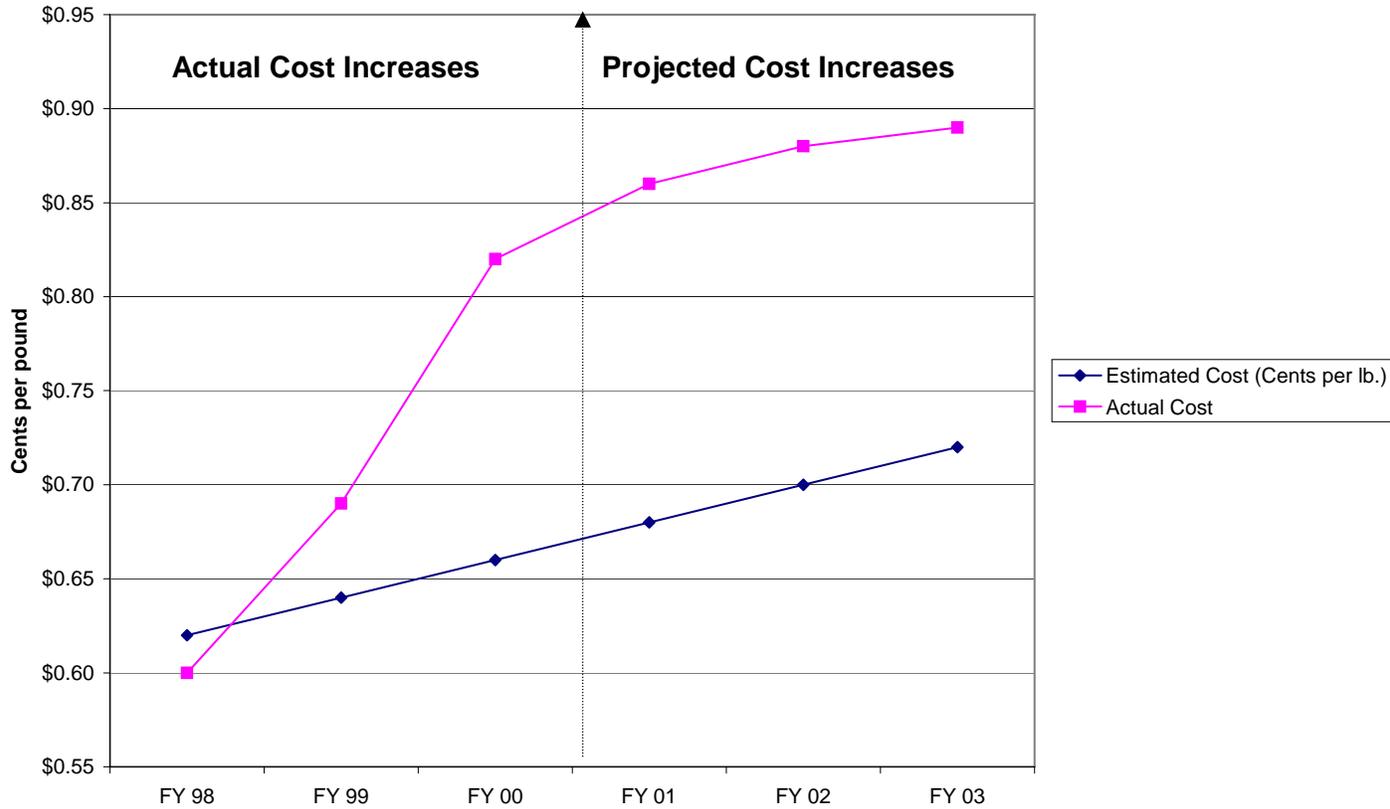
Inflation has remained steady at 3 percent throughout the life of the project, as estimated in the Initial Financial plan. However, the project has been impacted by unanticipated increases in the price of some construction materials. Both the price of reinforcing steel and the price of cement have increased dramatically due to a shortage of these materials caused by several large private sector construction projects in the immediate area. It is anticipated that these shortages, and thus the higher prices, will endure throughout the remainder of Project construction. Future estimates have been adjusted upward to reflect this reality. Exhibit 7a illustrates the actual cost of reinforcing steel compared to the estimate upon which the initial financial plan was based, and shows the revised projections for future costs.

This section of the Financial Plan may necessitate several exhibits like 7a to compare actual with estimated costs

8. REVENUE SHORTFALL MITIGATION

The 1998 revenue shortfall and the steps taken to deal with that shortfall have been discussed in

**Exhibit 7a
Cost Increases in Reinforcing Steel**



section 4, “Cash Flow,” and were dealt with more fully in the 1999 Annual update. As the project design is now virtually 100 percent, complete and construction is well underway, the potential for future large cost increases is very diminished. As the project has progressed now into its 3rd year the revenue sources have also become more predictable, and thus future revenue shortfalls are considered unlikely. In the event of a relatively small revenue shortfall (i.e., less than \$100 million), gas tax revenues can be shifted to cover the shortfall. If a substantial revenue shortfall occurs (over \$100 million), additional bond proceeds and federal-aid apportionments will be used to cover the shortfall.

9. SUMMARY OF SIGNIFICANT COST REDUCTIONS

SUMMARY OF SIGNIFICANT COST REDUCTIONS (in millions of dollars)				
CHANGE	INITIAL ESTIMATE	CURRENT ESTIMATE	REDUCTION	EXPLANATION
<i>Redesign landscaping plan (West Interchange)</i>	\$18	\$15	\$3	Use native plants / reduce irrigation
<i>Value engineer storm drainage (East Interchange)</i>	\$60	\$58	\$2	Change pipe sizes / materials
<i>Steel piling (Seismic Retrofit)</i>	\$32	\$25	\$7	Actual length was less than estimated
<i>Miscellaneous Cost Changes (Widening)</i>			\$2	Miscellaneous changes under \$1 million
<i>Total Cost Reductions</i>			\$14	

SUMMARY OF SCOPE REDUCTIONS/DESIGN CHANGES THAT RESULT IN DECREASED COST (in millions of dollars)				
CHANGE	INITIAL ESTIMATE	CURRENT ESTIMATE	REDUCTION	EXPLANATION
<i>Eliminate pier (West Interchange)</i>	\$40	\$20	\$20	Use high-strength concrete to lengthen spans.
<i>Miscellaneous Changes (East Interchange)</i>	\$0	\$1	\$1	
<i>Eliminate utility conduit</i>	\$10	\$0	\$10	Actual length was less than estimated
<i>Total Scope/Design Changes Resulting in Reduced Cost</i>			\$31	

10. SUMMARY OF SIGNIFICANT COST INCREASES

SUMMARY OF SIGNIFICANT COST INCREASES				
<i>(in millions of dollars)</i>				
CHANGE	INITIAL ESTIMATE	CURRENT ESTIMATE	INCREASE	EXPLANATION
<i>Earthwork (West Interchange)</i>	\$35	\$45	\$10	Disposal of contaminated soil
<i>Earthwork (East Interchange)</i>	\$36	\$37	\$1	Disposal of contaminated soil
<i>Seismic Retrofit Composite Wrap (Seismic Retrofit)</i>	\$90	\$120	\$30	Underestimated quantity required
<i>Substructure Construction (Seismic Retrofit)</i>	\$125	\$160	\$35	Encountered undetected clay strata
<i>Reinforcing Steel (Seismic Retrofit)</i>	\$45	\$55	\$10	Bid price over estimate
<i>Reinforcing Steel (Widening)</i>	\$50	\$60	\$10	Bid price over estimate
<i>Concrete paving (Widening)</i>	\$120	\$150	\$30	Escalation in concrete unit price
<i>Work Zone Traffic Control</i>	\$20	\$30	\$10	Due to construction delays
<i>Miscellaneous Cost Increases (Widening)</i>			\$9	
Total Cost Increases			\$145	

SUMMARY OF SIGNIFICANT SCOPE INCREASES/DESIGN CHANGES				
(in millions of dollars)				
CHANGE	INITIAL ESTIMATE	CURRENT ESTIMATE	INCREASE	EXPLANATION
<i>Add interchange lighting (West Interchange)</i>	\$0	\$25	\$25	Improve night-time safety
<i>Add pedestrian overpass (West Interchange)</i>	\$0	\$26	\$26	Connect bike path to recreation area
<i>Miscellaneous changes (East Interchange)</i>	\$0	\$2	\$2	
<i>Re-design (Seismic Retrofit)</i>	\$60	\$145	\$85	Meet new state safety standards
<i>Widen bike and ped path; extend (Widening)</i>	\$0	\$85	\$85	Meet new state requirements for disabled access
<i>Total Scope Increases/Design Changes</i>			\$200	

APPENDICES

APPENDIX A: ADDITIONAL EXAMPLES OF GRAPHICS/SUPPORTING DATA

A-Ia	Pie with Smaller Pie	Distribution of \$400 million net increase
A-Ib	Table	Cost Estimate Data
A-Ic	Pie with Smaller Pie	Cost Increase Pie/Bar
A-Id	Table	Implementation Plan Data
A-IIIa	Line	Cumulative Debt Service Requirements: Initial Estimate vs. Current
A-IIIb	Stacked Column	Revenues by Source & Year
A-IIIc	Table	Project Financing Data
A-IIId	Table	Summary of Bond Financing Plans and Assumptions
A-IIIE	Table	Sources of Repayment for Debt Service
A-IIIf	Table	Overall Revenue Sources
A-IIIG	Table	Apportionments Required by Project
A-Iva	Table	Cash Flow
A-Ivb	Stacked Column	Total Potentially-Available Revenues vs. Est. Annual Costs
A-Ivc	Table	Background data on available revenues.
A-Ivd	2 Pie Graphs	Sources and Uses of Funds
A-Vih	Table	Cost Changes Data Table
A-VIIa	Table	Cost Estimate Data for Steel

APPENDIX B: LIST OF POTENTIAL ATTACHMENTS (ORGANIZED BY SECTION)

Cost Estimate - Section 1

- Engineering Reports/Independent Verification (if available)

Implementation - Section 2

- Progress Reports
- Documentation of Project Completion (i.e., any more details regarding construction)

Project Financing and Revenues - Section 3

- Official Statement for Past and Proposed Bond Issues Associated With Project
- Rating Agency Reports for Bond Issues
- MOU between County and STD regarding local sales tax/toll revenue stream
- Toll revenue feasibility study

Cash Flow - Section 4

- Cash balance summary/report of fund balances