

**U.S. DOT Federal Railroad Administration
Office of Passenger and Freight Programs**

Monitoring Procedure 49 - Financial Plan Review

1.0 PURPOSE

This Monitoring Procedure (MP) describes FRA requirements for the Monitoring and Technical Assistance Contractor (MTAC) when evaluating a Grantee's financial plan. The MTAC's evaluation will inform FRA's decisions regarding a Grantee's readiness to receive Federal funds for capital rail projects.

2.0 KEY PRINCIPLES

The financial plan timeframe is 5 + 20 -- five years of financial history for the Grantee's transportation agency and twenty years of projected costs and revenues for the proposed project, the agency's existing system, and its other planned projects. For this timeframe, the agency's financial health should be demonstrated by its ability to fund capital and operation and maintenance (O&M) costs, and by the supporting documentation for the assumptions behind projected costs and revenues.

The general content of the financial plan will remain the same throughout a project's life however the level of development of the plan will reflect the project development stage. Details will evolve as project scope, cost estimates, and funding strategies are defined, and fund sources transition from planned to budgeted to committed.

The cost and revenue forecasts in the financial plan are useful at many points in a project's life but are especially useful when the Grantee and stakeholders are deciding among alignments or projects in alternatives analysis.

Prior to initiation of final design, the Grantee is expected to have non-federal funds committed to complete project construction. Prior to initiation of construction, the Grantee is expected to have all funds committed for construction and to support operation, maintenance, and necessary recapitalization for the first twenty years of operation.

3.0 REQUIRED DOCUMENTS

The MTAC should obtain from the Grantee the financial plan, the project cost estimate and schedule, and if available, the market analysis, and regional economic condition study.

4.0 SCOPE OF WORK

The MTAC should evaluate the Grantee's financial plan to confirm the Grantee's capacity and capability to:

- undertake the project – to identify and obtain capital funding on a schedule that reflects the cash flow needs of the project schedule;

- meet the requirements for ongoing operations, management, and maintenance for the project and the agency as a whole for a 20-year period;
- identify, analyze, manage, and mitigate project risks to the finance plan.

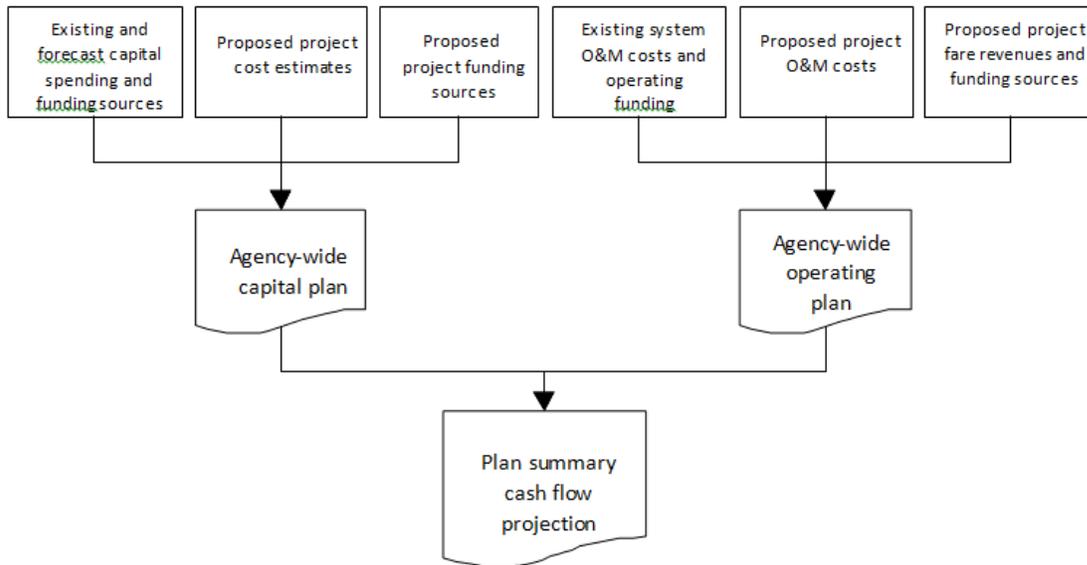
The MTAC will review revenue and expenditure projections including the assumptions described and any supporting documentation. If the MTAC determines that the Grantee’s assumptions or its capacity to generate revenue is inadequate or weak, the MTAC should make recommendations for corrective action, along with a time frame for the action.

The MTAC will verify that the Grantee has completed and submitted the required documents on a timely basis. As the project progresses, the MTAC will ensure that the Grantee updates or modifies the information when necessary, typically annually. The updates should document significant changes in project costs or revenues, provide explanations for the changes, and describe the actions to address potential shortfalls.

4.1 Financial plan

The financial plan is constructed by bringing several elements together into an integrated model, as shown in Figure 1 below:

Figure 1: Components of a Financial Plan



The financial plan includes a 20-year cash flow projection covering both capital and operating revenues and expenses for the agency as a whole, as well as for the proposed project. The assumptions and inputs that support the cash flow projection include:

- Funding sources and revenue forecasts;
- Proposed project capital budget;

- Other planned capital projects; and
- Annual operating and maintenance (O&M) expenses for the project as well as the existing and future system.

The financial plan should conform to this outline:

- 1) Introduction
 - a) Description of the Grantee and Funding Partners
 - b) Description of the Project
 - c) Summary of the Financial Plan
- 2) Capital Costs and Revenues
 - a) Project Plan
 - b) Agency-Wide Plan
- 3) Operating and Maintenance (O&M) Costs and Revenues
 - a) Project Plan
 - b) Agency-Wide Plan
- 4) Cash Flow Analysis
 - a) Twenty-Year Cash Flow Projection
 - b) Financial Evaluation
- 5) Appendix
 - a) Summary of Market Analysis and Regional Economic Condition Study
 - b) Summary of Financial Condition of the Grantee
 - c) Summary of Fleet Management Plans if applicable

4.2 Capital Costs and Revenues

4.2.1 Project Capital Plan

This plan includes a high level of detail regarding the proposed sources and uses of funding for the planning, design, and construction, and start-up of the project. It demonstrates the Grantee's ability to manage capital costs, and identify, obtain, and manage capital funding for the 5 + 20 timeframe (five years of financial history for the Grantee's transportation agency and twenty years of projected costs and revenues.)

It documents the commitment level for each funding source, schedule for funding availability, financing arrangements, and cash flow to cover project costs for the activities in the project schedule. In project planning and design, the costs and revenues can be shown in annual increments. Before bidding for construction, costs and revenues should be shown in quarter-year increments.

Capital Cost Estimating and Scheduling:

The cost estimate at each project stage should be retained for historical record, and for the “Before and After” report (refer to MP 27 Before and After Study.) Refer to MP 34 Project Schedule and MP 33 Cost Estimating for information on the kind of schedule and cost estimate required for various project stages. Note however, that for all stages, the cost estimate should be expressed as a range (low, medium, high) of potential project cost, in Year of Expenditure (YOE) dollars, and include costs for the following:

- Construction, real estate, vehicles, third party and force account work
- When applicable, construction in the context of an operating railroad, including shutdowns, rerouting, overtime, and work acceleration
- Professional services for the various phases of development and construction
- Financing
- Inflation -- the incremental increase in the cost of goods and services over time
- Allocated and unallocated contingencies for risks and unknowns
 - Refer to MP 40 Risk and Contingency Review for more information. The Grantee is responsible for cost increases and for fulfilling the terms of the grant agreement with FRA. Reduced service, delayed construction, or reductions in project scope are not acceptable contingencies.

For all stages, a narrative should accompany the cost estimate to describe the estimating methodology for project elements or units, inflation, interest rate forecasts for borrowing and earning, and in-kind contributions.

Funding:

The project capital plan identifies the proposed sources of funds for designing and constructing the project and indicates the degree of commitment of each non-federal funding source. At the completion of planning, the financial plan must identify a “realistic” strategy for providing non-federal “matching” funds. As the project advances, the level of commitment of non-federal funds must increase. Prior to initiation of final design, the Grantee is expected to have non-federal funds committed to complete project construction. Prior to initiation of construction, the Grantee is expected to have all funds committed for construction and funds to support operation, maintenance, and necessary recapitalization for the first twenty years of operation.

As shown in Table 1 below, evidence of commitment may include legislative documentation, resolutions approving funding, account balances, a bonding prospectus and agency debt covenants, signed joint development agreements, or legally binding agreements by State and other agencies to commit funds.

Table 1: Sources of Capital Funds, Year of Expenditure Dollars (Millions)

| Sources of Funds | Funding | Share | Attach Evidence of Commitment |
|---|------------------|----------------|--|
| Federal (Federal Railroad Administration) | 1,000,000 | 37.04% | NA |
| Other Federal funds | 200,000 | 7.41% | Statute to show the project is eligible for funding with this source |
| Total Federal Funds | 1,200,000 | 44.44% | |
| Sales Tax | 500,000 | 18.52% | Legislation and Revenue Forecast |
| Bond Proceeds | 1,000,000 | 37.04% | Debt Coverage Analysis and Rating |
| Total Non-Federal Funds | 1,500,000 | 55.56% | |
| Total Project Budget | 2,700,000 | 100.00% | |

A narrative should accompany such a table to describe each fund source -- the name, origins, dollar amount anticipated, amount currently expended, and share of total project capital costs in year-of-expenditure dollars. The total dollar amount across funding sources should sum to the project's total capital cost.

Funding Source Forecasts:

For each funding source, the plan should indicate whether the source exists, such as an active regional or State tax from which revenues are currently collected, or a new source requiring legislative approval, referendum, or other governmental action. For existing sources, the plan should outline the conditions of the funding agreement (e.g., funding formula, percent share of total revenues, etc.) and at least five years of historical revenue data. For major funding sources to the project, the plan should include 10 years of historical revenue data. For new sources, the plan should indicate when legislative approval or public referendum is expected and the date the source will become effective. For all sources, the plan must include a 20-year revenue forecast. The forecast should be supported by documents from the fund source, highlighting sunset clauses, and provisions to cover project funding beyond the sunset date.

For all revenue projections, the financial plan should use conservative rates of growth that do not exceed historical experience for that source.

Borrowing, Debt Levels and Ratings:

If the plan includes debt, a debt proceeds and service plan should be included to show outstanding debt levels, the gross amount of each debt issuance, net proceeds from each issuance, bond rating for each issuance, debt service requirements, and interest rates. The period includes the past five years and 20 years into the future. On at least a yearly basis, the Grantee should monitor and update the debt

information against the Grantee agency's most restrictive debt covenants, such as debt service ratio requirements, outstanding debt ceiling, or limits on debt expenditures during a specific time period, and should include the most recent bonding prospectus as supporting documentation.

Ref. Table 7 below. Using the 5 + 20 timeframe, the project capital plan includes for each existing, planned, and proposed project, the project name, description, capital cost, schedule, and detailed breakdown of funding sources is included. A narrative should accompany the table that indicates for each fund source the level of commitment, schedule for availability, and financing arrangements.

4.2.2 Agency-Wide Capital Plan

Ref. Table 8 below. The above project capital plan is incorporated into the agency- wide capital plan. The major funding categories are summarized in a 20-year agency-wide capital plan projection.

A State-of-Good-Repair (SOGR) Plan:

A state-of good-repair plan is an in-depth agency-wide capital plan, focused on improving the condition of existing transportation facilities and systems and minimizing life-cycle costs. The SOGR plan requires a detailed inventory of all agency assets for their condition and setting of target levels of repair for assets. For existing assets, the goal is reduction of the backlog of assets requiring rehabilitation. For new assets, the SOGR goal is achievement of the optimal useful life, by identifying maintenance requirements at procurement or creation, and linking maintenance budgets to the intended level of service or performance. Projects are prioritized according to criteria such as:

- Consistency with SOGR goals;
- If left unimproved, the poor asset condition will threaten network efficiency, mobility, or economic growth;
- Contributes to the "level of aesthetic, innovation and user experience . . ." ¹
- Can be capitalized and supported with sustainable revenue for O&M;
- Improves system resiliency, ability to withstand disaster/climate change;
- Contributes to a multimodal transportation system;

Various scenarios of priorities, costs, and funding are then modeled, leading to the selection of a scenario for implementation.

4.3 Operating and Maintenance (O&M) Costs and Revenues

4.3.1 Project Operating Plan

The operating plan documents how the agency intends to fund the operations and maintenance of the proposed project while maintaining existing agency-wide levels of service. To demonstrate capability, this plan documents operating revenues and O&M costs in the 5 + 20 timeframe.

¹ Brunel Awards 2014, http://watford-group.org/catalogus_def_lowres.pdf

Prior to initiation of construction, the Grantee is expected to have all funds committed for construction and to support operation, maintenance, and necessary recapitalization for the first twenty years of operation.

Operating Revenues:

Ref. Table 9 below. The operation and maintenance of the proposed project is likely to place additional burden on the agency's funding sources. Transportation agencies usually need to develop new funding sources or have existing sources that provide sufficient extra operating revenues to fund the proposed project. The plan should show the agency's fare revenues from its existing system plus fare revenues forecasted for the proposed project. Fare revenues are based on ridership forecasts and assumed fare levels. The plan should include supporting documentation for the assumptions used to develop the forecasts. Inflation assumptions in revenue forecasts should be explicitly documented. The plan should also document the commitment of proposed funds to their intended purpose.

Operating Costs:

Ref. Table 10 below. The plan should show that it has the financial capacity to cover additional O&M costs for the proposed project without reducing existing service levels. Impacts from the project to the existing operations, revenues and O&M costs should be described. The plan should include supporting information on service characteristics such as projected vehicle revenue miles, vehicles in service, and directional route miles, frequency of service. A narrative should explain the cost estimating methodology (including operating and maintenance labor, fuel, supplies, administration, inflation assumptions, etc.), and the service plan (planned system-wide operating/service characteristics, and productivity assumptions) to demonstrate that revenues to cover the proposed project's O&M costs are not due to service reductions or deferred maintenance on the existing system.

4.3.2 Agency-Wide Operating Plan

Ref. Table 11 below. Using the 5 + 20 timeframe, the project operating revenues and O&M cost estimates are incorporated into the agency-wide operating plan. The operating plan demonstrates that adequate additional funds are available to operate and maintain the proposed project and the rest of the system. The operating plan calculates the additional cost to operate and maintain the proposed project and the availability of additional operating revenues to cover the additional cost.

TABLES 7 and 8

| Table 7: PROPOSED PROJECT Capital Plan - Funding Sources, YOE Dollars (X000,000) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|----------------------|-------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|--|
| | | Actual | Actual | Actual | Actual | Actual | Budget | | | | | | | | | | | | | | | | | | | | |
| Fiscal Year | | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2007 | 2009 | 2010 | 2011 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | |
| Non-Federal Funds | | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | |
| | Net Bond Proceeds | 250 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | |
| | Investment Income | 25 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| Federal Funds | | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | |
| | FRA - ARRA | 1250 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | |
| | HUD - Sustainability | 250 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | |
| Total | | 1775 | | | | | | | | | | | | | | | | | | | | | | | | | |

| Table 8: Agency-wide Capital Plan - Expenditures and Revenue, YOE Dollars (X000,000) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|-------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--|
| | | Actual | Actual | Actual | Actual | Actual | Budget | | | | | | | | | | | | | | | | | | | | |
| Fiscal Year | | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2007 | 2009 | 2010 | 2011 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | |
| Total Expenditures | | 1863 | 76 | 76 | 76 | 76 | 76 | 78 | 78 | 78 | 78 | 73 | |
| | PROPOSED PROJECT | 1775 | 71 | 71 | 71 | 71 | 71 | 71 | 71 | 71 | 71 | 71 | 71 | 71 | 71 | 71 | 71 | 71 | 71 | 71 | 71 | 71 | 71 | 71 | 71 | 71 | |
| | Rail System Rehab | 38 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | |
| | Debt Service Costs | 50 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Total Revenue | | 1775 | 71 | |
| | PROPOSED PROJECT | 1775 | 71 | 71 | 71 | 71 | 71 | 71 | 71 | 71 | 71 | 71 | 71 | 71 | 71 | 71 | 71 | 71 | 71 | 71 | 71 | 71 | 71 | 71 | 71 | 71 | |
| Beginning Cash Balance | | 2900 | 2895 | 2890 | 2885 | 2880 | 2875 | 2870 | 2863 | 2856 | 2849 | 2842 | 2840 | 2838 | 2836 | 2834 | 2832 | 2830 | 2828 | 2826 | 2824 | 2822 | 2820 | 2818 | 2816 | 2814 | |
| Revenues less Expenditures | | -5 | -5 | -5 | -5 | -5 | -5 | -7 | -7 | -7 | -7 | -2 | -2 | -2 | -2 | -2 | -2 | -2 | -2 | -2 | -2 | -2 | -2 | -2 | -2 | -2 | |
| Change to Cash Balance | | 2895 | 2890 | 2885 | 2880 | 2875 | 2870 | 2863 | 2856 | 2849 | 2842 | 2840 | 2838 | 2836 | 2834 | 2832 | 2830 | 2828 | 2826 | 2824 | 2822 | 2820 | 2818 | 2816 | 2814 | 2812 | |

TABLES 9, 10, 11

| Table 9: Agency-wide Ridership and Revenue, Current Dollars (X000,000) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|-------------------------|----------------|----------------|----------------|----------------|----------------|----------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--|
| Fiscal Year | | Actual 1994 | Actual 1995 | Actual 1996 | Actual 1997 | Actual 1998 | Budget 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2007 | 2009 | 2010 | 2011 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | |
| Ridership | | 155 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5.5 | 5.5 | 5.5 | 5.5 | 6 | 6 | 6 | 8 | 10 | 10 | 10 | 11 | 12 | |
| | Existing System | 130 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5.5 | 5.5 | 5.5 | 5.5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | |
| | PROPOSED PROJECT | 25 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 4 | 4 | 4 | 5 | 6 | |
| | <i>Annual % Change</i> | | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 25.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 10.00% | 0.00% | 0.00% | 0.00% | 9.09% | 0.00% | 0.00% | 33.33% | 25.00% | 0.00% | 0.00% | 10.00% | 9.09% | |
| Fare Revenue | | \$175.0 | \$4.2 | \$4.2 | \$4.2 | \$4.2 | \$4.2 | \$5.3 | \$5.3 | \$5.3 | \$5.3 | \$5.3 | \$5.3 | \$5.8 | \$5.8 | \$5.8 | \$5.8 | \$6.3 | \$6.3 | \$6.3 | \$10.0 | \$12.5 | \$12.5 | \$12.5 | \$13.8 | \$15.0 | |
| | Existing System | \$143.7 | \$4.2 | \$4.2 | \$4.2 | \$4.2 | \$4.2 | \$5.3 | \$5.3 | \$5.3 | \$5.3 | \$5.3 | \$5.3 | \$5.8 | \$5.8 | \$5.8 | \$5.8 | \$6.3 | \$6.3 | \$6.3 | \$7.5 | \$7.5 | \$7.5 | \$7.5 | \$7.5 | \$7.5 | |
| | PROPOSED PROJECT | \$31.3 | \$0.00 | \$0.0 | \$0.0 | \$0.0 | \$0.0 | \$0.0 | \$0.0 | \$0.0 | \$0.0 | \$0.0 | \$0.0 | \$0.0 | \$0.0 | \$0.0 | \$0.0 | \$0.0 | \$0.0 | \$0.0 | \$2.5 | \$5.0 | \$5.0 | \$5.0 | \$6.3 | \$7.5 | |
| <i>Average Fare</i> | | \$1.05 | \$1.05 | \$1.05 | \$1.05 | \$1.05 | \$1.05 | \$1.05 | \$1.05 | \$1.05 | \$1.05 | \$1.05 | \$1.05 | \$1.05 | \$1.05 | \$1.05 | \$1.05 | \$1.05 | \$1.05 | \$1.05 | \$1.25 | \$1.25 | \$1.25 | \$1.25 | \$1.25 | \$1.25 | |
| | <i>Annual % Change</i> | | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 19.05% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | |

| Table 10: Agency-wide Operating Costs, YOE Dollars (X000,000) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|-------------------------|----------------|----------------|----------------|----------------|----------------|----------------|--------|--------|--------|--------|--------|--------|--------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--|
| Fiscal Year | | Actual 1994 | Actual 1995 | Actual 1996 | Actual 1997 | Actual 1998 | Budget 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2007 | 2009 | 2010 | 2011 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | |
| Vehicle Revenue Miles (million) | | 119 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 7 | 9 | 10 | 10 | 11 | 12 | |
| | Existing System | 96 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | |
| | PROPOSED PROJECT | 23 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 3 | 4 | 4 | 5 | 6 | |
| O&M Expenses | | \$242.0 | \$7.0 | \$7.0 | \$7.0 | \$7.0 | \$7.0 | \$7.5 | \$7.5 | \$7.5 | \$7.5 | \$7.5 | \$7.5 | \$7.8 | \$7.0 | \$7.8 | \$7.8 | \$7.8 | \$7.9 | \$12.9 | \$16.0 | \$16.0 | \$16.0 | \$16.0 | \$16.0 | \$16.0 | |
| | Existing System | \$189.0 | \$7.0 | \$7.0 | \$7.0 | \$7.0 | \$7.0 | \$7.5 | \$7.5 | \$7.5 | \$7.5 | \$7.5 | \$7.5 | \$7.8 | \$7.0 | \$7.8 | \$7.8 | \$7.8 | \$7.9 | \$7.9 | \$8.0 | \$8.0 | \$8.0 | \$8.0 | \$8.0 | \$8.0 | |
| | PROPOSED PROJECT | \$53.0 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$5.00 | \$8.0 | \$8.0 | \$8.0 | \$8.0 | \$8.0 | \$8.0 | |
| | <i>Annual % Change</i> | | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 7.14% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 4.00% | -10.26% | 11.43% | 0.00% | 0.00% | 1.28% | 63.29% | 24.03% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | |

| Table 11: Agency-wide Operating Plan, YOE Dollars (X000,000) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|-------------------------|----------------|----------------|----------------|----------------|----------------|----------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|---------|---------|---------|---------|---------|---------|--------|--------|--|
| Fiscal Year | | Actual 1994 | Actual 1995 | Actual 1996 | Actual 1997 | Actual 1998 | Budget 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2007 | 2009 | 2010 | 2011 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | |
| Operating Revenue | | 240.45 | \$6.7 | \$6.7 | \$6.7 | \$6.7 | \$6.7 | \$7.8 | \$7.8 | \$7.8 | \$7.8 | \$7.8 | \$8.3 | \$8.8 | \$8.8 | \$8.8 | \$8.8 | \$9.3 | \$8.8 | \$8.8 | \$12.5 | \$15.0 | \$15.0 | \$15.0 | \$16.3 | \$17.5 | |
| | Existing System Fares | \$143.7 | \$4.2 | \$4.2 | \$4.2 | \$4.2 | \$4.2 | \$5.3 | \$5.3 | \$5.3 | \$5.3 | \$5.3 | \$5.3 | \$5.8 | \$5.8 | \$5.8 | \$5.8 | \$6.3 | \$6.3 | \$6.3 | \$7.5 | \$7.5 | \$7.5 | \$7.5 | \$7.5 | \$7.5 | |
| | PROPOSED PROJECT | \$31.3 | \$0.0 | \$0.0 | \$0.0 | \$0.0 | \$0.0 | \$0.0 | \$0.0 | \$0.0 | \$0.0 | \$0.0 | \$0.0 | \$0.0 | \$0.0 | \$0.0 | \$0.0 | \$0.0 | \$0.0 | \$0.0 | \$2.5 | \$5.0 | \$5.0 | \$5.0 | \$6.3 | \$7.5 | |
| | Other revenue | \$65.5 | \$2.5 | \$2.5 | \$2.5 | \$2.5 | \$2.5 | \$2.5 | \$2.5 | \$2.5 | \$2.5 | \$2.5 | \$3.0 | \$3.0 | \$3.0 | \$3.0 | \$3.0 | \$3.0 | \$2.5 | \$2.5 | \$2.5 | \$2.5 | \$2.5 | \$2.5 | \$2.5 | \$2.5 | |
| O&M Expenses | | \$242.0 | \$7.0 | \$7.0 | \$7.0 | \$7.0 | \$7.0 | \$7.5 | \$7.5 | \$7.5 | \$7.5 | \$7.5 | \$7.5 | \$7.8 | \$7.0 | \$7.8 | \$7.8 | \$7.8 | \$7.9 | \$12.9 | \$16.0 | \$16.0 | \$16.0 | \$16.0 | \$16.0 | \$16.0 | |
| | Existing System | \$189.0 | \$7.0 | \$7.0 | \$7.0 | \$7.0 | \$7.0 | \$7.5 | \$7.5 | \$7.5 | \$7.5 | \$7.5 | \$7.5 | \$7.8 | \$7.0 | \$7.8 | \$7.8 | \$7.8 | \$7.9 | \$7.9 | \$8.0 | \$8.0 | \$8.0 | \$8.0 | \$8.0 | \$8.0 | |
| | PROPOSED PROJECT | \$53.0 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$5.00 | \$8.0 | \$8.0 | \$8.0 | \$8.0 | \$8.0 | \$8.0 | |
| Balance from Existing Operations | | \$5.00 | \$4.70 | \$4.40 | \$4.10 | \$3.80 | \$3.50 | \$3.20 | \$3.45 | \$3.70 | \$3.95 | \$4.20 | \$4.45 | \$5.20 | \$6.18 | \$7.95 | \$8.93 | \$9.90 | \$11.40 | \$12.30 | \$8.20 | \$4.70 | \$3.70 | \$2.70 | \$1.70 | \$1.95 | |
| Revenues less Expenditures | | -\$0.30 | -\$0.30 | -\$0.30 | -\$0.30 | -\$0.30 | -\$0.30 | \$0.25 | \$0.25 | \$0.25 | \$0.25 | \$0.25 | \$0.75 | \$0.98 | \$1.78 | \$0.98 | \$0.98 | \$1.50 | \$0.90 | -\$4.10 | -\$3.50 | -\$1.00 | -\$1.00 | -\$1.00 | \$0.25 | \$1.50 | |
| Surplus or (Subsidy) | | \$4.70 | \$4.40 | \$4.10 | \$3.80 | \$3.50 | \$3.20 | \$3.45 | \$3.70 | \$3.95 | \$4.20 | \$4.45 | \$5.20 | \$6.18 | \$7.95 | \$8.93 | \$9.90 | \$11.40 | \$12.30 | \$8.20 | \$4.70 | \$3.70 | \$2.70 | \$1.70 | \$1.95 | \$3.45 | |

4.4 Cash Flow Analysis

4.4.1 Twenty-Year Cash Flow Projection

The cash flow statement combines the results of the capital plan and the operating plan to summarize the year-by-year financial condition of the project sponsor throughout the 5 + 20 timeframe.

Cash flow analysis is a valuable tool for project planning. Its application permits project sponsors to develop and test funding strategies, test alternative assumptions, and conduct risk analysis as part of the agency's continuing financial planning activities. The cash flow statement includes at least five prior years of actual costs and revenues to provide a clear picture of the historical financial position of the agency and to substantiate the growth rates assumed in the 20 future years. The accompanying narrative should cite applicable legal provisions that allow or disallow the use of fund sources for various purposes. Cash flow statements are structured to reflect the agency's restrictions on operating and capital funds. Many agencies have restrictions on the use of cash balances such as debt retirement, contractual obligations, lease deposits, uninsured losses or reserve accounts for specific projects. If an agency is subject to any of these restrictions, balances in these restricted accounts are identified in the cash flow statement and not included as "available" cash.

By year, operating revenues and expenses are summed, as are capital revenues and expenses. The difference is the "cash balance" that carries over to the following year.

4.4.2 Financial Evaluation

The cash flow projection should demonstrate that the agency has adequate resources to complete the project as planned and continue to operate the existing service. Evidence of this financial capacity could be cash balances or debt service ratios. In general, cash balances should be sufficient to fund at least three months of operations. The bond market typically requires gross debt service ratios to exceed 150 percent, which means that revenues pledged to cover debt service must exceed 150 percent of annual debt service. Many agencies are subject to more stringent debt ratio requirements.

The cash flow projection is often evaluated to determine the sensitivity of an agency's financial health to changes in the assumptions underlying the financial plan. If small changes in the financial planning or economic assumptions, such as economic growth, ridership or interest rates, result in financial difficulties for the agency, the financial capacity of the agency may be questionable.

4.5 Appendix

4.5.1 Summary of Market Analysis and Regional Economic Condition Study

The market analysis and regional economic condition study underpin the revenue projections in the financial plan. Parties to the analysis and study may include FRA, States, MPOs, cities, counties, private entities, and NGOs.

The market analysis is based on a projected period of 20 to 50 years and the establishment of goals for the rail network and individual rail station cities. Goals may include the enhancement of multimodal

connections to centers of employment, education and services; long term mobility and access benefits for major population centers; long-term economic benefits; improvements in economic efficiency/reliability/productivity of land, capital, or labor; or enhanced opportunities for economically distressed areas, small and disadvantaged businesses, workforce training, or railroad sector employment.

In the market analysis, alternative network configurations and cities are evaluated against the goals. Conclusions are drawn and network configurations and station cities are agreed among the stakeholders; strategies are recommended to foster growth in some sectors of selected cities, and plans for implementation are set forth, with associated funding sources identified. As part of the implementation plan for each city, station areas may be defined, and appropriate mechanisms for revenue generation/value capture may be identified for each station area.

In the regional economic condition study, historical data and forecasts of economic and demographic changes are developed to substantiate the reasonableness of revenue and cost estimates associated with the proposed project – the project that evolved as a segment of the selected network configuration. These forecasts provide a check on growth rate assumptions for the project’s ridership, tax revenues, regional inflation and other key variables. Forecasts from independent institutions, such as universities, state agencies and private forecasting firms, are preferred sources of these data. These forecasts include:

- Population and employment growth estimates;
- Inflation and interest rate forecasts consistent with assumption in cash flow projections;
- Economic and land development projections; and
- The regional demographic or business trends to support 20-year revenue forecasts.

The forecasts should be portrayed in a table that includes, at a minimum, population, employment, personal income and inflation forecasts 20 years into the future, supported by current regional economic forecast reports.

4.5.2 Summary of Financial Condition of the Grantee

Documentation of the financial condition of the Grantee agency and other non-federal financial partners should be summarized. The documentation should include three years of audited financial statements, cash account balances, bond or liquidity test ratios, debt ratings and reports by debt rating agencies, the historical reaction to unexpected financial conditions, the extent of the ongoing capital rehabilitation and replacement program, and the condition of the agency’s existing asset base (including age of fleet, track and agency’s replacement rate.) In addition if applicable, evidence of the timely match, obligation, and draw-down of FRA funding over the past five to 10 years should be provided. The summary of the financial condition of the Grantee and major funding partners is substantiated and referenced to other reports and documents related to the agency.

4.5.3 Summary of Fleet Management Plans if applicable

5.0 REFERENCES – SEE MP 01