
COOPERATIVE DEVELOPMENT OF THE FINANCIAL PLAN

The purpose of organizing for financial planning is to develop a set of assumptions, information, and forecasts that are reliable and consistent across different levels of government and modes. The resulting financial plan will be a foundation for the Statewide Transportation Improvement Program (STIP), the metropolitan transportation plan, and the metropolitan area Transportation Improvement Program (TIP), and ideally, the long-range statewide transportation plan.

The sections below address the crucial elements of this cooperative effort:

- *How to Organize*
- *Organizational Functions*
- *Elements of Coordinated Financial Plan*

PROCESS: HOW TO ORGANIZE FOR FINANCIAL PLANNING

Start Up and Beyond

Leadership The need to coordinate arises because transportation agencies at the *State, regional, and local* levels receive funding from common sources. Different *modes* also share funding from some programs, like Federal flexible funds. The interconnections among these financial plans should be consistent.

A natural model for organizing the financial planning process would have the *State* lead the process, through the DOT or a separate organizational entity. The primary advantages of a State-led process are that consistency could be achieved among all the transportation and planning agencies throughout the State and that all geographic areas – both metropolitan and rural – could be included. This in fact is the model used by the State of Colorado.¹

“Leadership” does not connote control, however, but responsibility. Decision-making in a State-led process or with other models is of necessity collaborative. *The primary function of leadership, whether this responsibility rests at the level of the State or regional level, is team building, including initiating and building support for the coordination effort.*

Another logical candidate to take on the leadership role is the *MPO* in the case where collaboration in financial planning occurs at the metropolitan area level but not throughout the State. This may be an

¹ *Best Practices in Long-Range Statewide Planning, Case Study: State of Colorado*, prepared by Volpe Transportation Systems Center for Federal Highway Administration, January 2012, pp. 55-60.

interim stage, in which one or more metropolitan areas in the State works through the development of a model for cooperative financial planning, which ultimately is extended to and integrated at the State level. Achieving the goal of coordination at the metropolitan area level is a major step forward and in many cases will address a major share of coordination needs. *If financial plans are internally consistent and sound for all individual metropolitan areas in the State, the work of the State DOT in integrating financial information from metropolitan transportation plans and TIPs in the statewide long range transportation plan and STIP may be substantially simplified and the products improved.* Once organizational efforts have been initiated, leadership also can be shared or rotated if that model is most acceptable to participating agencies.

Participants While financial planning is largely a technical process, the participation and approval of public officials will enhance the credibility and reliability of assumptions regarding policy choices and future uncertainties (e.g. availability of revenue sources, cost inflation). Thus, participants in the financial planning process should include both *technical staff and elected official representatives*, as occurs most frequently in MPO policy committees. Recommended participants include:

- State executive representatives;
- State and MPO technical and policy committee members;
- MPO board members;
- Transit agency board members/executive representatives;
- Local decision-makers and/or technical staff (e.g., planners, financial managers, engineers), as appropriate;
- Technical staff specializing in financial analysis and/or financial consultants.

Logically, *technical staff will be responsible for most of the analytical work involved in developing financial plans and generally will need to coordinate and work among themselves, in addition to holding policy meetings that include officials.* Executive leadership will need to address logistical and resource considerations governing their agencies' roles in the process, such as:

- How much staff time will be committed to the process;
- Timelines and major milestones;
- Procedures for coordinating, including in-person meetings, teleconferences, and use of media such as SharePoint/websites; and
- Incorporating public involvement in the process, as discussed further below.

What Kind of Organization?

A primary goal of the financial planning effort, as noted previously, is to develop high-quality, consistent financial plans, which are federally required for the metropolitan transportation plan and the TIP and optional for the long-range statewide transportation plan and the

STIP ². Individual States and metropolitan areas may have additional, related financial planning goals, such as planning for major capital projects, programming investments, or asset management, that the cooperative planning effort is intended to address. The financial planning process can vary in terms of its formality, taking the form of an *ad hoc working group* or a regular feature of the State's or MPO's organizational structure.

A related question is whether the group functions on a recurrent basis or continuously. Options include:

- Ad hoc working or technical advisory group – informal group, consisting largely of technical staff, organized for the specific purpose of coordinating on development of the financial component of the long-range statewide transportation plan, the STIP, the metropolitan transportation plan, and/or the TIP. As with the case of the scale of the effort (i.e. statewide or limited to one or more metropolitan areas), coordination through an ad hoc working group can serve as a trial run in which procedures and technical approaches are tested and adapted for eventual implementation on a more formal basis.
- Regular working group or committee - a more formal and official organization than an ad hoc group, with representation from all member agencies specified in writing as part of an agreement among the agencies and/or the agencies' official charters. The group may convene on a recurrent schedule, timed specifically for the purpose of producing or updating financial analysis for the required Federal planning documents (e.g. the long-range metropolitan transportation plan, TIP) or on a continuing basis. This structure generally would entail membership and active participation by agency executives and officials in decision-making, as discussed previously. Technical staff coordinates offline from group meetings and supports officials at meetings as needed.
- Continuing working group or committee – A continuing or ongoing cooperative financial planning effort is likely to be required if collaboration occurs on a statewide basis, as generally would yield optimum results, due to the number of coordinated planning documents (i.e. long-range statewide transportation plan, STIP, metropolitan transportation plan, and TIP), the possible need to coordinate among multiple MPOs and local/regional planning agencies, and generally the scale of the planning effort.

Cooperative Planning Functions

Information Sharing The synthesis of information from different agencies and levels of government can involve consolidation of data and forecasts from existing documents and plans, such as Capital Improvement Programs. A major focus of the collaborative financial planning effort will be on determining *reasonably expected to be available revenues*; much of the information to be

² *A financial plan for the STIP is not literally required, but information needed to support a determination of fiscal constraint would include similar information provided by a financial plan.

shared will consist, therefore, of revenue and funding information, specifically funding from all Federal, State, and local sources.

Determining the “reasonability” of revenue expectations generally relies on establishing a historical trend and adjusting for changes in population and economic growth, as well as other factors, that may produce a change in the trend going forward. This technical analysis is data-intensive and requires collaboration among agency staffs to produce comparable and consistent results. Assembling *expenditure* or cost data from all agencies also is important to produce a unified plan that establishes fiscal constraint. A tool developed for FHWA, the *Financial Planning Computation Workbook*, which itemizes the financial revenue and expense data needed to develop a long-range financial forecast, is a tool that agencies may find useful in identifying, organizing, and communicating financial information.

Decision-making Cooperative financial planning will involve a range of decisions, many of which are primarily technical, and some of which are more policy-oriented. *The financial planning coordination group needs to have an effective decision-making capability.*

Policy Choices The need for involvement in decision-making by officials and agency executives obviously is greater for policy-oriented questions, such as:

- Establishing investment priorities;
- Identifying current and new revenue sources;
- Evaluating current and forecasting possible future tax rates for applicable funding sources;
- Allocating shared funding sources, such as sales and fuel taxes, among different agencies and modes;
- Developing an agreed-upon list of improvements and system expansion projects;
- Evaluating changes in operational policies that affect expenses, including operation and maintenance of new capital projects and improvements;
- Considering the use of bonding or innovative financing mechanisms (e.g., public-private partnerships) for funding transportation capital projects and major system improvements.

A significant organizational issue regarding the work of the financial planning group is *when and how to involve the public*. Options include:

- *A separate public involvement initiative* focused on the financial planning process. Coordinating with the broader public involvement effort conducted by transportation agencies is essential, but this can be accomplished in various ways, such as using the same public involvement staff or developing a process at each agency for integrating the financial public involvement effort with public involvement activities conducted for related products of the planning process (e.g. the statewide long-range plan, metropolitan transportation plan).

- Elected officials represent the public within the financial planning group, while technical staffs for each agency are responsible for incorporating information on the progress of the financial plan, key financial issues, and results as part of the individual agency's public involvement process.
- Including representatives of stakeholder agencies in the financial planning group on a regular basis or providing special briefings on a regular basis to stakeholder groups.

Technical Decisions Technical staff will have a greater role in resolving forecasting questions that are more technical in nature, such as rates of employment and population growth, as well as projecting future expenditures based on existing conditions, historical trends, and policies agreed upon by officials and executives. Policy-makers may undertake a high-level review of these decisions based on the technical staff's summaries and recommendations. Crucial technical decisions that may merit particular attention by policy makers include:

- Technical "ground rules," e.g. revenue forecasting based on historical trends, existing sources, laws; validation against actuals; forecasts by source and by mode; criteria for *reasonably expected to be available* revenues;
- Development of *standards* for *cost estimation*, which then can be followed by all participating agencies going forward on a continuing basis;
- Development of a process for integrating new projects/system improvements into the financial plan;
- Review of the financial information generated by the modal agencies and assurance of its consistency with agreed upon standards and assumptions;
- Risk assessment - the sources and extent of uncertainty in the financial plan as well as strategies and scenarios for addressing risk;
- Synthesis of elements into coordinated, unified plan.
- Authentication of financial plan.

A crucial principle to guide the decision-making process is *transparency*, which is essential to support public review and establish the credibility of the financial plan.

Technical Analysis The financial plan should account for the costs of maintaining the existing transportation system and planned expansions of the system over a 20-year or 30-year timeframe, to meet the needs of long-range planning. The first four to five years of the plan, which could be developed in greater detail, may be extracted to conform to the shorter timeframe for the STIP/TIP.

Plan Elements Technical analysis should incorporate three cross-cutting elements, forming a framework for the financial plan:

- Changes over time: Existing Conditions/Future Projections
- Sources (Revenues/Income) and Uses (Costs/Expenses)
- Capital and Operating Components

Another important element of financial planning is *sensitivity analysis*, which examines the degree of risk associated with assumptions and estimates, in terms of impacts on existing and future financial status.

Existing and Future Conditions Analyzing existing conditions, based on information assembled from the participating agencies as described above, constitutes a large share of this effort. An accurate portrayal of existing conditions is essential to: (1) establish the current status of fiscal constraint, that is, determine whether revenues are sufficient to meet existing needs; and (2) project future conditions. Understanding existing conditions and trends is key to forecasting the future. A baseline should be created extrapolating the funding and expenses for the existing system forward for the entire 20- or 30-year timeframe of the financial plan.

Sources Estimating future revenues (*sources*) begins with the baseline extrapolation, but *assumptions regarding the future of existing sources or the availability of potential new sources* also will play a major role in projecting *reasonably expected to be available* future revenues. These funding sources may include Federal flexible funding, State assistance, local funds and/or nontraditional revenue sources. Developing the long-range financial plan or *cash flow* requires *quantifying* the level of funding to be derived from each source and, in the case of shared funding sources, *distributing* funding among the modes. This analysis consists of several components:

- Projecting potential growth and other changes in funding sources by examining/tracking programs, policies, and appropriations;
- Determining interactions/relationships among funding sources, e.g. sharing or distribution of sources—such as sales taxes—among different modes; and
- Quantifying and determining conditions of regional bonding authority/capacity that may affect its availability for planned transportation investments.

Uses The best guide to future expenses is *existing conditions and prevailing trends*, as noted above. Any expansions of the existing system corresponding to new projects and improvements must then be incorporated into the financial forecasts, including both capital investments and operations. Cost estimates should fully account for asset maintenance, capital rehabilitation and replacement, and operation of the existing transportation system. Project cost estimates (or cost ranges) need to be developed in Year of Expenditure (YOE) dollars for transportation plans and programs.

Capital and Operating Components Maintaining the existing system requires the commitment of sufficient funds for re-capitalization and meeting expenses for continuing operations and maintenance (O & M).

Sensitivity analysis can be used to assess *risk*. Generally, this analysis addresses the impacts of lower-than-expected funding/revenues from major sources and higher-than-expected costs. The financial plan should include strategies for addressing the potential shortfalls identified through this analysis, showing how revenues could be increased or costs reduced to re-balance costs and revenues.

Monitoring and Managing Performance Whether financial planning is organized as a continuing or recurrent process timed in concert with the development of planning products, the process developed should provide a foundation for future planning. Thus, the group should develop procedures for monitoring, validating, updating, and adjusting cost estimates, revenue assumptions, and forecasts over time, as actual data and agency budgets become available to be used in checking earlier forecasts. Thorough *documentation* of methods is critical for this purpose. As projects advance from planning through development and implementation, the financial plan should be revised to reflect any corresponding changes in costs.

The financial planning group may adopt *performance measures* to guide the evaluation of how well the financial planning process is working. As a first step, the group may need to clarify goals and objectives in a way that can be measured objectively, generally quantitatively. Some potential objectives linked to the goals of *reliability* and *consistency* include:

- *producing consistent revenue estimates across agencies,*
- *producing accurate cost estimates;*
- *reducing/eliminating existing and short-term financial shortfalls; and*
- *clarifying long-range unmet funding needs.*

Potential measures that could be used to measure these objectives include:

- *absolute and relative differences in revenue assumptions (e.g. total funding available from common sources, distribution among agencies and modes);*
- *absolute and relative differences in projected revenues compared to historical trends;*
- *absolute deficits in base year and over five-year time period; deficits relative to overall budgets; and*
- *differences between estimated and actual expenses, established when actual cost data becomes available.*

In designing performance measures, an important principle is to avoid creating incentives to produce favorable results that are false. The third of the above measures in isolation, for example, could encourage planners to understate estimated costs or overstate projected revenues. The other measures, however, should provide a reality check to deter erroneously optimistic estimates and forecasts.

The above performance measures focus strictly on the quality of financial planning, from a technical and process perspective. A broader perspective could link financial criteria to transportation system performance, supporting the selection of high-priority improvements and expenditures by comparing the *cost-effectiveness and/or benefit/cost of different projects, programs, and integrated transportation system plans*. Benefits would be defined in terms of transportation goals, such as *mobility, access, safety, economic impact, and environmental impact*. Financial performance measurement thus would be integrated within the context of the larger transportation planning process. Potential measures include:

- travel time savings/\$ cost
- travel time index(normalized)/\$ cost
- reduction in hours/minutes of delay/\$ cost
- accessibility to jobs or destinations/\$ cost
- jobs created/\$ cost
- Gross State or Regional Product/\$ cost
- Asset (bridge, roadway) conditions/\$ cost
- Reduction in crashes/\$ cost
- Reduction in crashes per mile or per trip/\$ cost
- Reduction in air pollution emissions/\$ cost

Technical Tools

The technical staff can develop technical tools for use by participating agencies. These tools would serve the purposes of reducing the difficulty of preparing high-quality agency financial plans and promoting consistency among different agencies and continuity over time. The *Financial Planning Computation Workbook* is a tool that helps to identify the line items needed in the financial analysis and calculates revenue/expense balances over a 20-year timeframe. Additional tools that could be developed through cooperative statewide and regional planning efforts include:

- *Templates* – standardized formats and spreadsheets for reporting financial data to be used in the statewide transportation plan, STIP, metropolitan transportation plan, and TIP;
- *O & M cost estimation spreadsheets*, incorporating historical trend analysis and other relevant factors, such as system changes;
- Cost band estimation guidance and methods;
- Capital cost estimation *standards*, including unit measures, construction cost indicators, and right of way costs;
- Guidelines for *reasonably expected to be available* revenues;
- Guidelines and recommended *methods* for financial analysis.

These technical resources and contacts from the financial planning group can be made available on an internet websites.

COMPONENTS OF COORDINATED FINANCIAL PLAN

The following financial plan components are recommended for consideration in the cooperative planning effort. Cooperative analysis, deliberation, and decision-making will be needed in developing these elements. While some of the elements, such as cost factors, will differ among the agencies and modes, documentation will facilitate quality control and attaining the crucial goal of *transparency*. Many factors apply universally, however, such as assumptions about shared resources and socioeconomic conditions.

- 1- Timeframe of the plan: 20, 25, or 30 years
- 2- Assumptions about future revenues (developed through a cooperative interagency process)
 - Continuation of existing Federal, State, and local funding sources, and potential growth or decrease of those (see #4 below)
 - Identification of potential new sources
 - Feasibility of new sources – barriers and pre-requisites to implementation
 - Allocation of shared revenue and funding sources by State, local governments, transit and other agencies/modes; use of Federal Flexible Funding
 - Issues/problems/questions
- 3- Assumption about future expenditures
 - Definition of components of the system throughout the time horizon of the financial plan
 - Capital projects/system improvements
 - O & M costs: existing multi-modal system and planned system expansion
 - Asset rehabilitation schedules and projected costs
 - Unit O & M costs by type of expense
 - Existing system expenditures, disaggregated by mode and component
 - YOE factors
 - Issues/problems/questions
- 4- Assumptions about future socioeconomic conditions that affect costs and revenues
 - Population and employment
 - Income
 - Vehicle miles traveled (VMT)
 - Mode split
 - Fuel economy (accounting for the use of electric and hybrid vehicles)
 - Inflation and interest rates
 - Impacts of factors on revenue (e.g. fuel tax receipts)
 - Issues/problems/questions
- 5- Linkages between long-range plans and STIP/TIP
 - Reconciliation of list of improvements, expenses, and revenues
 - Process for adding new projects, adjusting financial analysis in plans.
- 6- Financing
 - Debt instruments (types and pros and cons of debt financing)
 - Interconnections (common funding sources, limitations, conditions)
 - Current and potential future uses of innovative financing:
 - Garvee bonds, GANs, Section 109 loans, TIFIA, Capital Leasing, COPs, tolling, other nontraditional financing options/arrangements
 - Issues/problems/questions

6 – Risk Assessment

- Identify major risk factors (e.g. lower than expected revenue, reliance on new sources)
- Quantify potential risks
- Develop strategy for addressing risks (e.g. scenario analysis, policies to reduce costs, raise revenues)
- Issues/problems/questions

7 – Financial plan synthesis and tracking

- Reconciliation of cross-agency inconsistencies
- Setting investment priorities statewide and for regions
- Development and application of financial performance measures (see previous discussion)
- Development of final plan for State or region, including version that is understandable to general public
- Development of agency budgets consistent with the financial plan; revising the financial plan to reflect emerging agency budgets.
- Validation of cost estimates and revenue projections.
- Updating of cost estimates as applicable throughout project planning, development, and implementation.