Financial Elements of Urban Transportation Planning: Puzzling Over the Metropolitan Transportation Puzzle

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INTRODUCTION

The fiscal stress being faced by the transportation community across the nation and the traditional straight-line financial planning process commonly used for metropolitan transportation do not work well together. It can be argued that this mismatch will be overcome by a redefinition of the financial planning process to make it more iterative, politically conscious and sensitive, open, and mature.

This argument assumes there will be little or no change in the fragmented patterns of governmental and intergovernmental organizations and responsibilities in most of the nation's metropolitan regions in the foreseeable future. Usually, the opposite assumption is made, followed by a prescription for reducing governmental fragmentation. However, such prescription frequently falls on deaf ears. It would be refreshing to look at opportunities for improving financial plans by working with the organizations and programs already in place.

Moving financial planning toward greater effectiveness within its present environment requires different skills than the readily available technical ones of forecasting, costing, and budgeting. This approach focuses directly on the scarcer skills and resources needed for managing interpersonal and intergovernmental dynamics.

The tasks undertaken here are to

- Refine the concept of financial planning to meet today's circumstances
- Examine alternative approaches to financial planning that might yield better results
- Identify those organizations and individuals who hold financial power
- Appraise alternative methods of linking separate revenue and expenditure streams to commonly held regional goals and strategies
- Evaluate the roles of metropolitan planning organizations in the linking process
- Characterize the types of skills needed to successfully plan metropolitan transportation finances

THE FINANCIAL PLANNING TASK

Financial planning involves the process of matching resources to needs. In the standard concept of this process (Figure 1), planners are expected to set forth a plan for transportation facilities and services that will be financed and implemented by others—each step following the other in a straight-line progression. In times of plentiful funding, this concept works well, and financial planning is a rather straightforward matter of segmenting the plan into discrete projects, developing cost estimates for each project, aggregating costs, comparing the total to revenue forecasts, and adjusting project priorities to balance costs with revenues.

With cutbacks in some traditional revenue sources, fluctuating pressures of inflation, shifting responsibilities among the levels of government, and multiplying proposals for improving productivity, this straightforward process is too rigid. The separation of planning, financing, and implementing no longer produces satisfactory results.

For at least a decade, what has been developing instead is a more complex planning process (Figure 2), in which the cost implications of building, maintaining, and operating transportation systems have become embedded in all parts of the planning process. This became very explicit with the advent of the federal requirement for Transportation System Management (TSM) analyses in the mid-1970s, and is being reemphasized now with requirements for stable financial commitments and maximum local shares in new federal regulations for major capital projects. The substantive transportation plan has become at least as important to financial success as revenue forecasts and revenue enhancements. As finances tighten, productivity improvement and proposals for shedding public responsibilities to the private sector may receive even more attention in some places than proposals for increasing revenues. When cost and revenue estimates do not match, the nature and extent of transportation services are as likely to be reevaluated as are the yields of present and proposed revenue sources.

At this point such concepts as alternative types of services, alternative service providers, revised standards of service, contracting out, and negotiating private sector partnerships come into play. In other words, financial pressures may lead us to plan a different transportation system than was originally contemplated, and to pay for it with a more complex financing package than the one first proposed. Instead of a simple financial plan consisting of an operating capital budget, the result may very well involve a series of

- Investment strategies
- Spending plans
- Revenue plans
- Debt management plans
- Marketing plans
- Service shedding plans

There may be many plans in each category, and each plan may be the responsibility of a different agency and dependent on a separate—and possibly unpredictable—source of funds restricted to specified uses. In addition many plans may contain elements of strategy, rather than firm dollar commitments. For example, a revenue plan may

- Count on grants not yet awarded
- Contain tax increases the state legislature would have to enact or a local referendum that would have to be passed
- Propose private land donations, leases, value captures, or transit subsidies that must be negotiated

Coordinating and relying on this broad array of financial plans often proves to be a challenging task.

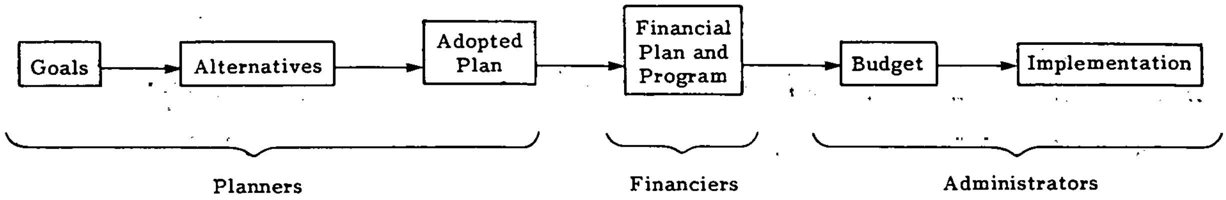

FIGURE 1 **Traditional transportation planning (for good times).**

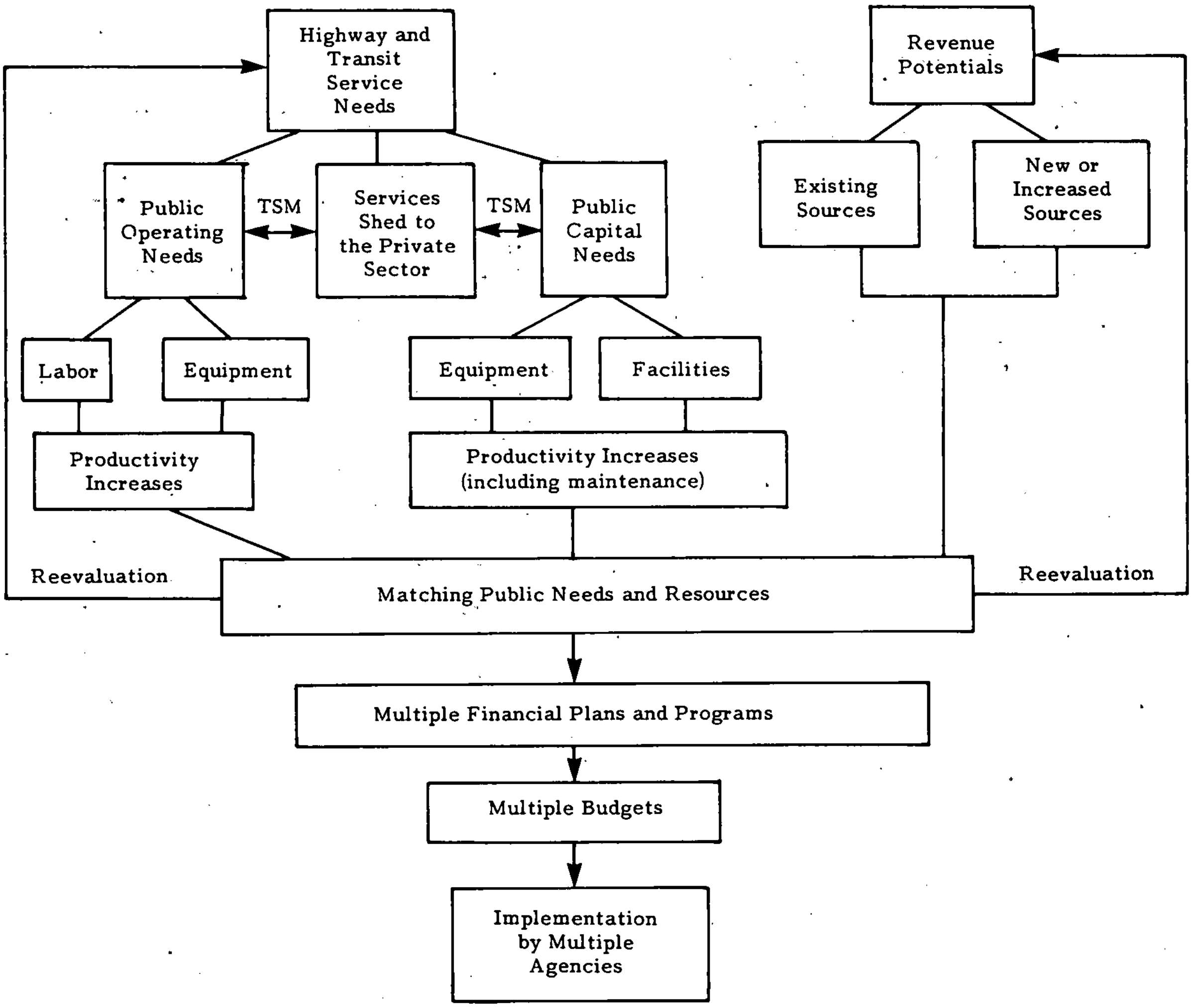

FIGURE 2 **Redefined transportation planning (for cutback times).**

ALTERNATIVE APPROACHES TO FINANCIAL PLANNING

The basic tension in financial planning comes in deciding whether transportation needs should generate the transportation budget or whether budget policy should generate the transportation program. Together with the age-old dilemma of whether to pursue strategic or project planning, this tension sets the stage for many controversies. Some combination of these approaches generally emerges. In times of cutbacks, the budgeteers have more going for them than the planners, unless the planners can demonstrate the cost-effectiveness of each proposal.

The effect of tight-money times and cost-conscious planning is to blur the traditional stages of the planning process that step down from broad system plans to corridor plans, to moderately precise multiyear programs, to specific projects. When costs were not critical, it was possible to plan metropolitan area-wide transportation systems, using very rough financial estimates, and let precise cost estimates wait until the project design stage, when implementing agencies became involved. Likewise, when metropolitan plans needed to consider only physical transportation routes and facilities, operating cost estimates were left to the operating agencies. These cost details now are moving into the metropolitan planning arena because of both their immediate and long-term effects over the life of the planned facilities and equipment. Who should prepare such cost estimates: metropolitan planners, implementing agencies, or some combination of the two? Tight-money times tend to blur agency responsibilities. It is no longer clear which comes first—the strategy or the project.

Another factor in blurring responsibilities is the pressure over the last decade to move planning closer to implementing. This can be done by giving planning agencies a degree of control over operating agencies or, conversely, by placing more of the planning function in the implementing agencies. The federally required Transportation Improvement Program (TIP) was an attempt to bridge the gap between planning and action without making fundamental changes in responsibilities, but it has not been entirely successful. As a result, making planning more realistic and effective has led to continued controversy, and planning funds have started shifting to the implementing agencies.

The danger in this shift is that long-range visions and objective analyses, unencumbered by vested operational interests, will be sacrificed for short-term administrative effectiveness. Some elected officials feel that the implementing agencies are substantially more staff-dominated and less-hospitable places in which to debate basic policies than the metropolitan planning agencies. In the Advisory Commission on Intergovernmental Relations (ACIR) 1983 survey of city, county, metropolitan planning, transit agency, and transit union officials in 56 metropolitan areas, 52 percent of the respondents corroborated these misgivings by favoring the concept of separating transit policy making from operations (1, p.96).

One partial antidote to blurring everything in the metropolitan transportation planning process is to sift out the purely local projects having no interjurisdictional impact and cut them loose from the regional program. Some projects are outside the scope of regional planning, and relaxed federal regulations for urban transportation planning and programming allow reduced detail for others. There is room for further movement in this direction. The results could help streamline the metropolitan planning process, while removing an irritant to local governments and releasing local energies for initiating needed innovations.

FRAGMENTED FINANCIAL POWERS

Financial powers are real; planning powers are not, even when embodied in officially adopted plans. The inherent weakness of metropolitan plans was recognized in the federal comprehensive, continuing, and cooperative (3C) requirement for transportation planning, which makes any project not included in officially adopted TIP plans ineligible for federal funding. This requirement was an attempt to unify financial powers fragmented by separate federal highway and transit grant programs. Many state highway agencies opposed this requirement and found ways around it. Directly funded transit agencies tend to parry planning policies with which they disagree, leaving financial power in the transportation field—real power—highly fragmented.

There are four federal transportation planning grant programs and seven principal highway and transit implementation programs. Table 1 depicts this fragmentation of power. Local governments and metropolitan planning organizations (MPOs) each receive funds directly from only two of the eleven programs, while states and transit operators each are funded directly by five programs. Although MPOs play a role in approving the use of funds in ten of these eleven federal-aid programs, others play equally strong or stronger roles. In no case does the MPO receive implementation funds itself that it could pass on to implementors willing to follow the MPO plan. Instead, the implementors already own the funds and usually initiate the projects they want to pursue.

Transportation funds from state and local taxes, transit fares, and other sources go directly to the implementing agencies in most cases and are budgeted independently. Operating primarily under federal rules and regulations, MPOs have little leverage over these non-federal funds.

The financial plans for transportation in most metropolitan areas are the separate budgets of the multiple transit providers, the multiple local governments, and the state transportation departments.

LINKING SEPARATE REVENUE AND EXPENDITURE STREAMS

The main task of a metropolitan financing plan for transportation is to link these separate revenue and expenditure streams to a common set of goals and strategies, insofar as they are of regional significance. There are many different methods for attempting this task. Some are centralizing, others are decentralizing, and still others are mixed.

Centralizing Methods

The most straightforward way to link the multiple transportation revenue and expenditure streams in metropolitan districts is to channel them through a single point. For example, if the federal grant funds to be spent for highways and transit in a given metropolitan area were allocated directly to the MPO for sub-allocation in accordance with the MPO's own planning, substantial coordination would be expected. Many diverse and strong political pressures would focus on the MPO in the process, but the mere fact that a single organization would be responsible for all final decisions could be expected to elicit at least a modicum of internal consistency among projects. The Metropolitan Transportation Commission in San Francisco, California, probably comes closest to this model.

Another option is to reduce the number of grant recipients, even though it might not be possible to have only one. An example is the transit funding agency illustrated by the Chicago Regional Transportation Authority (RTA). RTA is not the region's MPO and has nothing to do with highways, but, for transit, it comes close to holding all the cards.

Still another centralizing option is for the MPO to assume a strong mediation role. For this to work, a significant number of the organizations holding transportation finance power in the region would have to agree to negotiate their differences for the sake of realizing mutual benefits. In such a situation, the MPO could offer a forum for the negotiations, perhaps with the help of a professional mediator. This technique—referred to as negotiated investment strategies (NIS)—has been tried in St. Paul, Minnesota; Gary, Indiana; and Columbus, Ohio.

A fourth centralizing option is for the MPO to promote cooperation and coordination by informal means (2). This

TABLE 1 Principal Federal Aid Programs Supporting Metropolitan Transportation

	Principal Recipient				Principal Project Approval Agencies					
Programs	State	Local Government	Transit Operator	MPO	FHWA	UMTA	State	Local Government	Transit Operator	MPO
Planning										
Section 8 Transit Technical Studies				X	X	X				X
Section 9 Transit Block Grant			X						X	X
PL Grants				X	X	X				X
HPR Grants	X						X			
Implementation										
Section 3 Discretionary Transit Capital Grants			X			X			X	X
Section 9 Transit Block Grants			X						X	X
Urban System Highway and Transit Capital Grants		X	X					X		X
Interstate Substitution Highway and Transit Capital Grants	X	X	X		X	X	X	X	X	X
Interstate Highway Grants	X				X		X			X
Primary Highway Grants	X				X		X			X
Secondary Highway Grants	X				X		X			X
Totals	5	2	5	2	6	4	5	2	4	10

Source: ACIR staff compilations, 1984.

approach could include such techniques as (a) voluntary committees and task forces, established for specific purposes and on a temporary basis; (b) regular meetings of the responsible general managers of transit agencies and other key transportation officials; and (c) designated liaison staffs within the major transportation agencies who are specifically charged with developing stronger communication channels among cooperating agencies. The idea is to develop close personal relationships and professional ties among transportation officials as an important means of creating a healthy and productive "web of trust," that can lead to staff sharing and staff collaboration among agencies, smoothing their coordination activities. Some such activities are found frequently, but they are more highly developed and more fully used in certain places in California, such as San Diego and San Francisco.

Decentralizing Methods

Delegation of responsibilities is the key concept in techniques that decentralize financial planning. One means of delegating is to establish a regional planning framework to guide specific planning by local governments and other transportation agencies. The separate plans can be reviewed by the MPO for consistency with regional guidelines and sent back for further work, if found deficient. This process is used in Minneapolis and St. Paul, Minnesota, as well as in Oregon and Florida.

A variation of this delegation theme is to subregionalize the planning and negotiating process. Under this agreement, only unreconciled differences surface at the regional level. State or county lines that divide the region often give rise to this approach, which is often reinforced by suballocating transportation funds to the subregions, either by formula or by some process of negotiation.

The most separatist approach is to encourage competition among transportation agencies, on the assumption that the most cost-effective and successful ones will be rewarded and create the biggest benefits. This is a marketplace-type of rationale that applies more to transit than to highways.

Mixed Methods

These centralizing and decentralizing methods need not be applied to the entire metropolitan transportation planning and financing task. The different transportation modes and subregions can be treated differently within the same metropolitan area.

THE MPO ROLE

The obvious question that arises about ways to link the separate revenue and expenditure flows is, "What about the MPOs—weren't they designed to provide these linkages?" This is a good question and needs to be answered.

Present MPO Roles

A recent ACIR study of metropolitan transit evaluated the MPO situation (1). The basic finding was that MPOs are doing a creditable and needed technical job of compiling transportation projects proposed by operating agencies, molding these projects into the TIPs required to administer federal grants, and constraining TIPs to a fiscal level reasonably commensurate with expected federal funding. MPOs routinely juggle priorities and resolve minor issues. Yet, major new initiatives and efforts to resolve big controversies that may have been discovered by the MPO usually were found to occur outside MPOs in the regular political channels occupied by mayors, governors, and legislators. In other words, the MPOs' technical processes and the regions' political processes do not seem to mesh well. Real decision makers do not use MPOs. Nevertheless, once the big decisions have been made, MPOs reflect these decisions in their revised TIPs.

TIP revisions are frequent. As reported in a recent Transportation Research Board (TRB) report, the portions of a TIP annual element not funded, plus the portions amended during the year, may be large enough to create significant potential for changing the intent of the original program (3, p.48).

Obviously, the average MPO is neither the policy innovator nor the financial planning wizard one might suppose it to be after reading what is expected of it.

The Future of MPOs

ACIR's 1983 survey of a broad range of officials in 56 metropolitan areas (1, pp.90-102) revealed, in part, that

- Most respondents saw the MPOs in their districts as needing to (a) expand their scope of planning to meet a broader range of financial, regulatory, and public and private partnership issues, (b) place greater emphasis on strategic reevaluations of the nature of future transit services, and (c) simultaneously meet short-range transit service and productivity improvement needs
- Substantial minorities saw a need for greater coordination of transit plans with land use policies, parking programs, and automobile tolls
- A majority of the respondents felt that the MPOs should make greater use of informal coordination techniques, but there was lukewarm support for expanding representation on the MPO governing boards to include labor and business, and opposition greeted the proposal for giving MPOs greater authority

The conclusions emerging from these findings, as far as MPOs are concerned, are that their current usefulness could be enhanced, but their powers should remain limited. These conclusions are in line with two other recent studies prepared for the U.S. Department of Transportation (DOT) concerning better ways to coordinate urban transportation (2). These studies found that fragmentation of responsibilities was the general case, and fragmentation was likely to persist in the foreseeable future. They laid primary stress on improving coordination through

- Financial and other incentives encouraging public agencies and individuals to embrace cost-effective transportation improvements
- A closely knit web of relationships and trust among key individuals in the transportation community
- Specific techniques—both formal and informal—of strengthening relationships among individuals and agencies
- Greater involvement of interest groups and the public as transportation projects are developed, thereby strengthening nongovernmental support

The reports stressed the potential effectiveness of these techniques, regardless of how fragmented the formal organizational structure may be in a metropolitan region, so long as a talented individual coordinator committed to, and skilled in, operating in a public policy environment is assigned the task and is supported by trusting leaders within the community.

In light of the federal government's withdrawal from most programs for metropolitan planning other than those in the field of transportation—including particularly the withdrawal from metropolitan land use planning—state legislation would appear to provide the only other option for strengthening metropolitan transportation coordination. Where strong state action has occurred, as in Minneapolis and St. Paul, Minnesota; Atlanta, Georgia; and San Francisco, California, MPOs do have some worthwhile advantages. Where legislative potential exists in the states for forging stronger links among the multiple transportation financial flows, they should be pursued. However, there is probably more promise in most places in taking the informal coordination route.

SUMMARY

As important as it is for metropolitan transportation financing to have good cost estimates, reliable forecasts, responsive cost accounting, timely facility condition inventories, accurate service performance reports, creative productivity improvement proposals, and correct budget documents, it is equally important to establish cooperative networks for interagency coordination. This may require professional skills in listening, communicating, marketing, mediating, organizing the community, lobbying, and running successful meetings. It is a mistake to think these skills are just common sense that can be applied by any manager. These skills are needed by MPOs and other participants in the metropolitan transportation process. They must be pursued diligently and patiently to achieve success.

MPOs are structured to bring everyone together so they can get to know each other, build mutual understanding and trust, share information, and learn to work together constructively toward common goals. The organizational structure cannot do the job alone. If the participants and facilitators are inept, these contacts can generate discord rather than trust and cooperation, and no matter how good the financial data and proposals are, they are not likely to be coordinated or implemented.

An extra effort to perfect these skills is essential. When it is time to budget for the financial planning staff, some of these non-financial skills should be funded. Substantial dividends in the form of better linked transportation revenue and expenditure streams will be realized.

REFERENCES

1. Metropolitan Transit in the 1980s: An Intergovernmental Challenge. Draft. Advisory Commission on Intergovernmental Relations. Washington, D.C., June 1984.
2. Petersilia and Reno. Operating Multi-Model Urban Transportation Systems. U.S. Department of Transportation, Dec. 1977; Burkhardt et al. Current Institutional Arrangements for Urban Transportation Decisions—and Potential Changes. National Technical Information Service, Springfield, Va., Oct. 1981.
3. E. A. Harper. Transportation Improvement Program for Northeastern Illinois. In Transportation Research Board Record 955, TRB, National Research Council, Washington, D.C., 1984, pp. 41-49.