Building Effective Relationships Between Central Cities and Regional, State, and Federal Agencies

A Synthesis of Highway Practice

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Systematic, well-designed research provides the most effective approach to the solution of many problems facing highway administrators and engineers. Often, highway problems are of local interest and can best be studied by highway departments individually or in cooperation with their state universities and others. However, the accelerating growth of highway transportation develops increasingly complex problems of wide interest to highway authorities. These problems are best studied through a coordinated program of cooperative research.

In recognition of these needs, the highway administrators of the American Association of State Highway and Transportation Officials initiated in 1962 an objective national highway research program employing modern scientific techniques. This program is supported on a continuing basis by funds from participating member states of the Association and it receives the full cooperation and support of the Federal Highway Administration, United States Department of Transportation.

The Transportation Research Board of the National Research Council was requested by the Association to administer the research program because of the Board's recognized objectivity and understanding of modern research practices. The Board is uniquely suited for this purpose as it maintains an extensive committee structure from which authorities on any highway transportation subject may be drawn; it possesses avenues of communication and cooperation with federal, state, and local governmental agencies, universities, and industry; its relationship to the National Research Council is an insurance of objectivity; it maintains a full-time research correlation staff of specialists in highway transportation matters to bring the findings of research directly to those who are in a position to use them.

The program is developed on the basis of research needs identified by chief administrators of the highway and transportation departments and by committees of AASHTO. Each year, specific areas of research needs to be included in the program are proposed to the National Research Council and the Board by the American Association of State Highway and Transportation Officials. Research projects to fulfill these needs are defined by the Board, and qualified research agencies are selected from those that have submitted proposals. Administration and surveillance of research contracts are the responsibilities of the National Research Council and the Transportation Research Board.

The needs for highway research are many, and the National Cooperative Highway Research Program can make significant contributions to the solution of highway transportation problems of mutual concern to many responsible groups. The program, however, is intended to complement rather than to substitute for or duplicate other highway research programs.

NOTE: The Transportation Research Board, the National Research Council, the Federal Highway Administration, the American Association of State Highway and Transportation Officials, and the individual states participating in the National Cooperative Highway Research Program do not endorse products or manufacturers. Trade or manufacturers' names appear herein solely because they are considered essential to the object of this report.
PREFACE

A vast storehouse of information exists on nearly every subject of concern to highway administrators and engineers. Much of this information has resulted from both research and the successful application of solutions to the problems faced by practitioners in their daily work. Because previously there has been no systematic means for compiling such useful information and making it available to the entire community, the American Association of State Highway and Transportation Officials has, through the mechanism of the National Cooperative Highway Research Program, authorized the Transportation Research Board to undertake a continuing project to search out and synthesize useful knowledge from all available sources and to prepare documented reports on current practices in the subject areas of concern.

This synthesis series reports on various practices, making specific recommendations where appropriate but without the detailed directions usually found in handbooks or design manuals. Nonetheless, these documents can serve similar purposes, for each is a compendium of the best knowledge available on those measures found to be the most successful in resolving specific problems. The extent to which these reports are useful will be tempered by the user's knowledge and experience in the particular problem area.

FOREWORD

By Staff
Transportation Research Board

This synthesis report will be of interest to local, regional, state, and federal officials, as well as to the consultants that work with them in building effective relationships among different levels of government. It documents various intergovernmental relationships and practices that have proven successful in furthering the capital, operations, and maintenance needs of urban transportation systems. It addresses questions about how various intergovernmental units work together to address the transportation needs of central cities, what types of relationships have proven successful in achieving this goal, and what practical steps local, regional, state, and federal officials can take to enhance and improve central city transportation systems.

Administrators, engineers, and researchers are continually faced with highway problems on which much information exists, either in the form of reports or in terms of undocumented experience and practice. Unfortunately, this information often is scattered and unevaluated and, as a consequence, in seeking solutions, full information on what has been learned about a problem frequently is not assembled. Costly research findings may go unused, valuable experience may be overlooked, and full consideration may not be given to available practices for solving or alleviating the problem. In an effort to correct this situation, a continuing NCHRP project has the objective of reporting on common highway problems and synthesizing available information. The synthesis reports from this endeavor constitute an NCHRP publication series in which various forms of relevant information are assembled into single, concise documents pertaining to specific highway problems or sets of closely related problems.

This report of the Transportation Research Board contains information from a literature review and a survey of transportation agencies with jurisdiction in the 12 largest metropolitan areas in the United States. A total of 84 projects, processes, or other experiences were submitted by transportation agencies to document successful collaborative...
outcomes; 9 of which provide case study results, emphasizing the importance of agencies focusing very clearly on problems, needs, and opportunities.

To develop this synthesis in a comprehensive manner and to ensure inclusion of significant knowledge, the available information was assembled from numerous sources, including a large number of state highway and transportation departments. A topic panel of experts in the subject area was established to guide the author's research in organizing and evaluating the collected data, and to review the final synthesis report.

This synthesis is an immediately useful document that records the practices that were acceptable within the limitations of the knowledge available at the time of its preparation. As the processes of advancement continue, new knowledge can be expected to be added to that now at hand.
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This study was managed by Donna L. Vlasak, Senior Program Officer, who worked with the consultant, the Topic Panel, and the Project 20-5 Committee in the development and review of the report. Assistance in project scope development was provided by Stephen F. Maher, P.E., Manager, Synthesis Studies. Don Tippman was responsible for editing and production. Cheryl Keith assisted in meeting logistics and distribution of the questionnaire and draft reports.

Crawford F. Jencks, Manager, National Cooperative Highway Research Program, assisted the NCHRP 20-5 Committee and the Synthesis staff.

Information on current practice was provided by many highway and transportation agencies. Their cooperation and assistance are appreciated.
BUILDING EFFECTIVE RELATIONSHIPS BETWEEN CENTRAL CITIES AND REGIONAL, STATE, AND FEDERAL AGENCIES

SUMMARY

America's central cities depend on the cooperative efforts of local, regional, state, and federal agencies to meet their transportation needs. This study documents successful relationships and processes that used intergovernmental cooperation, coordination, and collaboration to strengthen large city transportation facilities and services. These successful experiences suggest lessons that can be applied to meeting a variety of central city transportation needs.

The focus of this synthesis is on the nation's 12 largest metropolitan areas. The size and complexity of these areas, ranging from the New York metropolitan area with a population of 21.2 million in 2000 to Miami–Ft. Lauderdale with a population of 3.9 million, create particularly challenging political and organizational environments.

This study is based on three sources of information. First, a review of the literature on intergovernmental cooperation in transportation and other fields. Second, a survey of transportation agencies in the 12 metropolitan areas, which identified 84 successful projects and processes involving intergovernmental cooperation. Third, case studies of 9 of the 84 projects identified in the survey. The case studies, which used in-depth interviews of staff from participating agencies and organizations, represent a range of project types including areawide planning, project planning, and transit and highway projects. The case studies also incorporate related issues of economic development, land use, the environment, and historic preservation.

This report includes detailed accounts of each case study, 11 critical characteristics of intergovernmental cooperation, tools and techniques proven useful for coalescing effective intergovernmental relationships, a series of questions that can be used for self-assessment of cooperative opportunities, and results of the literature search.

A number of key findings were revealed in the study.

Intergovernmental cooperation and collaboration are difficult, but very important (see chapter 2).

- There are often strong official and citizen desires to maintain the independence and prerogatives of existing jurisdictions. Efforts to increase cooperation and collaboration must deal with existing organizational missions and structures that support the independence of each government agency. There is relatively little research on how to do so effectively.
- Regional planning organizations are generally available to help channel and facilitate intergovernmental cooperation and collaboration, but they are not a panacea.
Influential societal trends support efforts for greater intergovernmental cooperation and collaboration. These trends include increased public expectations that agencies work together, greater public involvement, increasing focus on program outcomes, strong links between transportation and other issues, and the growing need for metropolitan areas to compete in the global economy.

Examples of intergovernmental cooperation documented in this report show the effectiveness of such efforts in areas ranging from high-occupancy vehicle lane construction and operations to increases in bus ridership to revitalization of historic arterial streets.

Intergovernmental cooperation also provides a vehicle for state departments of transportation and metropolitan planning organizations to respond to new challenges ranging from environmental justice to land use and historic preservation.

Characteristics of effective coordination and collaborative relationships are emerging and include (see chapter 4):

- Attention to both vertical and horizontal relationships;
- Explicit attention to the political dimensions of issues;
- The use of both formal and informal mechanisms;
- Focus on interdependencies among agencies;
- Involvement of nonprofit and private organizations, in addition to government agencies; and
- Greater public involvement.

Practical tools and techniques for facilitating cooperation and collaboration include (see chapter 5):

- Steering committees and interagency task forces;
- Fact finding surveys, inventories, and field data collection to diffuse myths, enlighten public dialogues, and open new possibilities;
- Forums and hearings where participation and involvement can be broadened;
- Neutral parties who can help overcome some of the baggage of past relationships and help diverse groups move forward to consider current and future issues;
- New communications and analytical technologies that facilitate improved understanding and discourse among individuals and groups;
- Interlocal cooperation acts and agreements;
- New and reshaped organizations that can get things done that no other group is currently able to do; and
- Greater involvement of community groups and the public (see chapters 3 and 4).

Central cities can benefit by systematically assessing their opportunities for improving intergovernmental cooperation and collaboration. Means for doing this include (see chapter 5):

- Identifying specific and timely opportunities for innovations important to the central city.
- Expressing the city's goals in specific terms, but being open to looking at the issue holistically in order to open a larger array of opportunities for reaching the goals of other potential partners at the same time.
- Building on previous successes in cooperation and collaboration.
- Tying the goals to current priorities and major upcoming events.
• Restating the goals in intergovernmental or interjurisdictional terms and making them politically attractive.
• Identifying the main stakeholders, potential partners, and other affected parties.
• Finding ways to link up with and involve these other parties.
• Including other parties, where appropriate, in all phases of the effort—planning, funding, approval, implementation, operations, and maintenance.
• Developing and articulating a shared vision to solidify the relationships.
• Translating very large goals into manageable projects that produce short-term tangible accomplishments along the way as a means of fortifying and maintaining the partnership over the long haul.

Creative program ideas and examples of successful projects are plentiful and include (see the project listing in Appendix E and the case studies in Appendix D):

• A transit priority demonstration project involving the city of Los Angeles and the Los Angeles County Metropolitan Transportation Authority. This project greatly increased bus speeds and bus ridership along two major corridors and is being expanded to 12 additional transit corridors.
• An overlapping set of projects for economic revitalization, historic preservation, tourism development, and road improvements along Woodward Avenue in Detroit, Wayne County, and suburban Oakland County, involving public and nonprofit agencies and private businesses.
• Planning, construction, and operation of an extensive network of high-occupancy vehicle lanes in the Dallas-Ft. Worth area, the product of a partnership between Dallas Area Rapid Transit and the Texas Department of Transportation.
• Participation of private fleets in clean fuels programs, brought about through the cooperative efforts of the city of New York, the New York Metropolitan Transportation Council, and elected officials.
• Installation of standardized directional signage throughout Philadelphia, which facilitates wayfinding to major tourist, cultural, and neighborhood destinations and reduces sign clutter, through an innovative public-private partnership that provides ongoing funding for improved sign maintenance.

Effective relationships are vital to addressing cities' complex and overlapping transportation, land-use, environmental, and economic-development challenges. For agencies at all levels of government, effective relationships offer the opportunity to better fulfill their own responsibilities in the furtherance of their constituents' best interests.
CHAPTER ONE

INTRODUCTION

BACKGROUND

Central cities are hardly masters of their own fates. They depend on funding and support from state and federal governments as well as local revenues. Responsibility for planning, funding, constructing, maintaining, and operating central city transportation facilities and services is divided among many jurisdictions, including municipalities, counties, metropolitan planning organizations (MPOs), various regional authorities, and state and federal agencies. The opportunity for central city officials to participate in regional, state, and federal transportation planning, regulatory, and policy decisions varies greatly as does the level of attention, concern, and funding provided by these different governmental entities.

The number and diversity of governmental entities, combined with the complexity of central city transportation challenges, necessitates cooperative efforts to meet central city transportation needs. This synthesis documents various intergovernmental relationships and practices that have proven successful in furthering the capital, operations, and maintenance needs of urban transportation systems, and addresses the following questions:

- How can various governmental units work together to address central city transportation needs?
- What types of relationships have proven successful in achieving this goal?
- What practical steps can local, regional, state, and federal officials take to work together to improve central city transportation systems?

The topic of this report was originally suggested during a conference of transportation officials from large U.S. cities, held in Detroit in 1998. The proceedings of that conference (Conference on Transportation Issues... 1999) provide valuable discussion and a catalog of issues and concerns faced by transportation officials from large cities.

Another outgrowth of that conference was the funding of the Large City Technical Exchange and Assistance Program, conducted by New York University's Rudin Center for Transportation Policy and Management for the Federal Highway Administration, with the cooperation and support of the National Association of City Transportation Officials. Two of the topics in the first-year report from that project directly concern building intergovernmental relationships to address central city transportation issues. These topics are intergovernmental cooperation for traffic management and interagency sharing of fiber optic networks. This report (Rudin Center for Transportation Policy and Management 2000) is available on the Internet at http://www.nyu.edu/wagner/transportation/downloads.html.

Several important articles and reports focus on changing roles and responsibilities in the governmental structure. These include Lockwood's (1998) report on the changing state of departments of transportation (DOTs), research issues identified by the heads of state DOTs (Strategic Management Research Needs... 2000), and assessments of MPO's conducted by Dempsey et al. (2000), McDowell (1999), ACIR (1997), and Gage and McDowell (1995).

SCOPE AND METHODOLOGY

This report is based on a review of relevant literature and a survey of state and local transportation agencies. The literature review examined why intergovernmental relationships are important to addressing central city transportation needs, challenges to forming effective relationships, and the likely characteristics of effective relationships.

The survey consisted of a short questionnaire and follow-up telephone interviews. The questionnaire was sent to 58 local, county, regional, and state transportation agencies with jurisdiction in the nation's 12 largest metropolitan areas:

- Atlanta
- Baltimore and Washington, D.C.
- Boston
- Chicago
- Dallas and Fort Worth
- Detroit
- Houston.
- Los Angeles
- Miami
- New York
- Philadelphia
- San Francisco.

Respondents were asked to submit (1) information on agency responsibilities for central city transportation functions and (2) a list of successful projects, processes, or other experiences that illustrate how cities, states, MPOs, counties, and/or transit agencies successfully worked together to further the capital, operations, and maintenance needs of the central city's transportation systems.
Twenty transportation agencies (cities, counties, MPOs, states, and transit agencies) (listed in Appendix E) submitted a total of 84 projects, processes, or other experiences.

The list of 84 projects was reduced to 19 for further information gathering. The initial selection was based on input from the synthesis panel and agency staff that responded to the original questionnaire. Selections were also designed to achieve a range of types (areawide planning, project planning, transit projects, highway projects, etc.) and a geographic spread. Of these 19 projects, in-depth interviewing and analysis was completed on 9 projects. Several projects were dropped, because upon further investigation they did not involve central city transportation needs. In other cases, it was not possible to complete telephone interviews with key project participants.

**ORGANIZATION OF THE STUDY**

Chapter 2 reports on the findings of the literature survey. Chapter 3 discusses the survey findings. Chapter 4 integrates literature and survey findings into 11 primary characteristics of effective relationships for addressing central city transportation needs. Chapter 5 reviews techniques that facilitate intergovernmental collaboration and provides questions that agency officials can use as a framework for determining how to cultivate effective relationships in particular situations. Chapter 6 presents conclusions and recommendations for further research.

Tables and appendixes include a chart showing transportation responsibilities in selected cities, the survey questionnaire, a list of the 84 projects submitted by survey respondents, a list of responding agencies, and in-depth write-ups on the 9 case studies.

Readers can focus on particular needs including:

- Understanding why intergovernmental cooperation and collaboration is difficult and important (chapter 2).
- Understanding structures and processes that characterize effective relationships (chapter 4).
- Tools and techniques necessary to coordinate and collaborate with others (chapter 5).
- Assessing opportunities for building effective relationships and how to develop those relationships (chapter 5).
- Creative program ideas in specific project areas (Appendix E) and case studies of interest (Appendix D).
- The role of state DOTs and MPOs (chapter 3).
- The role of community groups and public involvement (chapters 3 and 4).

**RELEVANCE TO STATE DEPARTMENTS OF TRANSPORTATION AND METROPOLITAN PLANNING ORGANIZATIONS**

This report does not focus on traditional state DOT or MPO responsibilities. These organizations, however, are increasingly called upon to respond to topics and institutions that are not focused on traditional DOT issues and MPO planning processes. Examples range from environmental justice, land use, and historic preservation to urban signage and clean fuels. DOTs and MPOs must by circumstance and necessity work with a wide variety of other agencies to address these issues. How to do so successfully is a major challenge.

Readers focused on these issues might turn to chapter 2, for an understanding of their changing environment and heightened public expectations; chapter 3, for the role of DOTs and MPOs in projects that embody changing intergovernmental relationships; chapter 4, for a discussion of agency relationships and project structure; and chapter 5, for a series of questions to guide analysis of opportunities for a particular issue, topic, or project.

Case studies on Clean Fuels Forums, Illinois Balanced Growth Initiative, Bay Area Pavement Management System, Walk Philadelphia/Direction Philadelphia, and Woodward Avenue Heritage Route, are provided as examples of DOTs and MPOs performing a variety of roles.

**TERMINOLOGY**

Cooperation between government agencies takes one of these forms: intergovernmental, interjurisdictional, and interagency. Although there are important distinctions between these terms, as discussed briefly in chapter 2, for the sake of simplicity the word “intergovernmental” is used in this report to include both horizontal relationships (e.g., city-to-city) and vertical relationships (e.g., city-to-state). Much of what is discussed in this report also applies to interagency relationships (e.g., between city agencies or between state agencies), but that is not the focus of this study.
CHAPTER TWO

THE CHANGING FACE OF INTERGOVERNMENTAL RELATIONS

Local, regional, state, and federal officials are showing renewed and intensified interest in building effective relationships among different levels of government. Their interest comes about as officials and citizens increasingly identify intergovernmental collaboration, cooperation, and coordination as a key tool to solving problems that cut across city, county, and state boundaries. Officials and the public see intergovernmental cooperation as an effective and relatively immediate way to knit transportation planning and operations with land-use, environmental, and economic development goals, and to meet the publics expectations for effective, efficient, and responsive government.

This focus on intergovernmental relationships marks a shift away from using regional agencies to address interjurisdictional challenges. It is worth while to review the forms these regional agencies have taken, and where they have succeeded and fallen short. This history helps to inform and shape current efforts at intergovernmental cooperation.

EXPERIENCE WITH REGIONAL AGENCIES

At least in theory, regional agencies could serve to gather together the disparate parts of sprawling metropolitan regions, and rationally and comprehensively address the transportation challenges facing these metropolitan areas. Regional agencies could also relate transportation and land-use, environmental, and economic development goals. They could rise above contentious local self-interests and bring together local government participants and resources to solve transportation problems and meet other needs.

There is a long history of efforts to implement regionalist approaches to solving metropolitan-wide problems. Some were successful, notably movements to form regional governments, regional service districts, city annexations, or city–county consolidations. Most of these regional agencies have taken, and where they have succeeded and fallen short. This history helps to inform and shape current efforts at intergovernmental cooperation.

ISTEA greatly strengthened the role of MPOs in determining the best mix of transportation investments to meet metropolitan transportation needs. ISTEA broadened the context of transportation planning and increased the amount of state funding used in metropolitan areas.

It is not even clear that regionalism if practiced as advocated by its proponents would lead to economically more vital or physically more attractive metropolises. Authors such as Rusk (1993) contend that the ability of some central cities to expand their borders enhances the economic prospects of both central city and suburbs. But citing a broader set of empirical data than Rusk, Blair et al. (1996) conclude that Rusk's elasticity hypothesis explains only a small part of the differences in regional growth and does not appear to relate to changes in per capita income or poverty levels.

Although multi-purpose regional agencies or city–county consolidations are the exception, a wide variety of single-purpose regional agencies have been created over the years. Of most pertinence to this study are mandates for MPOs set forth by the landmark Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) and the Transportation Equity Act for the 21st Century (TEA-21), enacted in 1998. In addition, many special purpose districts and public authorities have been created to address particular needs that cross city, county, and state boundaries. These include public transportation authorities; port districts; bridge, tunnel, highway, and airport authorities; and air quality districts.

Despite their expanded role and powers, MPOs have enjoyed limited effectiveness. Gage and McDowell (1995) documented the difficulties of MPOs in carrying out their planning responsibilities and forging intergovernmental relationships. McDowell (1999) concluded that new MPO responsibilities were “stretching many MPOs almost to the breaking point. Most MPOs now have responsibilities that far exceed their authority.”

Compartmentalization of powers of special purpose districts and public authorities increases rather than decreases the need for intergovernmental cooperation. In a review of regional agencies in southern California with planning, transportation and air quality responsibilities, Bollens (1997) points out how limited are the powers of some regional agencies—down to the level of agencies charged solely with building a single toll road. Bollens
worries that “the creation of regional governance through issue-specific and functional incrementalism may result in uncoordinated areawide policies damaging to our metropolitan futures.” Likewise, in the Chicago area, Weir (2000) points out the

... maze of special districts with operational responsibilities [that] carve up the region into functional areas for water, parks, and waste disposal. For the most part, the problems of growing suburbs were addressed through these ad hoc and functionally specific entities, among which there was little coordination and no overarching vision.

Ironically, then, regionalism as practiced in major American metropolitan areas gives rise to an increased need for intergovernmental coordination and collaboration, not less.

Why have multi-purpose regional governments had such limited appeal? A prime reason is pervasive American distrust of regional solutions. State and local government officials in Maryland, surveyed on the role of regional councils, showed the highest level of approval for “relatively passive” roles such as “identifying regional needs” and “acting as a regional forum” (Florestano and Wilson-Gentry 1994). A survey in California found that most city planning directors question the ability of regional government to solve problems or respond effectively to local issues (Baldassare et al. 1996). A 1985 survey conducted by the U.S. Advisory Commission on Intergovernmental Relations (ACIR) indicated that 75 percent of respondents would reject the idea of giving MPOs more authority (McDowell 1986). As Katz (2000) remarks, “Americans like the idea of small, accessible, responsive local governments and have not been quick to embrace larger governing bodies.”

There is no question that a variety of regional agencies will remain important participants in large metropolitan areas; however, they are no longer seen as the panacea to regional and central city needs. The debate has moved to other ground; “today’s discussions concerning regionalism focus not on the traditional question of whether to have a metropolitan area government or not, but on how policymakers can develop alternative means of metropolitan governance and collaboration” (Bollens 1997).

FORCES FOR INTERGOVERNMENTAL COLLABORATION

If regional agencies are not the most promising solution for meeting central city transportation needs, the challenge of meeting these needs falls to collaborative efforts.

Collaborative efforts have received increasing emphasis over the past decade at both the local and federal level. Locally, amid recession and budget shortfalls in the early 1990s, big city mayors consciously sought to rethink the role of American cities in the global economy and shift the focus of intraregional relationships to economic development strategies (Roberts 1990). As discussed earlier, on the federal level ISTEA and TEA-21 gave local officials, in cooperation with state DOTs and transit operators, responsibility for setting local transportation priorities.

A range of forces drives these new intergovernmental relationships and shapes their form. These forces, depicted in Figure 1, include:

- Public emphasis on intergovernmental cooperation to address problems and needs that involve multiple jurisdictions,
- Emphasis on outcomes rather than inputs.
- Heightened expectations for citizen participation,
- Awareness of metropolitan areas as the key unit for international economic competitiveness, and
- Desire to integrate transportation, land-use, environmental, and economic development concerns.

Public Expectations for Intergovernmental Cooperation

The first and perhaps most important force is derived from the public demand that different levels of government work together to solve problems. A public opinion survey in Michigan found that a majority of respondents preferred that all three levels of government—federal, state, and local—be involved in transportation, environmental, and economic development (Thompson and Elling 1999). If responsibilities remain spread among different agencies, they should coordinate more effectively, make efficient use of each agency's strengths, and share resources where doing so is beneficial. Bollens (1997) notes that “metropolitan cooperation is seen as more innovative, politically possible, and responsive than the wholesale creation of comprehensive, multifunctional metropolitan governments...” Metropolitan cooperation is more circumscribed, less a threat to existing general purpose governments, and “may strike a chord with metropolitan residents who favor self-reliance and detest bureaucratic solutions.”

Outcomes Versus Inputs

There is a newfound emphasis on outcomes—on results rather than inputs, on governance rather than governance structure. Emphasis on outcomes means identifying “a set of societal goals that represent results in the lives of real people that public programs should be helping to achieve, and to measure and regularly track progress toward their achievement” (ACIR 1997).
The push for transportation agencies to focus on outcomes is part and parcel of a fundamental shift from a construction focus to an operations focus, e.g., from building the Interstate highway system to squeezing the most productivity from existing roadway capacity. The outcome is “moving people and goods,” a far different focus than lane-miles of new construction.

**Heightened Expectations for Citizen Participation**

Increased citizen participation was mandated in the transportation planning process in the form of collaborative planning that “is increasingly inclusive and focused on building widening circles of consensus—among governments, agencies, other institutions, directly affected population groups, media and the general public” (ACIR 1997). ISTEA and TEA-21 expect MPOs to involve all affected parties including “customers and the general public” in the planning process (McDowell 1999).

**Regions as International Economic Competitors**

During the explosive growth of suburbs after the Second World War, the public, press, and elected officials often viewed competition for resources within the metropolitan area as a zero-sum contest between central city and suburb. That view has changed. There is a growing belief that international economic competitiveness demands a focus on the metropolitan area and not simply individual municipalities as the relevant urban economic region (Cisneros 1993; Peirce et al. 1993). Intraregional competition can be counterproductive. “Regions or ‘citistates’ competing in an international economy may not be able to afford the costs of internal divisions (such as central city–suburbs) that dampen overall regional health” (Bollens 1997).

Intergovernmental cooperation finds fertile turf when city and suburban residents see that transportation improvements bring shared benefits to their region as it competes in the international economy. Park (1997) notes that transportation is a “developmental policy area” that both city and suburban residents tend to view as having positive effects on the local economy.

**Integration of Transportation with Other Issues**

Transportation issues were once focused on moving people and goods from point A to point B on mode X. Transportation
is now seen in the much broader context of economic development, environmental, and land-use issues. ISTEA and TEA-21 codified the objective of viewing transportation in this larger context. ISTEA and TEA-21 also view transportation as necessitating multimodal solutions; a focus on one mode no longer suffices.

In conclusion, there are strong forces for intergovernmental cooperation in transportation and related areas: public expectations, emphasis on governmental outcomes, expectations for citizen participation, international economic competition, and concerns about environmental, land-use, and quality of life issues.

BARRIERS TO BUILDING EFFECTIVE RELATIONSHIPS

There are clear signs that local, state, and federal transportation officials are responding to the need for intergovernmental cooperation. Several studies document the need, presence, and payoff of greater intergovernmental cooperation.

- In a wide-ranging survey of state DOTs, Lockwood (1998) found that “Over one-half of survey respondents reported better policy coordination with metropolitan planning organizations and rural entities; including increased planning and programming discretion.” He reports that 16 states “described informal production arrangements with local government based principally on trading of responsibilities or informal cooperation that rationalize construction and maintenance-related activities.” Citizens care about the conditions of the transportation infrastructure, not which agency is responsible.

- An extensive analysis of intergovernmental cooperation in traffic management and fiber optic sharing showed the efficacy of collaborative approaches (Rudin Center for Transportation Policy and Management 2000).

- In an exploration of public policies that increase transit's market share, Charles River Associates (1997) found that “institutional cooperation is often essential.”

- In an analysis of federal MPO certification reviews, ACIR (1997) found that with respect to intergovernmental coordination, “reviewers found almost as many commendable practices as needs for improvement (40 versus 43 percent). The biggest challenges were coordination with the state, other partners within the MPO, and other MPOs in the same metropolitan area.”

While noting these positive developments, officials and observers believe that much greater levels of cooperation are needed. In his review of MPOs, McDowell (1999) concluded that MPOs “need more than ever to form partnerships with others who have authority for the growing number of interdependent governmental and private actions required to make metropolitan areas better places to live.” Local officials expect further development of partnerships and other types of intergovernmental cooperation. A survey found that top city administrative officials expect “greater regional and interjurisdictional cooperation and collaboration” (Cole et al. 1999). A conference of transportation officials from the nation’s largest cities concluded, “Opportunities for regional governments are limited, but models for regional cooperation should be pursued” (Conference on Transportation Issues... 1999). A Metropolitan Assembly of elected and appointed officials; business, civic, and community organizations; and academics in northeastern Illinois concluded:

Most, if not all, of the social problems we examined are best understood from a metropolitan regional perspective (i.e., solutions require actions that involve suburban as well as central city governments). Yet much more needs to be learned about the conditions under which intergovernmental cooperation is, and is not, likely to work effectively (Weisbrod and Worthy 1997).

Thus, there is a desire to view metropolitan problems in their regional context, but also a hesitation to trust regional solutions. How can these countervailing impulses be channeled to work together in some fashion?

It is important to begin by identifying the barriers that make it difficult to build effective relationships between various governmental entities. One barrier is complexity. Intergovernmental cooperation involves “multiple jurisdictions, each with independent resources, different laws and policies and generally distinct planning objectives” (Zoller and Capizzano 1997).

Another barrier is a still-skeptical public. Although influential studies in the early 1990s by Ledebur and Barnes (1993), Rusk (1993), and Savitch et al. (1993) found that central city and suburban economic fortunes are linked, others have disputed their conclusions. The concept of “edge cities,” independent of any central city, popularized by Garreau (1991), takes at least an equal place in the popular understanding of the central city-suburban dynamic. Findings from the 2000 U.S. Census show fragments of urbanized area beyond the suburbs or even exurbs (Firestone 2001). Residents of such areas seem unlikely to feel a close connection to urban needs. Surveys in the Philadelphia region found that “three-quarters of suburban residents acknowledged a symbiosis between the city and the suburbs,” but have not supported further efforts to aid the urban center because “there is an all-pervasive sense that taxpayers have been generous in the past. Just about everything has been tried with at best limited success, and there is no sense throwing good money after bad” (Hershberg 1996).
A dearth of research is another barrier. The challenge of collaboration “has been intensified by a dearth of research on the topic...[including] important concepts such as coordinating systems of governance, sharing resources and accountability, and integrating organizational cultures” (Grubbs 2000). Nunn and Rosentraub (1997) note that few studies have explored the mechanisms of interjurisdictional cooperation designed to enhance regions. Seldom is ‘interjurisdictional cooperation’ studied directly in terms of its various guises and how different forms of cooperation have emerged, developed, and been sustained. ... Missing is information about particular interjurisdictional actions that have promoted various forms of cooperation, how and why these structures evolved, and what happened as a result of the cooperation. Yet this is the information planners, administrators, and city leaders need as they work to form interjurisdictional linkages.

A workshop of state DOT CEOs identified as a critical research need obtaining a better understanding of the barriers that exist to cooperative relationships between state DOTs and other public and private entities and how the barriers can be overcome (Strategic Management Research Needs... 2000).

The research shortfall is deepened when the needs of large metropolitan areas are considered. A 1998 conference on “Transportation Issues in Large U.S. Cities” posed the question, “Which relationships [between local, state, and federal agencies] are working and what makes them work—organizational factors, attitudinal factors, or something else?” (Conference on Transportation Issues... 1999).

CHARACTERISTICS OF EFFECTIVE RELATIONSHIPS

What is the likely shape of effective relationships among government agencies? What will necessarily characterize intergovernmental relationships in addressing central city transportation needs? What are likely attributes of effective relationships?

Existing research emphasizes several characteristics. Effective intergovernmental relationships will

- Be both vertical and horizontal;
- Deal explicitly with politics;
- Encompass a variety of mechanisms, from formal agreements to loose cooperative affiliations;
- Build on interdependence among agencies;
- Involve nonprofit and private sector organizations in addition to government agencies; and
- Involve greater public participation.

Vertical and Horizontal

First, interactions will take place both vertically and horizontally in the governmental structure. Intergovernmental, or horizontal, relationships involve “interactions between governments with comparable powers.” Intergovernmental, or vertical relationships, refers “to interactions between local governments with different powers” (Park 1997). Intergovernmental cooperation involves central cities and suburban municipalities, whereas intergovernmental cooperation involves central cities and their (generally geographically overlapping) counties, MPOs, transit agencies and other regional agencies, and state and federal governments. Given the distribution of governmental responsibilities, authority, and funding, both horizontal and vertical interactions are critical to meeting central city transportation needs.

The nature of vertical interactions will also change. In their perceptive analysis of a “jurisdiction-based model of intergovernmental management,” Agranoff and McGuire (1998) posit that intergovernmental management can no longer “be defined solely in terms of ‘top-down’ or ‘bottom-up’ orientations.” Instead, they posit that intergovernmental management “is more akin to a series of mutual interactions where local actors instigate action, and goals and resources are exchanged among actors in the system.” In this model of intergovernmental relations, “local officials strategically interact with various actors for the purpose of successfully designing and administering policies.” No longer is the focus on “which government has the most control or whether states and localities have adequate autonomy.”

Politics

Effective relationships will deal explicitly with politics. Large city transportation officials identify the political isolation of such large cities as a larger problem than economic or social problems (Conference on Transportation Issues... 1999). That political isolation can only be overcome through skillful political activity. This point was illustrated in a study of successful transit agencies, which found that critical to their success was being in tune with political forces and politically accountable (Paaswell et al. 1999).

One key political issue to be addressed is the degree to which intergovernmental cooperation requires that agencies yield local control. The degree to which agencies are willing to sacrifice their autonomy will shape the nature of the relationships that develop.

Regions can take a ‘low risk’ trajectory, building coalitions only through free market/laissez faire approaches that include networking and sharing information. Such avenues of regional cooperation are often informal, and do little to reduce the local autonomy of independent jurisdictions. More risky in terms of reducing local autonomy are working relationships among cities that use joint capital projects, program initiatives, or organizations created with interlocal cooperation as the key objective... (Nunn and Rosentraub 1997).
**Mechanisms**

Effective relationships will encompass a variety of mechanisms including “contracts, compacts, agreements, and memoranda of understanding” (ACIR 1997). Bollens (1997) cites public-private cooperation, voluntary interlocal agreements, and cross-sectoral alliances that pursue collaborative visions for the region. Some of the emerging entities that act as vehicles for cooperative enterprises will function as “loose affiliations” that express a “collective sense of civic mindedness,” but are not perceived to interfere with local self-interest (Grigsby 1996). In collaborative networks, the “‘mindset’ or commitment to the whole” replaces traditional methods of coordination and control; no one is in charge (Mandell 1999).

**Interdependence**

Relationships will be built on interdependence among different agencies. Just as there is a growing appreciation of regional interdependence, government officials are becoming more aware of mutually beneficial opportunities for sharing strengths and resources that stem from interdependence among agencies. Sometimes cooperation is spurred by agencies' need for each other's resources. “Intergovernmental actors are dependent on each other because they need each other's resources (legal authority, funding, organization, expertise, and information) to achieve their goals” (Agranoff and McGuire 1998).

As Bardach (1999) puts it, interagency collaboration takes advantage of “complimentaries in production that arise when specialized competencies are blended in the right way.” Collaboration can also make use of underutilized capacity and use of the same resources to conduct multiple functions (Bardach 1999). Underused capacity might mean using an outbound lane for a high-occupancy vehicle (HOV) lane during the morning rush hour. The same resources are used for multiple functions when closed circuit television cameras are used by both transportation departments for traffic management and by police and fire departments for determining emergency response (Rudin Center for Transportation Policy and Management 2000).

**Nonprofit and Private Sector**

Effective relationships will involve nonprofit and private sector organizations in addition to local, regional, state, and federal agencies. One-half of the top city administrative officials surveyed observed an “increased involvement of for-profit and not-for-profit organizations in program planning and service delivery for their cities” (Cole et al. 1999).

**Public Participation**

Finally, effective relationships will involve greater public participation. The new buzzword among planners is “collaborative planning.” Plans should be developed “through an open and visible involvement process that creates as much consensus and support as possible” (ACIR 1997). ISTEA required “Collaborative planning that incorporates a much wider set of institutions into the MPO policy board and committee structures and requires a broader, more proactive, and more effective public involvement program” (ACIR 1997). These requirements were expanded under TEA-21 to include public involvement during MPO certification review.

Studies of MPOs and corridor management document the importance of effective public participation. MPO planning and decision making that is “inclusive and collaborative” is “essential to the effectiveness of an MPO” (Dempsey et al. 2000). A study of corridor management found that a “defining characteristic of successful corridor management efforts is the active involvement of people and organizations with a vested interest in the corridor” (Williams 1999).

Collaborative planning can draw on a variety of involvement techniques. They include “stakeholder analysis and recruitment, advisory committees, coordination committees, meeting facilitation, simulation exercises, social impact analysis, negotiation, conflict resolution, plain English and other accessible forms of information, open meeting and freedom of information laws, and many more” (ACIR 1997). Dempsey et al. (2000) add visioning sessions, open house workshops, and guidebooks. The rise of the Internet has expanded the opportunities for public involvement.

The case study research conducted for this report echoes these six characteristics discussed from the literature review. The case studies highlight several other critical characteristics of effective intergovernmental relationships as well. As discussed in chapters 3 and 4, these include the focus and structure of projects involving intergovernmental cooperation. Case study results emphasize the importance of agencies focusing very clearly on problems, needs, and opportunities. They also show the effectiveness of structuring projects as a series of interrelated efforts that produce both short-term and long-term results. Finally, the case studies show the vital role of committed and competent staff, and the importance of a shared vision.
SURVEY AND CASE STUDY RESULTS

The survey conducted for this project included two parts. The first part requested information about responsibility for central city transportation functions; the second part asked for examples of projects, practices, or processes that exemplify successful relationships between city, regional, state, and federal agencies in meeting central city transportation needs.

RESPONSIBILITIES FOR CENTRAL CITY TRANSPORTATION FUNCTIONS

As expected, a wide variety of agencies are involved in central city transportation functions. Responsibilities include highway and street design, construction, and maintenance; enforcement; transit operations; trucking regulation; rail and port responsibilities; multimodal planning; and environmental justice issues. Based on comprehensive responses received from five cities, the following types of agencies have significant central city transportation responsibilities in at least some cities:

- City transportation, public works, or streets department
- City design and construction departments
- City planning departments
- City police departments
- City public property departments and commissions
- City commerce departments
- City environmental protection departments
- City health departments
- City housing departments
- City mayor's offices
- City taxi commissions
- Other commissions
- Sheriffs and Highway Patrols
- State transportation or highway departments
- Regional and statewide transit authorities
- State industrial development corporations
- Various city and metropolitan commissions
- City, regional and state port, highway, bridge, and tunnel departments and authorities
- State public service or public utility commissions
- MPOs
- Parking departments or authorities
- Downtown business and development organizations.

Cities have adopted a range of structures for organizing their transportation functions with varying degrees of fragmentation or consolidation. In some cities, traffic operations are found in the same agency—typically a transportation or public works department—as design, construction, and maintenance of streets and highways. To these responsibilities may be added traffic enforcement, parking operations, regulatory authority (taxis, jitneys, etc.), transit operations, bridge construction and maintenance, and a variety of other functions. In other cities, responsibilities for these various areas are spread across a number of agencies, most typically including streets, public works, and police departments.

The level of government that is responsible for various transportation functions also varies greatly. Often times, county or state agencies are fully or partially responsible for highway and/or bridge design, construction, and operations; transit services; trucking and freight regulation; and ports.

Regardless of the structure of responsibilities, central city transportation functions are divided among a variety of agencies. This point is amply illustrated in the detailed information on transportation responsibilities for Baltimore, Boston, Miami, New York, and Philadelphia found in Table 1.

SUCCESSFUL PRACTICES

Twenty governmental agencies (city, county, MPO, state, and transit agencies) submitted a total of 84 projects, processes, or other experiences that they believed represent successful practices in furthering the capital, operations, and maintenance needs of central cities' transportation systems.

Although these projects represent a “convenience sample” as opposed to a random sample of projects that are representative of some larger universe, their characteristics are interesting to note.

The 84 projects can be categorized in several ways. One-third (28) of the projects involved corridor or areawide planning, ranging from the Ongoing Unified Planning Process in the Baltimore area to the Bay Area Transportation Blueprint for the 21st Century, I-375 Riverfront Access and Redevelopment in Detroit, and a Balanced (Smart) Growth Study in the Chicago area.

Fifteen of the 84 projects involved planning and implementation of rail and bus projects. These included the
<table>
<thead>
<tr>
<th>Responsibility Area</th>
<th>Baltimore</th>
<th>Philadelphia</th>
<th>New York City</th>
<th>Miami</th>
<th>Boston</th>
</tr>
</thead>
<tbody>
<tr>
<td>Highway and street design, construction, and maintenance</td>
<td>Baltimore City Dept. of Public Works (DPW)</td>
<td>Philadelphia Dept. of Streets; Pennsylvania DOT (PennDOT)</td>
<td>City Dept. of Transportation, but City Dept. of Design and Construction for detailed design</td>
<td>Dade County Public Works and Florida DOT</td>
<td>City Public Works Dept., State Highway Dept., Metropolitan District Commission</td>
</tr>
<tr>
<td>Traffic control, intersection control, traffic signals</td>
<td>DPW</td>
<td>Dept. of Streets</td>
<td>City Police Dept.</td>
<td>Miami-Dade County Public Works Dept.</td>
<td>City Transportation Dept.</td>
</tr>
<tr>
<td>Parking responsibilities</td>
<td>DPW/Downtown Partnership (being reorganized)</td>
<td>Philadelphia Parking Authority; City Managing Director's Office</td>
<td>Regulation and facilities management: City DOT; enforcement: City Police Dept.</td>
<td>City of Miami Off Street Parking Dept.</td>
<td>City Transportation Dept., Air Pollution Control Commission</td>
</tr>
<tr>
<td>Transit operations (bus, subway, downtown circulators, vans, para-transit, ferry, etc.)</td>
<td>Mass Transit Administration</td>
<td>Southeastern Pennsylvania Transportation Authority (SEPTA), New Jersey Transit, Delaware River Port Authority (DRPA), City Dept. of Public Property</td>
<td>City DOT, Metropolitan Transportation Authority (MTA)</td>
<td>City DOT, MTA Bridges and Tunnels, Port Authority of New York and New Jersey</td>
<td>Massachusetts Bay Transportation Authority</td>
</tr>
<tr>
<td>Bridge construction, reconstruction, maintenance, and operations</td>
<td>Baltimore City</td>
<td>Dept. of Streets, PennDOT, DRPA, SEPTA, Norfolk Southern, and CSX</td>
<td>City DOT, City Police Dept., Port Authority of New York and New Jersey</td>
<td>State, Miami-Dade County</td>
<td>Massachusetts Port Authority, Massachusetts Turnpike Authority (tunnels)</td>
</tr>
<tr>
<td>Trucking regulation</td>
<td>DPW</td>
<td>Mayor's Office of Transportation, PennDOT, City Dept. of Public Property</td>
<td>City DOT, City Police Dept., Port Authority of New York and New Jersey</td>
<td>State, Miami-Dade County</td>
<td>Massachusetts Port Authority</td>
</tr>
<tr>
<td>Freight responsibilities</td>
<td>Baltimore City</td>
<td>PennDOT, DRPA, City Commerce Dept., Pennsylvania Industrial Development Corp.</td>
<td>Port Authority of New York and New Jersey</td>
<td>State, Miami-Dade County</td>
<td>Massachusetts Port Authority</td>
</tr>
<tr>
<td>Rail and port responsibilities</td>
<td>Maryland DOT through Mass Transit Administration and Maryland Port Administration</td>
<td>Port of Philadelphia and Camden, a division of DRPA; Norfolk Southern; CSX; Pennsylvania Industrial Development Corp.; SEPTA; City Commerce Dept.</td>
<td>Port Authority of New York and New Jersey</td>
<td>Miami-Dade County Port Authority and Aviation Dept.</td>
<td>Massachusetts Port Authority</td>
</tr>
<tr>
<td>Involvement in special/major events, emergency situations</td>
<td>DPW and Police Dept.</td>
<td>Mayor's Office of Transportation, City Managing Director's Office</td>
<td>Mayor's Office and agencies as directed by Mayor's Office</td>
<td>City of Miami Budget Dept.</td>
<td>State Highway Dept., State Executive Office of Transportation Construction, Metropolitan Area Planning Council</td>
</tr>
<tr>
<td>Responsibilities for allocating federal/state funding</td>
<td>By negotiated formula</td>
<td>Mayor's Office of Transportation, Delaware Valley Regional Planning Commission (DVRPC); PennDOT, FTA, FHWA</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
TABLE 2
SUMMARY OF PROJECT TYPES

<table>
<thead>
<tr>
<th>Type of Project</th>
<th>No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corridor or areawide planning</td>
<td>28</td>
</tr>
<tr>
<td>Rail and/or bus projects</td>
<td>15</td>
</tr>
<tr>
<td>Street maintenance</td>
<td>5</td>
</tr>
<tr>
<td>Highway projects</td>
<td>5</td>
</tr>
<tr>
<td>HOV lanes</td>
<td>4</td>
</tr>
<tr>
<td>Air quality</td>
<td>4</td>
</tr>
<tr>
<td>Funding</td>
<td>4</td>
</tr>
<tr>
<td>Liaison and intergovernmental relations</td>
<td>4</td>
</tr>
<tr>
<td>Traffic improvements</td>
<td>3</td>
</tr>
<tr>
<td>Bicycle and pedestrian projects</td>
<td>3</td>
</tr>
</tbody>
</table>

Greyhound Bus Terminal in Baltimore; Chestnut Street Transitway, Streetscape, and Roadway Improvement in Philadelphia; MAGLEV High-speed Rail System in California; and Public Transit to the San Francisco Giants Pac-Bell Park.

As Table 2 shows, the remaining projects are a diverse lot. This count categorizes projects by their primary goals; many projects cross into several categories, as in transitway improvements that include bicycle and pedestrian improvements that may have air quality benefits.

Appendix E lists each project and the agencies involved, as cited on the questionnaire returned by each agency.

Participating agencies were listed for 75 of the 84 projects submitted. The list of participating agencies illustrates the diversity of jurisdictions that address central city transportation issues (Table 3). City agencies were listed as participants for 48 of the 75 projects. These agencies included transportation, public works, and streets departments, as well as city planning, environmental protection, and police departments.

TABLE 3
SUMMARY OF PARTICIPATING AGENCIES

<table>
<thead>
<tr>
<th>Participating Agencies</th>
<th>No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>City agencies</td>
<td>48</td>
</tr>
<tr>
<td>State DOT</td>
<td>47</td>
</tr>
<tr>
<td>MPO</td>
<td>35</td>
</tr>
<tr>
<td>Transit agency</td>
<td>34</td>
</tr>
<tr>
<td>County</td>
<td>10</td>
</tr>
<tr>
<td>Emergency response agency</td>
<td>10</td>
</tr>
<tr>
<td>Federal agencies</td>
<td>5</td>
</tr>
</tbody>
</table>

Federal agencies such as the FHWA and FTA were listed as participants in only five projects. It was clear, however, that federal funding and oversight were present in a larger number of projects.

Of the 84 projects listed by respondents, in-depth interviewing and analysis was completed on 9 projects, including
corridor planning studies, transit improvements, air quality, and signage, and are described briefly here.

- **Chestnut Street Transitway** (Philadelphia)—Entailed reconstruction of a three-lane retail street in downtown Philadelphia. The reconstruction was designed to improve an existing bus transitway while also accommodating pedestrians, bicyclists, delivery vehicles, through traffic, and on-street parking. The city Streets Department was the lead agency.
- **Clean Fuels Forums** (New York City area)—These forums are sponsored by the New York Metropolitan Transportation Council (NYMTC), the region’s MPO (see Figure 2). They present information on clean fuels to the public, municipal officials, and the business community, including privately operated fleets. The forums serve as a mechanism for these various parties to obtain information and make contacts for follow-up activity. NYMTC coordinates each forum with local agencies, utilities, and others.
- **HOV lanes** (I-30, I-35E, I-635) (Dallas area)—A partnership between the Dallas Area Rapid Transit (DART) and the Texas DOT (TxDOT) to build a network of HOV lanes in the Dallas area.
- **Illinois Balanced Growth Initiative**—Northeast Chicago and Near North Suburbs—This ongoing project, which has had a “successful start,” is focused on a loosely defined corridor on the north side of Chicago and its northern suburbs. The study will address problems of increasing auto congestion, traffic speeds, pedestrian safety and amenities, aesthetics, and quality of life. The Illinois DOT (IDOT) is the lead agency for the study, with extensive city and community involvement.
- **Pavement Management System (PMS)** (San Francisco Bay Area)—A computer-assisted decision-making process designed to help cities and counties prevent pavement problems through judicious maintenance, and to diagnose and repair those that exist in a timely, cost-effective manner. The Metropolitan Transportation Commission (MTC; the area MPO) offers its PMS program to each local jurisdiction.
- **Public Transit to San Francisco Giants PacBell Park**—This process addressed the challenge of providing transportation to fans attending games at the new downtown ballpark without undue traffic impacts on the community. Through a planning process joined by a cross section of transportation and transit agencies in San Francisco and environs, public transit was promoted as a viable and desirable way to get to the ballpark. The San Francisco Department of Parking and Traffic chaired the planning task force.
- **Transit Priority Demonstration Project** (Los Angeles)—A joint effort by the city transportation department and county transit agency. The Los Angeles DOT implemented a Transit Priority Demonstration Project for buses on two major corridors in Los Angeles (see Figure 3). The Metropolitan Transportation Authority (MTA) integrated the Transit Priority Demonstration Project with other bus service improvements such as low floor buses and reduced the number of bus stops to form the Metro Rapid Bus Demonstration Project. The program has produced substantial increases in bus speeds and ridership.
- **Walk Philadelphia/Direction Philadelphia** projects (Philadelphia)—These projects were implemented in the early 1990s to help motorists and pedestrians, respectively, find their way to key destinations. Program goals are standardization of directional signage throughout the city, reduction of sign clutter, and improved sign maintenance. A nonprofit organization, the Foundation for Architecture (FFA), spearheads the Direction Philadelphia project with extensive
participation by area attractions, the city Streets Department, and others (see Figures 4 and 5).

Woodward Avenue Heritage Route (Detroit area)—Extends 28 miles from downtown Detroit to suburban Pontiac. Woodward Avenue adjoins numerous cultural and historic institutions and is itself of historic significance. Several overlapping projects are underway for economic revitalization, historic preservation, tourism development, and road improvements. County governments and nonprofits play lead agency roles.

A detailed profile of each of these nine projects is included in Appendix D. Each profile includes a list of
participating agencies, a description of the project and its
genesis, and addresses several key issues of interest for
developing effective relationships among government
agencies.

Clearly, these nine projects cannot capture all the nu-
ances in intergovernmental efforts to meet central city transpor-
tation needs; however, three considerations do fa-
vor using this limited sample as a basis for analysis. First,
the nine projects are a diverse lot. Some of the projects are
quite ambitious, whereas others are more limited in scope.
Some involve numerous agencies; others involve two agen-
cies. Some included extensive community outreach and
participation, others very little. Some projects involve land-
use, environmental, and economic development concerns;
others do not. Some projects were highly political, whereas
others had little overt political involvement.

Second, it was more productive to gain an in-depth un-
derstanding of nine projects through telephone interviews
with staff in participating agencies than a more superficial
understanding of a larger number of projects. The keys to
effective intergovernmental relationships are difficult to un-
cover without personal interviews, and it is essential to gather
the perspective of each major participating organization.

Third, the results of the nine case studies showed a
striking degree of consistency, suggesting that despite the
small and unscientific sample involved, many of the con-
clusions will apply to other situations.

CASE STUDY RESULTS

Each case study examined the following series of issues
thought to be of likely importance to understanding inter-
governmental cooperation:

- Role of politics and elected officials
- Role of state DOTs
- Role of MPOs
- Role of community groups
- Private sector involvement
- Impact of funding sources and requirements
- Degree to which comprehensive versus incremental
  planning approaches were used and the role of vision
- Outreach to low-income and minority communities
- Integration of transportation with environmental,
  land-use, and economic development issues
- Impact of major events or special events
- Impact of technology
- Role of design standards.

This section summarizes case study findings in each
area.

Role of Politics and Elected Officials

In several cases, politics and elected officials played vitally
positive roles in focusing agencies on central city transpor-
tation needs. In the Illinois Balanced Growth Initiative, for
example, both the governor and a Chicago alderman played
initiating roles; the governor at the global level of building
a Smart Growth agenda, and the alderman in persistently
calling attention to her neighborhood's traffic problems. In
the Public Transit to San Francisco Giants Park, the San
Francisco Board of Supervisors mandated that a transporta-
tion plan be developed prior to the ballpark's opening to
deal with neighborhood traffic concerns.

The Chestnut Street Transitway in Philadelphia shows
political influences at work on different sides of a project.
Improvements to this corridor came about because of the
mayor's desire to improve a prominent street, most impor-
tantly prior to the Republican National Convention. On the
other hand, area merchants have continued to oppose an
aspect of the new system (right-turn restrictions) that pro-
ponents feel is vital to the transitway's success.

The Balanced Growth and Chestnut Street projects
show politics at work as an external force driving the pro-
jects; in each case, politics shaped the process and project.
In other cases, the process marshaled political forces to gain
widespread support. The Woodward Avenue Heritage
Route designation process is an interesting example. The
legislation setting up the designation process requires that
each municipality and county in a Heritage Route corridor
adopt a resolution in support of designation. The legislation
also requires a showing of support from property owners,
businesses, and residents along the route. The need for
Heritage Route applicants to obtain these approvals and
shows of support helped overcome years of distrust be-
tween Detroit and its suburbs, because no one needed to
worry that the designation would be applied to them with-
out their support.

In the Los Angeles Rapid Bus demonstration program
political considerations shaped the presentation of the pro-
ject as well as helped move it forward. The bus program
was presented as a relatively inexpensive and quick way to
improve transit service, but not as a replacement for rail
projects. This presentation of the project kept the door open
for support from rail proponents.

The Clean Fuels Forums in New York also benefited
from the involvement of local elected officials who are
concerned about air pollution from heavy truck traffic. For
the forum in the Bronx, the local congressman and borough
president were responsible for attendance by private sector
fleets—expanding the audience beyond those who typically
show interest in clean fuels. According to MPO
staff, the support of elected officials made the Bronx forum a much greater success than previous forums.

Sometimes politics appears to play little or no role to some participants, but only because the project is well advanced. The Pavement Management System project, for example, stemmed from public works officials' frustrations in obtaining funding for street repairs. The program is now well established and appears to be nonpolitical to some city staff. However, the need for objective and comprehensive information drove the creation of the system. Similarly, recent development of HOV lanes in the Dallas area is portrayed as a technical task proceeding within the umbrella of an approved multimodal transportation plan for the region. This transportation plan is supported by a political consensus developed in the late 1980s and early 1990s.

In no cases did political forces or elected officials play a predominately negative role. It can be surmised that the screen for successful projects eliminated projects with strong political opposition.

Role of State DOTs

State DOTs are the lead or co-lead agency in two projects. In the case of HOV planning and construction in the Dallas area, TxDOT is naturally a co-lead agency in HOV construction on state highways. Less straightforward is IDOT's leadership of the Balanced Growth Initiative. This project takes the agency into Smart Growth and central city issues that go well beyond traditional DOT highway planning concerns. IDOT's involvement stems from both internal and external factors. Internally, Smart Growth was of keen interest to senior IDOT management. Externally, the governor was building a Smart Growth agenda and the local community in northeast Chicago was vitally concerned with neighborhood traffic problems. The confluence of internal and external factors gave birth to a pair of major studies.

State DOTs played important but not leading roles in the other seven case studies. In some cases, state DOT approval was needed for the project to succeed, as in PennDOT approval of new signage design on state routes. In several cases the state DOT has been involved as it affects their traditional responsibilities, as in the Michigan DOT's adding aesthetics as a factor in construction projects planning on state highways that carry Historic Route designation.

Role of MPOs

MPOs were the lead in two projects: Pavement Management Systems in the Bay Area and Clean Fuels Forums in New York. Both of these projects came about in response to clear local needs articulated by local officials. Both projects also leveraged economies of scale and networking economies from replication in several communities.

MPOs played various supportive roles in other projects. The MPO role was critical to the success of some projects, such as the Woodward Avenue Heritage Route designation, where the Southeastern Michigan Council of Governments (SEMCOG) brought together central city and suburban counties and acted as the conduit for funding. In other cases the MPO helped to focus the attention of other agencies on a problem or need, such as when the Chicago area MPO introduced the community planning concept in its long-range plan. The MPO was also important in shaping some projects; for example, in emphasizing the importance of transit service on the Chestnut Street transitway in Philadelphia. MPOs also offered important support to projects, including providing transit marketing for the new ballpark in San Francisco.

Although the MPOs played important roles in the case study projects, the case studies do not provide evidence that MPO voting procedures or the weight of the central city in MPO voting had an impact on this small sample of projects. It may be possible, however, that MPO voting weights affected overall funding or planning decisions that are not captured in the case study methodology. On the other hand, it may be that successful projects generated by local needs and initiatives are not as frequently subject to voting controversy at the MPO board of directors' level.

Role of Community Groups

One of the most interesting aspects to the case studies is the key role played by community groups. These roles ranged from identifying needs to initiating action to providing input. Among the nine case studies, the best example of community groups initiating action is the lead role taken by a nonprofit organization, the FFA, that initiated the Walk Philadelphia/Direction Philadelphia project. The organization identified the need for a much-improved signage system, rallied support from government agencies and a wide range of local organizations, and headed a long and challenging process to design, install, and maintain an attractive new signage system.

Although the Philadelphia signage program began with a nonprofit group and grew to include city agencies, the Woodward Avenue Heritage Route in the Detroit area developed in the opposite direction. While municipal and county planning staff initiated the Heritage Route project, out of the project grew two new nonprofit organizations with both government and private sector members.

Central involvement by the community has benefited these projects in numerous ways. Community involvement
means that those most affected by the projects can contribute their understanding and insights to program design. Community participation brings to the forefront concerns about historic preservation, tourism development, community identity, and other areas that are not the usual province of transportation agencies. Community involvement also created a constituency that could carry the project forward through changes in government officials and shifting fiscal fortunes.

Even where they were not central to the project, community groups played very important roles in shaping several other projects. Such groups helped the Los Angeles County MTA (LACMTA) focus on the need to improve bus speeds and helped to build support in an unsettled political environment for the Metro Rapid Bus Demonstration Project. Community turnout in response to an alderman’s focus on traffic issues on the near north side of Chicago got the attention of city, regional, and state officials. In these ways, community groups and individual citizens helped government officials properly identify community needs.

On some projects the community itself has conflicting interests and thus plays a more mixed role in project development. An example is the differing uses of Chestnut Street advocated by various merchants, property owners, and users of Chestnut Street in Philadelphia. Another example was the varied preferences expressed by local residents near the new San Francisco Giants baseball park as to where traffic should be routed. In these cases, the community was active on different sides of the issue. The role of city agencies was to mediate conflicting community interests.

Private Sector Involvement

The private sector played very significant roles in several projects. Nonprofit organizations were much more prominent than for-profit companies. Nonprofit groups took the lead in organizing the Walk Philadelphia/Direction Philadelphia project and played an increasingly important role in projects concerning Woodward Avenue. For-profit companies and business interests participated through nonprofit groups in both of these projects and also the Chestnut Street Transitway.

Two other case studies saw direct participation by individual for-profit companies. Electric and gas utilities participated by defraying costs and showing vehicles at the New York Clean Fuels Forums. The San Francisco Giants baseball club participated in planning and implementation of transportation plans for their new ballpark. These projects come the closest to being public-private partnerships, although neither was formally designated as such.

Private sector participation throughout the case studies manifested the mission of nonprofit groups and the interests of the for-profit sector. Private sector groups saw their participation as being in their own interests and furthering their own missions.

Impact of Funding Sources and Requirements

Funding sources and requirements played a variety of roles in the nine case study projects, ranging from helping to shape the project to being shaped by the project.

Funding sources and requirements are often thought of as determining the scope, goals, and methods used in a project. This role was evident in the Chestnut Street project, in that street improvements used transit funding and thus helped keep the transitway in place. The opportunity to obtain grants and tax credits from Historic Route and other designations spurred the organizing of constituencies along Woodward Avenue. A major reason for Bay Area cities to adopt the MTC’s pavement management system is its relatively low price for software and technical support.

In other cases project goals shaped the source of funding. IDOT passed over possible federal funding through the FHWA’s Transportation and Community and System Preservation Pilot program because of certain program requirements. Instead, it is using internal planning funds for the Balanced Growth studies. The Walk Philadelphia/Direction Philadelphia project’s need for maintenance funding was used to advantage, making local destinations into stakeholders with a financial investment in the project.

In building cooperation between agencies, funding can help cement partnerships. The 50/50 division of nonfederal funding for HOV projects in the Dallas area between DART and TxDOT is a concrete manifestation of the partnership between these two agencies.

In other cases funding governed the extent of each agency’s involvement. For example, each agency participating in transportation planning for the new ballpark in San Francisco funded their own operations, which determined the scale of those operations. Similarly, the Los Angeles DOT and the MTA funded their own agency’s role in developing the Transit Priority Demonstration Project.

Incremental Versus Comprehensive and the Role of Vision

Each case study explored the breadth of planning (comprehensive or incremental) and the role of vision in the planning process. How “useful” are visions in formulating and implementing projects that meet central city transportation needs? Is comprehensive planning appropriate for its ability to incorporate a variety of issues and locales, or do the case studies indicate that a more focused approach is better suited to achieving results?
One predominant pattern in the case studies is that the participants worked on the particular project within a larger vision. Although the vision was not always written down or formally adopted by any governing body, key participants shared it. In several projects the vision involved economic revitalization and historic preservation—Woodward Avenue, Walk Philadelphia/Direction Philadelphia, Balanced Growth in the Chicago area. Another vision shared by several projects is an effective and balanced transportation system (HOV lanes in Dallas, transit to the ballpark in San Francisco, Transit Priority in Los Angeles, Chestnut Street Transitway in Philadelphia). Other visions involved clean air (Clean Fuels Forums in New York) and a well-funded, well-managed pavement management system in the Bay Area.

Specific and often short-term project goals enabled participants to work toward the vision while showing real accomplishments in a reasonable time frame. Because they related to a larger vision, project goals had meaning and strength of support greater than would be created by the immediate goals by themselves.

The issue of incremental versus comprehensive is therefore not really an issue at all. Projects in the case studies evidenced both comprehensiveness of vision and incrementalism in approach.

**Outreach to Low-Income and Minority Communities**

The growing focus on public participation and environmental justice suggests that outreach to low-income and minority communities may play a large role in building effective relationships among governmental agencies. Three of the case studies evidenced conscious outreach efforts by lead or co-lead agencies. These efforts included the FFA's desire to show the importance of the built environment in residential and industrial areas, the New York MPO's desire to hold a clean fuels forum in the Bronx, and IDOT's inclusion of low-income communities in one of its Balanced Growth Initiative study areas (southwest of downtown Chicago). Each of these projects was directed into certain areas because of their low-income or minority characteristics. In each instance, sensitivity to low-income or minority needs was important to project development.

In other cases, involvement of low-income or minority communities was naturally part of the project given project goals. For example, low-income areas are part of the Woodward Avenue corridor in Detroit and Highland Park. Buses on Chestnut Street in Philadelphia and on the arterial streets chosen for the Transit Priority project in Los Angeles serve large numbers of low-income and minority customers.

**Transportation and Environmental, Land-Use, and Economic Development Issues**

The national interest in linking transportation to environmental, land-use, and economic development issues is embodied in several case study projects. Michigan's Woodward Avenue Heritage Route adds aesthetics to the Michigan DOT's considerations for roadway improvements and provides a focus on revitalization and historic preservation.

The Walk Philadelphia/Direction Philadelphia project recognizes the opportunity to use tourism as an engine for economic growth. Furthermore, the Pennsylvania Industrial Development Corporation sees signage as a tool for industrial retention in certain neighborhoods. As with Woodward Avenue, transportation-related improvements are viewed as one important component to economic development and promotion of cultural and historic sites.

Economic development and neighborhood aesthetics are also central goals in the Balanced Growth Initiative. IDOT intends to use its pair of Balanced Growth studies as models for how to harmonize transportation services with mature land-use and infill development.

Similarly, the Chestnut Street Transitway project was aimed as much at revitalization of a deteriorated commercial arterial as to improve bus service.

Other projects constitute one step among many toward making central cities vibrant and attractive places. One example is that the new ballpark in San Francisco is within walking distance of downtown. Speedier bus and HOV access to downtown Dallas is another example, as is effective maintenance of streets in the Bay Area.

**Impact of Major Events or Special Events**

It is sometimes observed that central cities are better at doing the “big thing” than carrying out routine, everyday program development. Several case study projects showed the importance of events such as national political conventions and opening of new transportation and entertainment facilities in creating the focus and sense of urgency necessary to resolve disagreements and acquire funding. The Metro Rapid Bus project in Los Angeles proceeded rapidly to open the bus service together with the Red Line subway extension. The Dream Cruise on Woodward Avenue highlights the area's role in automotive history (Figure 6). Walk Philadelphia/Direction Philadelphia and the Chestnut Street Transitway were both accelerated in order to complete the projects prior to the 2000 Republican National Convention. Most obviously, San Francisco needed to implement a transportation plan prior to the April 2000 opening of the Giants' new stadium.
In each of these cases, project participants cited the deadline as an important if not critical factor in keeping the project moving. The deadlines created a different dynamic in the decision-making process. A participant in one of these projects stated that “no one wanted to be the one to delay the project past the deadline.” The threat of failing to meet the deadline tempered participants’ tendency to negotiate endlessly over project details. Thus, although a common vision and shared goals were important, the “stick” of avoiding failure was equally decisive.

Impact of Technology

A wide range of technologies played important and sometimes key roles in the case study projects. Information technologies that portray various transportation problems in the study area and can rapidly adapt presentation information are helping with community outreach in the Balanced Growth project. The ability to move traffic barriers with the Barrier Transfer Vehicle was critical to implementing reversible-lane HOV projects in Dallas (Figure 7). The ability to make transportation information available on the Internet facilitated the high use of transit and walk modes to the new San Francisco Giants baseball park. Simple databases were vital to keeping track of hundreds of stakeholders in Walk Philadelphia/Direction Philadelphia project development. Technology in the form of durable signs provided maintenance cost savings for the Walk Philadelphia/Direction Philadelphia signage. Low-cost communications made remote variable message signs affordable for traffic control on San Francisco Giant game nights. Technology is obviously a key part of clean fuel vehicles showcased in the New York forums.
In another example, Los Angeles's Transit Signal Priority Display shows the location of all buses along the route (Figure 8). Late or slowed buses are displayed as a flashing icon to quickly notify the dispatcher. Traffic engineers can monitor the status of transit signal priority at each intersection, which is indicated by colored dots.

Although often quite important, technology is rarely the focus of a project. Project participants tended to mention uses of technology only in passing or when questioned. Participants most frequently emphasize goals, vision, and the benefits of collaboration. Technology is seen as a means to the end, not the centerpiece of these projects.

**Role of Design Standards**

Highway and roadway design standards have greatly improved in their sensitivity to urban design needs. (See the FHWA's website on context-sensitive design: http://www.fhwa.dot.gov/csd.) Nevertheless, some projects encountered hurdles in adapting standardized design criteria to unique urban spaces. The Walk Philadelphia/Direction Philadelphia project is an example of barriers from use of traditional design standards. The new signs were not “by the book.” The Philadelphia Streets Department and nonprofit groups spent considerable effort convincing state and federal highway agencies to allow a different design on state highways and for use with federal funding.

The Balanced Growth study in the Chicago area is grappling with the benefits of traditional traffic engineering standards that have made arterial streets faster and safer for vehicular traffic but unfriendly for pedestrians and those living and working along the corridor. Addressing design issues will be an important part of the project as it moves forward.
CHARACTERISTICS OF EFFECTIVE RELATIONSHIPS

From the literature and case studies, 11 characteristics of effective intergovernmental relationships in meeting central city transportation needs can be identified. These 11 characteristics can be grouped into four areas.

1. Who's involved
   • Horizontal and vertical relationships
   • Nonprofit and private sector organizations
2. Agency relationships
   • Agency interdependence
   • Complementary strengths and resources
   • Staff competence and commitment
3. Shaping projects and building support
   • Focus on needs and opportunities
   • Building political support
   • Grass roots initiative and stakeholder ownership
   • Shared vision and goals
4. Project structure
   • Short-term and long-term results.

Key relationships among these characteristics are depicted in Figure 9.

WHO'S INVOLVED

Intergovernmental cooperation typically involves both horizontal and vertical relationships in the governmental structure and often involves nonprofit organizations and the private sector.

Horizontal and Vertical Relationships

Intergovernmental relationships nearly always involve vertical relationships: central city transportation or public works department, MPO, state DOT, and occasionally county agencies. Transit agencies, which do not fit neatly into either vertical or horizontal categories, are also often

FIGURE 9 Notable relationships among characteristics of effective relationships.
involved. The literature is filled with examples, and all nine of the case studies involved multiple levels of government.

Horizontal relationships are equally important, and typically involve neighboring cities; neighboring counties; and city, regional, or state agencies that report to different political authorities (such as an executive branch agency and independent transit or transportation authority). As a practical matter, horizontal relationships may also involve sister agencies that, while formally under the same political authority (e.g., the mayor), operate with substantial autonomy on the particular issue or project.

Agency collaboration reflects each agency's relationship to the problems, issues, and opportunities. Rather than following top-down or bottom-up models, agency relationships are structured to best design and administer intergovernmental projects. State DOTs play supporting roles as well as lead-agency roles, which may be taken by city agencies, nonprofit organizations, or others.

Nonprofit and Private Sector Organizations

Although by no means always present, relationships with nongovernmental organizations are often very important when addressing central city transportation needs. These organizations include neighborhood groups, local nonprofit organizations, business associations, development agencies, and private companies. Nongovernmental organizations often bring expertise, commitment, flexibility, financial resources and, at times, operating or administrative capabilities. Nongovernmental organizations are also often a convenient and vital avenue for stakeholder participation and building political support. Finally, they often provide a continuity of vision that sustains both the process and constituent and political support.

In the case studies, nongovernmental agencies are more often nonprofit rather than for-profit. Studies of public-private partnerships have also noted the same tendency; one study noted that “effective private sector involvement” is a barrier that is more often not overcome than overcome (Hauser 1999). The for-profit sector does often play a vital role, however, through membership and involvement with nonprofit organizations. Representatives of for-profit companies often sit on the boards of nonprofit organizations, where they are joined by nonprofit and government members. Local economic development agencies are another way to bring entrepreneurial capability to projects involving economic development goals.

Nongovernmental organizations sometimes take the leading role in addressing transportation-related issues. This involvement goes well beyond the concept of public participation, public input, or even collaborative planning.

Nonprofit organizations initiated or eventually took the lead on projects such as Walk Philadelphia/Direction Philadelphia and Woodward Avenue improvements. Although public agencies played vital roles, the role of the nonprofits was an equally if not more central ingredient of the success of these projects.

AGENCY RELATIONSHIPS

As a rule, cooperation and collaboration are built on mutual dependence between agencies that need each other to accomplish their (sometimes separate) goals. Leveraging complementary strengths ranging from staff expertise to procurement practices to legal authority further strengthens intergovernmental relationships. Each participating agency benefits in two ways: by gaining cooperation in an area outside the individual agency's control and by gaining efficiencies from trading resources.

Agency relationships are further strengthened by the mutual commitment of staff to work together. A core team, working in an atmosphere that encourages creativity and the pursuit of new opportunities, is essential to effective intergovernmental cooperation and collaboration.

Agency Interdependence

Interdependence is the linchpin of intergovernmental cooperation. Willingness to expend the effort required to reach across institutional borders is motivated by each agency's inability to operate its facilities and services, or provide programs, without reference to the activities of other agencies. Effective intergovernmental relationships focus on identifying the most promising areas of mutual benefits. As Helton (1993) observes from his experience with private sector partnerships, “The first major determinant of a partnership is the need for mutual benefits, benefits that would not be achieved through independent action.”

Complementary Strengths and Resources

Another dimension of interdependence is the opportunity to benefit from other agencies' expertise, information, legal authority, funding, organization, institutional relationships, procurement procedures, underutilized capacity, political support, and economies of scale.

Complementary strengths are vital in a variety of circumstances. For example, by each contributing what they do well or do easily, agencies can implement programs at a relatively modest cost. The New York MPO and city and county agencies, for example, each contributed their unique expertise, funding, and relationships to make possible the Clean Fuels Forums.
One of the most interesting and creative uses of complementary strengths occurred in the Houston area. In the design and construction of the TranStar traffic management facility, the state DOT let the construction contracts, the transit agency was responsible for the communications systems, the city of Houston handled the finances, and the county maintains the building. This arrangement maintains the involvement of each agency and capitalizes on the strengths of the different agencies in construction, communications, etc. (see Rudin Center for Transportation Policy and Management 2000).

Complementary strengths are also essential to wide-ranging projects that encompass economic development, environmental, and land-use issues. Projects that cut across these issues can generate a broader vision and a richer palette of resources, skills, and knowledge than transportation projects by themselves. They can also bring political strength to transportation endeavors.

**Staff Competence and Commitment**

Effective relationships rely on a core team of committed staff, which is able to reach across jurisdictional lines to implement and oversee project development. Such staff must understand how to operate in the fluid and sometimes uncertain intergovernmental environment. They must have the creativity and the chances to identify new opportunities, rally resources, and take risks. They must also have the authority to work directly with colleagues in other agencies and outside of government.

The mixing of staff competence and staff commitment creates the glue for cooperative relationships. Staff in each agency depends on the competence of other agency staff in their mutual efforts. Such commitment is essential to identifying opportunities and solutions and maintaining a presumption of goodwill when possible conflicts arise.

In addition, staff continuity is essential to seeing intergovernmental efforts to fruition. Because staff turnover is a fact of life, colleagues within the agency must be available to step in when staff move on.

**SHAPING PROJECTS AND BUILDING SUPPORT**

Successful intergovernmental projects focus on meeting transportation needs and exploiting new opportunities to improve transportation systems. They build community and political support by meeting well-recognized needs and by articulating a vision and goals with broad appeal. In most projects, political support and stakeholder involvement are integral to both shaping the project and to its successfully gaining the needed support.

**Focus on Needs and Opportunities**

Successful projects have a clearly articulated purpose focused on a problem to be solved or opportunity to be pursued, and the benefit to be derived. Identification of problems and opportunities are critical to structuring the project. The focus on need helps to organize resources and motivate action. Well-articulated needs and opportunities help determine who should participate; why agency managers, elected officials, and the public should support the effort; and what results can be expected and when.

**Harnessing the Political Winds**

Projects examined in this study are at least consistent with prevailing political values and goals. At a minimum, elected officials should welcome the opportunity to cut the ribbon. The more ambitious projects are driven by the agenda of elected officials, marshal political processes to rally political support, or are positioned to take advantage of prevailing political winds.

Some projects can be developed and implemented by agency staff working under the political radar and without significant external involvement. Those are the exception, however. Furthermore, when staff describe projects as purely administrative matters, their descriptions often mask an earlier stage in which political and public involvement paved the way for relatively routine administrative implementation later. An example of this is the Bay Area Pavement Management System (PMS). Some city staff described PMS as having no political dimension; however, further investigation showed that the program originated in the objective of documenting pavement needs to obtain legislative appropriations, hardly a nonpolitical objective.

Elected officials can also play a vital role in setting a mandate for agencies under their purview. The Connecticut Legislature and governor, for example, sanctioned a strategic plan put together by a coalition of business, environmental, and civic organizations in southwestern Connecticut to deal with the region’s traffic congestion. The legislation directed the state DOT to develop and submit an Implementation Plan to the legislature (Gordon and Frankel 2000).

**Grass Roots Initiative and Stakeholder Ownership**

Public participation and outreach to various communities can take several forms. The most conventional is where agencies take public input into account during project definition and development. Outreach and community participation can play a vital role in shaping projects and building public and political support. For example, public hearings
and forums were effective in the focus on bus speeds in Los Angeles, signage deficiencies in Philadelphia, and transportation concerns on Chicago's north side. These are good examples of agencies (or nonprofit organizations) listening to customers and the general public, heeding their concerns, and developing a successful program.

The Internet offers greatly expanded opportunities to inform and involve the public in planning and project processes. The Internet can be used for public information about major construction projects [see for example, http://www.bigdig.com (Boston's Central Artery/Tunnel Project) and http://www.fww2000.com (Fort Washington Way in Cincinnati, Ohio)], planning information [http://www.njchoices.com (the New Jersey Statewide Long-Range Transportation Plan)], and public involvement (http://www.bigdig.com).

In several cases, grass roots participation developed well beyond the point of public agencies simply listening to public concerns. Particular constituencies can hold a very tangible stake in project development. Project leadership, decision making, and financing can become a community endeavor. As the Woodward Avenue nonprofit sponsors of the Heritage Route designation became more involved in management of this project, for example, county planning staff stepped back from a management role. When Philadelphia attractions needed to decide whether or not to pay for sign maintenance, the stakeholders decided whether the program should move forward. When IDOT staff state that they will give “great deference” to the advisory committee that includes community representatives and allow their consultant to shape the project goals and design to address community issues, the community comes close to being “in charge.”

In these cases, “outreach” becomes “in-reach” as the community in one form or another takes the lead and public agencies assume the role of responding to the community.

This level of public involvement is not needed or appropriate for every project. Several case study projects took the form of partnerships between public agencies. The purest examples are DART and TxDOT’s partnership in building and operating HOV lanes, and implementation of a common pavement management system in the San Francisco Bay Area.

**Shared Vision and Goals**

Shared vision and goals give a broader significance to short-term project goals. Participants in the case studies and other projects (see Crain & Associates 1996 and Gordon and Frankel 2000) view their particular project in the context of a larger vision that encompasses a variety of projects. Together the projects create a synergy of action, visibility, and results that no one project could achieve by itself.

Shared vision does not always mean identical vision. Different agencies and private sector groups often come together because their visions, goals, and organizational missions overlap on the particular project. For example, the Direction Philadelphia signage outside of the downtown area serves the purposes of wayfinding, promoting industrial retention, articulating a sense of community identity, and highlighting historic sites. The Philadelphia Industrial Development Corporation has a quite different mission than the Philadelphia Streets Department or the Foundation for Architecture. However, the missions of each organization found shared purpose in the signage project.

**PROJECT STRUCTURE**

Successful projects are typically structured as a series of interrelated efforts, often meeting multiple program goals. Projects can be structured to produce both short- and long-term results.

**Short-Term and Long-Term Results**

It is important for goals not to become too visionary or grandiose. Each of the case study projects kept a clear focus that could produce relatively short-term results. Definition of a transportation corridor is one way to provide focus. Some projects retained focus by having a clear, externally imposed deadline for implementation.

When projects are shaped to manageable dimensions, participants do not feel limited. Each step becomes a building block upon which further steps can be built (see Rudin Center for Transportation Policy and Management 2000). The building block character of the process means that the intergovernmental relationship is open-ended, forming “a series of exchanges without a defined end” (Helton 1993).

**Series of Interrelated Efforts**

The many transportation needs must be met with many individual projects and efforts. Successful projects tend to be organized as a series of interrelated efforts, as opposed to components of a master plan. This allows for projects to grow as agency relationships strengthen and mature, and for new projects to be developed as relationships expand into new areas.
Master plans such as state transportation plans are important in ratifying and formalizing a series of projects and may as well be required to qualify projects for funding—no small matter! In describing the origins of successful projects, participants most often point to a series of individual efforts that grew out of a common set of concerns, rather than the influence of a pre-existing transportation plan.

It is not unusual to find projects that embody all 11 characteristics of effective relationships, at least to some extent. The Woodward Avenue project illustrates this point. That project identified clear transportation (and many other) needs, some specific and short term (fix the street numbering system), some long term (make the avenue more attractive), generalized (improve pedestrian safety), or nontransportation related (promote tourism). The project involves city, county, state, and regional agencies and nonprofit organizations. Businesses are prominently involved as well. The grass roots nature of the effort, and integral stakeholder involvement, have been essential in navigating a challenging political landscape. Staff from various agencies have leveraged the resources and strengths of each agency. The Woodward Avenue “project” is a series of projects that include state Heritage Route and federal historic designations, roadway improvements, and reinvestment strategies. The projects have multiple goals, from transportation to tourism to cultural enrichment to economic development. The various projects are unified by a shared vision for the avenue, even though the core interests of different participants vary widely.
CHAPTER FIVE

TOOLS FOR MAKING IT HAPPEN

This chapter presents seven techniques designed to facilitate intergovernmental cooperation and a series of questions that can aid program staff in identifying and evaluating opportunities for cooperation and collaboration.

TECHNIQUES FOR COALESCING INTERGOVERNMENTAL COOPERATION

Agency staff can use a variety of techniques to facilitate intergovernmental cooperation. None of these techniques is a “magic bullet,” but each technique (depicted in Figure 10) was found useful in particular circumstances to harness the political winds, develop a shared vision, identify complementary strengths, bring focus to projects, involve stakeholders, and produce short-term as well as long-term results.

Steering Committees and Interagency Task Forces

Most of the case study projects and many projects reviewed in the literature used some type of oversight or coordinating committee. Steering committees, advisory committees, and task forces provide a forum to share information, develop mutual understanding, create a sense of focus and momentum, and make decisions as the project moves forward.

As would be expected, committees and task forces are typically chaired by the lead agency. Where a group is formally charged with a task, such as the San Francisco task force to plan transportation to the new ballpark, the chair is naturally the agency charged with completing the task. In other cases, the chair acts more as a convenient facilitator, as did Oakland County, Michigan, planning staff.
in the initial phases of Woodward Avenue project planning. Either way, it is important that staff chairing the committee or task force define their mission as completing the task to the satisfaction of the members, and not simply as adopting the lead agency's preferred plans.

Committees and task forces vary widely in size. Smaller groups—roughly 4 to 10 participants—are more suitable for long-term projects of relatively undefined scope. The task of the group is to define the scope of the project, allocate particular responsibilities, and coordinate each agency's activities. Project participants are as much focused on overall project goals as on their agency's role. Because the group is small, each participant can acquire a feeling of responsibility and participation in the overall project. Successful corridor management projects, such as Woodward Avenue and Balanced Growth steering committees, are examples of this approach [see Williams (2000) for other examples].

Larger task forces are better suited for well-defined tasks and for coordinating the activities of a multitude of agencies. If the group's task is to coordinate actions of many different agencies, a few focused meetings may suffice. More commonly, however, the challenge is not only to coordinate activities but also to set priorities for limited resources, resolve differing needs, or reconcile conflicting missions. This will take a larger number of meetings as well as outside negotiations. How should the three lanes of Chestnut Street be used? How can fans travel to a new ballpark without disturbing the neighborhood? These are typically long and difficult decision processes involving many different parties, each pursuing and protecting its own interests. The committee or task force provides a forum and mechanism to work out these differences.

Committees and task forces often find it useful to set up a weekly, biweekly, or monthly schedule for meetings. A regular meeting schedule creates predictability and a structure to keep the project moving. Participants want to have “something to show” for the next meeting.

Committees and task forces are not always needed. Two agencies can work together on a project without the need for formal committees or even frequent meetings. Recent HOV projects in the Dallas area, for example, were carried through primarily with telephone contact between DART and TxDOT staff. Meetings were unnecessary because responsibilities and tasks were clearly defined.

Forums and Hearings

Various types of forums can reach out to a broader set of participants. The Walk Philadelphia/Direction Philadelphia project, for example, held numerous forums with stakeholders to obtain their input. The forums provided an opportunity for stakeholders to articulate their needs and contribute their insights, as well as gain understanding and buy-in for the project. These forums led to using stakeholders as the source of funding for signage maintenance, thus binding stakeholders more closely to the project and, correspondingly, resolving a funding problem. Forums and hearings played important roles in other case study projects as well. For example, public hearings and meetings with community groups helped focus the LACMTA on the issue of bus speeds as opposed to other service issues.

Surveys, Inventories, and Field Data Collection

Various types of data collection serve several functions that go well beyond simply providing important information for project planning. Surveys, inventories, and other data collection can uncover a wider range of possibilities than participants realized. It is doubtful that any particular participant or stakeholder along Woodward Avenue appreciated the full extent and diversity of the area’s cultural and historic resources; the critical mass of these resources creates tourism possibilities that had been underappreciated.

Surveys, inventories, and other data collection also help participants identify and understand their shared interests, as when city and suburban elected officials identified the same set of traffic problems in the Chicago area. Information collection also provides a job that can help a task force or committee jell.

In addition, surveys and inventories document needs and thus can be vital to managing assets and for obtaining funding. A major purpose of the PMS in the San Francisco Bay Area is to bolster funding for pavement maintenance.

Of relevance to this discussion are recently adopted accounting requirements that mandate that state and local governments that use generally accepted accounting principles include the value of public assets, such as roads and bridges, in their financial statements. Governments must either depreciate these assets or report on the costs and consequences of preserving them. These requirements provide an opportunity to bring into focus asset management and maintenance issues that might otherwise be overlooked in governmental budget processes (see http://accounting.rutgers.edu/raw/gasb/repmmodel/index.html for additional information).

New Entities/Enabling Organizations

A committee or task force is one type of new entity; however, in some cases it can be useful to create a new, permanent organization, as with the nonprofit groups in Wayne
and Oakland counties or an enabling organization to develop intermodal partnerships (Crain & Associates 1996). These organizations can be charged with implementing a series of tasks related to the overall project. They also provide an opportunity to articulate and institutionalize a political balance between different jurisdictions, as exemplified in how separate nonprofits carefully balanced the allocation of board seats in Wayne and Oakland counties.

Neutral Party

The involvement of a neutral party can be quite useful, particularly in politically sensitive situations. A neutral party can bring together different sides, facilitate progress, and provide assurance that each participant will be treated respectfully in the process. Examples occur with the MPO's involvement with Wayne and Oakland counties in the Woodward Avenue project, and various partnerships for multimodal transportation projects (Hauser 1999). Neutral parties and facilitators may be particularly critical in considering sensitive and complex environmental justice issues.

Technology

Technology has created tremendous new opportunities for better coordination and information sharing among agencies, critical elements in building effective relationships. Participants can communicate more rapidly and more easily. Information can be shared and presented in easy-to-understand graphical formats and made accessible on the Internet. Technology also provides new opportunities for mutual benefit, whether compiling a regional database of pavement conditions and needs or sharing video feeds from closed circuit television cameras (Rudin Center for Transportation Policy and Management 2000).

Interlocal Cooperative Acts and Agreements

Interlocal agreements are used for a variety of purposes. They are often essential when projects require shifting of funds from one jurisdiction to another and they are also useful for delineating operational or construction responsibilities among agencies and for dealing with liability or other legal issues (see http://icma.org for resources on intergovernmental agreements).

A FRAMEWORK OF QUESTIONS FOR MORE EFFECTIVE RELATIONSHIPS

Case study findings and cross-cutting themes can be distilled into a series of questions that can help agency staff and officials chart a course toward building effective intergovernmental relationships for meeting central city transportation needs. These questions are intended as a guide to help agency staff think about different dimensions of their own situation and approaches that may be effective for them.

The list is as much a set of questions to continue asking as a set of questions to definitively answer. At the start of a project, staff will only be able to begin to contemplate the answers to some questions. The answers to many of the questions will evolve during the project as participants, goals, timelines, and strategies are refined and redefined. Other questions will not be relevant to a given project or situation.

Under each question, examples from one or more case studies are used to illustrate how the question applies to particular situations.

Problem Definition

The first several questions address ways of scoping the project from substantive, intergovernmental, political, and timeliness perspectives.

- What is the problem, need, or opportunity that I want to address?
  - How can the section of Woodward Avenue in our town be made more attractive?
  - How can we revitalize Chestnut Street?
  - How can we improve bus speeds on Chestnut Street?
  - How can we spread the word about clean fuels to private and government fleets? (NYMTC)
  - How can we improve bus speeds on major arterials? (Los Angeles DOT)
  - How can bus service be rationalized, made more cost-effective, and improved? (LACMTA)
  - How can we prevent traffic to and from the new ballpark from overwhelming the neighborhood? (San Francisco Department of Parking and Traffic)
  - How can we get better signage erected and maintained? (FFA)
  - How can the imbalance between commuter and neighborhood use of arterial streets—evidenced in excessive vehicle speeds and poor pedestrian safety—be rectified? (Chicago alderman)
  - How can we make Philadelphia into a tourist destination and not simply a stopover point? (San Francisco Department of Parking and Traffic)
  - How can we make the best use of existing highway capacity? (Dallas area agencies)
  - How can funding for street maintenance be increased? (Bay Area agencies)
- What is the central city manifestation or expression of an issue, problem, or opportunity we've been dealing with in other areas?
How can the highway corridor study used to involve local suburban communities be brought to a large city context? [Chicago Area Transportation Study (CATS)]

- Can the issue, problem, or opportunity be stated in a more holistic fashion that may open other opportunities?
  - Think about highways as historic corridors. (Michigan DOT)
  - How can the bus operations of all providers in Los Angeles County be rationalized, improved, and made more efficient? (LACMTA)
  - What factors are contributing to our neighborhood traffic problems? What is the experience of cities around the country and in Europe on these types of issues? (Chicago alderman)

- What previous successes can we build on?
  - How can we take the success of interjurisdictional planning for 8 Mile Road and realize similar successes elsewhere in the region? (various agencies in the Detroit area)
  - How can we replicate the success of a clean fuels forum held on Long Island? (NYMTC)
  - How can the success of improved signage in the city center be replicated in neighborhoods and industrial areas? (various agencies in Philadelphia)

- What have we long wanted to do that would be timely for a major upcoming event?
  - Improve Chestnut Street before the Republican National Convention.
  - Open one of the demonstration routes for Bus Rapid Transit at the same time that the Red Line subway extension opens.

- How can the problem, need, or opportunity in this area be stated in intergovernmental or interjurisdictional terms?
  - Ask the Wayne County Planning Department for design assistance along Woodward Avenue. (city of Royal Oak)
  - Offer to the MTA a way to improve how quickly buses move through intersections on major corridors. (Los Angeles DOT)
  - Have CATS officials address our neighborhood traffic problems in its long-range plan. (Chicago alderman)
  - City and county public works officials have asked for help in highlighting funding needs for street rehabilitation and maintenance. (MTC)

- How can the problem, need, or opportunity in this area be stated in a politically attractive way?
  - HOV lanes are a quick, relatively inexpensive way to help relieve congestion and improve air quality; doable while we work on longer-term solutions.
  - The Bus Rapid Transit concept is a quick, relatively inexpensive way to improve transit service for one of the nation's largest operators of buses. This improvement program makes sense whether or not the region moves ahead with future rail projects.
  - Developing a toolbox of strategies that address transportation, land-use, and growth issues and that are both effective and show political appeal would fit very well with the new governor's Smart Growth agenda. (Illinois DOT)
  - Mayor is emphasizing improved relations with suburban communities. This is consistent with an alderman's outreach to suburban mayors; we can be supportive of this. (Chicago DOT)

**Identification of Stakeholders and Possible Partners**

- Who will be affected by the type of project we have in mind?
  - Cultural institutions will benefit by having more visitors. (Walk Philadelphia/Direction Philadelphia and Woodward Avenue)
  - Bus riders will benefit from speedier service. (LACMTA)
  - Air will be cleaner for local residents if vehicle fleets used clean fuels. (NYMTC)
  - Suburban mayors and aldermen to the north of my ward would be affected if traffic were simply diverted from my ward to their areas. (Chicago alderman)

- What citizen groups have been vocal in this area?
  - Remember that CATS hearing where an alderman showed up with 500 constituents?
  - The Greater (Detroit) Downtown Partnership is active in improving downtown business conditions.

- Who is already active in issues that have a bearing on what we are doing?
  - FFA's signage project could help revitalize neighborhoods as well as downtown.
  - MTC can help with transit marketing for the new Giants baseball park.

- Thinking about all phases—planning, funding, approval, implementation, operations, and maintenance—who needs to be involved in implementing possible solutions?
  - Signage on city streets is under the Streets Department jurisdiction.
  - All communities along Woodward Avenue should be involved in renumbering the houses and providing an inventory of cultural and historic resources.
Building Effective Relationships

- How can we make this into a shared process among various stakeholders, implementing agencies, and funding sources?
  - Invite elected officials from neighboring communities to a breakfast, ask them to identify the five traffic hot spots in their communities, and show that we share the same problems. (Chicago alderman)
  - Meet with community groups in the context of transit restructuring studies to understand their major concerns about bus service. (LACMTA)
  - Hold public forums and workshops on signage issues. (FFA)

- How can we get the real stakeholders more active and involved in the project? How can we make this a real partnership?
  - Require a City Council resolution and letters of support from each community that would be part of the Historic Designation.
  - Charge a fee to each institution displayed on the sign, the proceeds used to pay for maintenance.
  - Split the planning and design costs 50/50 between the transit agency and state DOT.
  - Request for proposal for this planning study should note that the consultant will scope the project based on issues identified by the community. (Balanced Growth)
  - Create a steering committee that meets monthly to oversee the project. (Balanced Growth)

- What is organizationally the toughest part of the job? What will break the ice jam?
  - Set up nonprofit entities in Wayne and Oakland counties. (Woodward Avenue)
  - Bring in the MPO as a neutral party to help move this project along. (Woodward Avenue)

- What resources, skills, experience, or expertise can my agency offer that complements the capabilities of other agencies?
  - DART has a depth of experience with operations that complements TxDOT’s experience in construction.
  - SEMCOG can readily be the official grant recipient.
  - Philadelphia Streets Department has expertise in sign placement for motorists.
  - Los Angeles DOT has expertise in sophisticated traffic control devices that can be applied to bus priority and traveler information systems.
  - Showcase vehicles at clean fuels forums. (various organizations)

Developing/Articulating a Vision

- For what larger goals is this project a building block? What values does this project symbolize or articulate?
  - As a Department of Transportation (no longer just Highways), our job is to move people, not vehicles. (TxDOT)
  - Area should be a tourist destination, not merely a stopover or artery. (Woodward Avenue and Philadelphia organizations)

- What are the intangible benefits of this project?
  - Effective and attractive signage strengthens the sense of identity of a community.

Getting Results

- This project is too big and cumbersome. What can be done in the short term to produce concrete, tangible accomplishments?
  - Everybody agrees that the house numbering system on Woodward Avenue leads to confusion. Let’s get all the cities together to agree on a renumbering plan.
  - Start with the Metro Bus concept on two demonstration corridors to show that it works, with plans for a dozen more corridors. (LACMTA)
CHAPTER SIX

CONCLUSIONS

Building intergovernmental relationships to address central city transportation needs can be a challenging and intricate effort. The task requires hard work, a clear view of “my agency’s” position in relation to the many other agencies, attention to political needs, and the ability to work creatively, effectively, and with perseverance in uncertain interagency environments. And yet, despite the challenges posed by each situation and project, intergovernmental cooperation, coordination, and collaboration enjoy the support of powerful forces, including

- **Public emphasis** on intergovernmental cooperation to address problems and needs efficiently and effectively.
- Emphasis on **outcomes and results** rather than on inputs in assessing the effectiveness of governmental programs.
- Heightened expectations for **citizen participation**, which require agencies to actively involve local communities and stakeholders.
- Recognition of metropolitan regions as **key units in a competitive world economy**, which demands that the different parts of metropolitan areas work together in furtherance of their shared interests.
- Desire to link transportation to **economic development, environmental and land-use issues**, which requires the participation of a wide variety of agencies spanning different levels of government.

Local, state, and federal transportation officials are indeed responding to the need for intergovernmental cooperation. Studies of state DOTs, MPOs, and big city transportation departments document a number of successful experiences. Even so, officials and observers believe that more needs to be done.

This study identifies 11 key characteristics of successful intergovernmental projects and processes. These characteristics, which themselves are interdependent and mutually reinforcing, address who's involved, agency relationships, how projects are shaped and support is built, and project structure.

- **Who's involved**
  - Horizontal and vertical relationships
  - Nonprofit and private sector organizations
- **Agency relationships**
  - Agency interdependence
  - Complementary strengths and resources
  - Staff competence and commitment
- **Shaping projects and building support**
  - Focus on needs and opportunities
  - Building political support
  - Grass roots initiative and stakeholder ownership
  - Shared vision and goals
- **Project structure**
  - Short- and long-term results
  - Series of interrelated efforts

Various tools are available for coalescing intergovernmental cooperation, including

- Steering committees and interagency task forces;
- Public forums and hearings;
- Surveys, inventories, and field data collection;
- Establishment of new entities and enabling organizations;
- Involvement of a neutral party to bring together different sides; and
- Exploitation of technology to facilitate coordination and information sharing.

Effective relationships are important for local, regional, and state transportation agencies. For cities, intergovernmental cooperation is essential to addressing the complex and overlapping transportation, land-use, environmental, and economic development challenges. Examples of effective intergovernmental relationships are shown throughout this report to help address these needs.

For state DOTs and MPOs, intergovernmental cooperation provides a vehicle to respond to new challenges without greatly expanding the scope or changing the nature of their responsibilities. Intergovernmental cooperation is also a vital avenue for state DOTs and MPOs to integrate economic development, environmental, and land-use issues with transportation issues.

By collaborating with a broader set of agencies, state DOTs and MPOs can become more responsive to local needs as defined by counties and cities, which in turn are articulated by neighborhood groups, nonprofit organizations, and other community representatives. State DOTs and MPOs can better attune their programs and goals to problems and needs as understood by those closest to the situation, and to community and political possibilities and constraints.

The process is not just bottom-up. State DOTs and MPOs bring a broader geographic perspective, state and
federal financial resources, and an ability to act in the statewide or regional political arena. Thus, intergovernmental collaboration provides mutual benefits. Each participating agency makes contributions and reaps rewards in seeking to fulfill their responsibilities while furthering the overall well-being of their constituents.

This research report documents how particular projects have helped meet central city transportation needs by using successful intergovernmental relationships. It offers a framework for understanding these successes. The following areas for additional research could extend the findings of this report to provide further practical assistance to agency staff.

- Institutional approaches to coordinating transportation functions on an intrajurisdictional level, specifically among city agencies. City transportation functions are organized in many different ways, but there is one common thread—they are always in some fashion divided among city agencies, as well as between municipal and other jurisdictions. City officials possess considerable leeway in reorganizing transportation functions. What are the most effective institutional arrangements within cities? What goals are best served by alternative arrangements?
- A handbook and training materials to bolster an agency staff’s ability to envision, plan, create, and nurture intergovernmental collaboration. This new research would extend the tools and techniques section of this report by further developing and field testing practical materials assisting agency staff in this area.
- A handbook and training materials specifically devoted to public participation. Public participation offers both opportunity and peril to transportation agencies. Approaches, techniques, and the extent of public participation vary greatly from one project or process to the next. Additional research could draw on a large body of experience in documenting the impact and effectiveness of public participation in a variety of situations. Practical guidance and training would aid governmental and other organizations in designing and implementing public involvement processes beneficial to all parties.
REFERENCES


APPENDIX A

Study Questionnaire

STUDY QUESTIONNAIRE
NATIONAL COOPERATIVE HIGHWAY RESEARCH PROGRAM
Project 20-5, Topic 31-11

Building Effective Relationships Between Central Cities, State, and Federal Governments

The National Cooperative Highway Research Program has convened a panel of experts from around the country to develop a synthesis of the best practices currently underway on the topic: Building Effective Relationships Between Central Cities, State, and Federal Governments. This project grew out of the Large Cities Conference held in Detroit, Michigan, in June 1998.1

Project objective: To identify and share practices proven successful in furthering the capital, operations, and maintenance needs of central city transportation systems.

Areas being studied: The twelve largest metropolitan areas in the U.S. These are Atlanta, Baltimore–Washington, Boston, Chicago, Detroit, Dallas–Ft. Worth, Houston, Los Angeles, Miami, New York, Philadelphia, and San Francisco.

Purpose of this survey: To inventory responsibilities for transportation functions relevant to the central city, and to identify practices proven successful in furthering the capital, operations and maintenance needs of central city transportation systems. Six to ten effective practices will be selected for more detailed study.

The survey contains two parts: Part 1—Information on your agency's responsibilities (compilation of existing documents), and Part 2—Identification of successful practices in building effective relationships.

Agencies being surveyed: City department with responsibility for traffic and transportation functions (typically a DOT or DPW); State DOT; MPO; County DOT or equivalent (where appropriate); major transit agencies.

How you benefit from responding to this survey:

1. Recognition through NCHRP for developing effective relationships between your agency and other transportation agencies in your metropolitan area.

2. Contact names and capsule project descriptions for all practices identified in Part 2 of this survey. These will be sent to you. You can use this information to follow-up on projects in other cities that are relevant to your needs.

Where to return this survey: Bruce Schaller
Schaller Consulting
94 Windsor Place
Brooklyn, NY 11215

Deadline: May 24, 2000

Questions: Please contact Mr. Schaller at (718) 768-3487. Email: schalle@schallerconsult.com.

Part 1. Agency Responsibilities Relevant to the Central City

Purpose: Compile inventory of responsibilities for transportation functions relevant to the central city.

Submissions: Please provide written material that you have on hand, describing [Your Agency]’s responsibilities that pertain to transportation functions in [Your Central City].

Examples of suitable material include any or all of the following:
- Mission statement
- Annual report
- Management reports
- Brochures
- Budget summaries
- Relevant sections of law or regulation

Where applicable to [Your Agency], please provide information about (refer to appropriate list below):

List for State and City DOTs:
- Method of appointment of agency head (or board members)
- Responsibility for highway and street design, construction, and maintenance
- Responsibility for traffic control, intersection control, traffic signals
- Parking responsibilities
- Enforcement and regulatory responsibilities (traffic, taxi, jitneys, etc.)
- Transit operations (bus, subway, downtown circulators, vans, paratransit, ferry, etc.)
- Bridge construction, reconstruction, maintenance, and operations
- Trucking regulation
- Freight responsibilities
- Rail and port responsibilities
- Involvement in special/major events, emergency situations
- Major funding sources
- Responsibilities for allocating federal/state funding
- Multimodal planning responsibilities
- Involvement in land-use planning
- Consideration of environmental justice issues
- Community, minority, low-income, immigrant participation in agency planning and decision making
- Any relationships with economic development or commerce departments or offices (state or local)

List for MPOs:
- Membership of MPO, number of city representatives, method of appointment, voting method
- Criteria for selecting and prioritizing projects
- Involvement in special/major events, emergency situations
- Major funding sources
- Responsibilities for allocating federal/state funding
- Multimodal planning responsibilities
- Involvement in land-use planning
- Consideration of environmental justice issues
- Community, minority, low-income, immigrant participation in agency planning and decision making
- Any relationships with economic development or commerce departments or offices (state or local)
- Regional transportation “management systems”

List for Transit Agencies:
- Size of board, number of city representatives, method of appointment
- Services provided directly (bus, subway, commuter rail, light rail, paratransit)
- Services provided by contract
- Parking responsibilities
- Involvement in special/major events, emergency situations
• Major funding sources
• Responsibilities for allocating federal/state funding
• Multimodal planning responsibilities
• Transit-oriented development
• Consideration of environmental justice issues
• Community, minority, low-income, immigrant participation in agency planning and decision making

Please mail this material by May 24, 2000 to:

Bruce Schaller
Schaller Consulting
94 Windsor Place
Brooklyn, NY 11215
Part 2. Identification of Successful Practices

Submissions: Use the form on the next page to list successful projects, processes, or other experiences that illustrate how cities, states, MPOs, counties and/or transit agencies successfully worked together to further the capital, operations, and maintenance needs of [Your Central City]'s transportation systems.

The practices you list should:

- Pertain to [Your Central City]
- Involve your agency
- Illustrate effective relationships between [Your Central City] and other governmental levels in furthering the capital, operations, and maintenance needs of [Your Central City]'s transportation systems.
- Can be documented through written material and/or telephone interviews
- Be potentially relevant to other urban areas

Topic areas: The list below is provided to help you understand the types of projects of interest to this study. Please do not feel bound to projects or experiences that fit neatly into one of these areas, however.

Inter-agency planning/coordination/operations
1. Special/major events planning
2. Policy coordinating committee
3. Technical coordinating committee
   (a) Addressing design standards
   (b) Technology development/implementation
   (c) Other
4. Staff sharing arrangements
5. Posting staff in other agency's offices
6. Joint location/co-location
7. Retreats/team-building programs

Decision-making processes
8. Visioning/mission statements
9. Proportional MPO representation
10. MPO voting procedures

Public involvement
11. Minority, low-income, and immigrant out-reach and participation in process
12. Public involvement in planning, programming, etc.

Funding
13. Federal-aid fund-sharing arrangements
14. Pooling of funds/other financial strategies
15. Use of partnerships, private funders
16. Changes to funding requirements
17. Changes to funding allocation/procedure

Agency responsibilities
18. Rationalizing jurisdictional responsibilities

Combining transportation planning and policymaking with:
19. Land-use planning
20. Environmental concerns
21. Economic development
22. Policing/enforcement
23. Consideration of environmental justice issues
Project Listing

List below successful projects, processes, or other experiences that illustrate how cities, states, MPOs, counties and/or transit agencies successfully worked together to further the capital, operations, and maintenance needs of your central city’s transportation systems.

Check the boxes where you can provide written information and/or contact names for the project. We will contact you later for projects where we need this information. Use an additional sheet if you want to list more than six projects. Attached is a sample survey that illustrates the type of responses desired.

<table>
<thead>
<tr>
<th>Topic # from previous page</th>
<th>CHECK IF YOU CAN PROVIDE (upon our request)</th>
<th>Written information</th>
<th>Contact names for each agency</th>
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<tr>
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<td>Agencies involved</td>
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<td>Project:</td>
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<td>Agencies involved</td>
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</tbody>
</table>

Contact person for initial follow-up:

Name: ___________________________ Phone: ___________________________
Email: __________________________ Fax: ___________________________

Fax this form by May 24, 2000 to Bruce Schaller at (718) 768-5985.
Or mail to: Schaller Consulting, 94 Windsor Place, Brooklyn, NY 11215.

Thank you for participating in this study!
Project Listing (Sample)

List below successful projects, processes, or other experiences that illustrate how cities, states, MPOs, counties and/or transit agencies successfully worked together to further the capital, operations, and maintenance needs of your central city's transportation systems.

Check the boxes where you can provide written information and/or contact names for the project. We will contact you later for projects where we need this information. Use an additional sheet if you want to list more than six projects. Attached is a sample survey that illustrates the type of responses desired.

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<td>8, 14, 20</td>
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<td>Project: HOV Lane Master Plan</td>
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<td>Agencies involved: City DOT, State DOT, State Planning Commission</td>
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<tr>
<td>2, 8, 12, 20</td>
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<tr>
<td>Project: Transit priority on Wilmot Avenue</td>
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<td>Agencies involved: City DOT, MTA, MPO</td>
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<td>3b, 15, 20</td>
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<tr>
<td>Project: Clean Fuel Vehicles in City Fleet</td>
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<tr>
<td>Agencies involved: City General Services, State Environ. Protection, Conoco Gas Co.</td>
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<td>3a, 3b</td>
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<tr>
<td>Project: Electronic Toll Collection</td>
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<tr>
<td>Agencies involved: City DOT, Regional Bridge Authority, State Thruway Authority</td>
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</tbody>
</table>

Contact person for initial follow-up:

Name: Tom Jones  Title: Planning Director  Phone: 282-222-5555
Email: jones@city.state.us  Fax: 282-222-5554

Fax this form by May 24, 2000 to: Bruce Schaller at (718) 768-5985.
Or mail to: Schaller Consulting, 94 Windsor Place, Brooklyn, NY 11215.

Thank you for participating in this study!
APPENDIX B

Survey Respondents

Atlanta Department of Public Works
Atlanta Regional Commission
Baltimore Department of Public Works
Boston Transportation Department
Dallas Area Rapid Transit
Dallas County
Georgia Department of Transportation
Illinois Department of Transportation
Los Angeles Department of Transportation
Metropolitan Atlanta Rapid Transit Authority
Maryland State Highway Administration
Massachusetts Highway Department
Metropolitan Transportation Commission
   (San Francisco Area)

Miami Department of Public Works
Miami Urbanized Area Metropolitan Planning Organization
Michigan Department of Transportation
New York City Department of Transportation
New York Metropolitan Transportation Council
Pennsylvania Department of Transportation
Philadelphia Mayor's Office of Transportation
San Francisco Municipal Railroad
Southeastern Pennsylvania Transportation Authority
Southern California Council of Governments
Texas Department of Transportation
APPENDIX C

Case Study Interviews

*Chestnut Street Transitway* (Philadelphia)
Southeastern Pennsylvania Transportation Authority
City of Philadelphia Mayor’s Office
Philadelphia Department of Streets
Former Philadelphia Deputy Mayor

*Clean Fuels Forums* (New York City area)
New York Metropolitan Transportation Council
New York City Department of Transportation

*HOV lanes (I-30, I-35E, I-635)* (Dallas area)
Dallas Area Rapid Transit (DART)
Texas Department of Transportation
North Texas Council of Governments

*Illinois Balanced Growth Initiative*
Illinois Department of Transportation
Chicago Department of Transportation
Chicago Area Transportation Study
48th Ward Chicago alderman

*Pavement Management System* (San Francisco Bay Area)
Metropolitan Transportation Commission
City of San Jose
City of Oakland

*Public Transit to San Francisco Giants PacBell Park*
San Francisco Municipal Railroad
San Francisco Department of Traffic

*Transit Priority Demonstration Project* (Los Angeles)
Los Angeles Department of Transportation
Los Angeles County Metropolitan Transportation Authority

*Walk Philadelphia/Direction Philadelphia*
Foundation for Architecture
Philadelphia Industrial Development Corporation
Philadelphia Streets Department
Architect (formerly with Foundation for Architecture)

*Woodward Avenue Heritage Route* (Detroit area)
Michigan Department of Transportation
Oakland County Planning Department
Consultant for Oakland County Planning Department
Wayne County Planning Department
Southeastern Michigan Council of Governments
Greater Downtown Partnership
APPENDIX D

Case Studies

Chestnut Street Transitway (Philadelphia)

NATURE OF PROJECT

Corridor transportation improvements

AGENCIES

- Philadelphia Department of Streets
- Philadelphia Mayor's Office of Transportation
- Southeastern Pennsylvania Transportation Authority (SEPTA)
- Pennsylvania DOT (PennDOT)
- Delaware Valley Regional Planning Commission (the MPO)
- FTA
- National Park Service

PROJECT DESCRIPTION

Chestnut Street is a major retail street stretching across downtown Philadelphia. In 1976, Chestnut Street was converted to a pedestrian mall and dedicated transitway that operated in both directions. As large department stores were subdivided into smaller shops, delivery trucks were also allowed onto the street by permit. Over the years, the street fell into decline. Although some changes were made (the transitway was changed to eastbound only, one lane was allocated to truck delivery only, and evening/night automobile traffic was reintroduced), there was a widespread consensus that Chestnut Street needed to be redesigned to improve how transportation worked on the street and to enhance the street's attractiveness.

The final redesign continues the transitway while also accommodating pedestrians, bicyclists, delivery vehicles, through traffic, and on-street parking. Planning involved the agencies listed previously, area merchants, and the Center City District (the downtown development district).

The reconstructed street is now one way. There is an 11-foot-wide bus/bike lane on the south side, a 10-foot-wide lane for moving vehicles in the middle lane, and 7-foot-wide curb lane for parking and deliveries on the north side. Right turns are prohibited to prevent cars and trucks from impeding buses.

Reconstruction was completed prior to the 2000 Republican National Convention. City and SEPTA staff feel that the new design works well, with two caveats. First, vigorous enforcement is needed to prevent double-parking, which blocks the middle lane and forces traffic into obstructing the bus lane. An associated problem concerns cars with handicapped parking permits that use metered parking all day. A city study found that vehicles with handicapped parking permits use 40–50 percent of parking spaces along this street. This use of the curb space defeats the project goal of providing parking spaces that turn over frequently for the benefit of shoppers.

The second issue concerns the prohibition on right turns from Chestnut Street. This prohibition also needs to be enforced. Meanwhile, area property owners have been lobbying the city council to repeal the right turn prohibition, which SEPTA and the city feel is critical to successful operation of the bus lane.

AGENCY ROLES

- Philadelphia Streets Department was the lead agency and managed the design consultant and construction.
- Philadelphia Mayor's Office of Transportation was actively involved in the planning and community relations.
- SEPTA was actively involved with the transit way design.
- PennDOT provided funding.
- The MPO provided federal funding. The MPO's Citizens Advisory Committee took an active role in advocating for pedestrian and bicycle uses.
- National Park Service was involved because the street goes through a National Park.

GENESIS

There was a widely recognized need to rehabilitate a major debilitated street combined with this being a mayoral priority.

FUNDING

Funding came from city, state, and federal transit and highway sources. SEPTA had to agree to the use of transit funding, which helped the city maintain its position to keep the transitway. Transit funding was used for new bus shelters and for paving the exclusive bus/bike lane.
AGENCY RELATIONSHIPS

The city took the lead role and actively consulted with the other agencies both in planning and to obtain funding. Chestnut Street is a state highway; however, the city is responsible for design, sidewalks, and street furniture.

INCREMENTAL/COMPREHENSIVE

Reconstruction of the street is a large planning process, but an incremental step in improvements to the downtown area and to transit service.

PRIVATE SECTOR INVOLVEMENT

Downtown business interests played an active role in the planning process and were pivotal in the decision to reintroduce full-time automobile traffic and parking.

IMPACT OF TECHNOLOGY

New electronic parking meters were installed during reconstruction; otherwise there was no impact.

IMPACT OF MPO VOTING

None, except that an advisory committee to the MPO played an important role in advocating pedestrian and bike uses.

IMPACT OF MAJOR EVENTS

The Republican National Convention in August 2000 served as a deadline for project completion, and was critical in providing the motivation that decisions be made in a timely manner during the planning process.

IMPACT OF POLITICS

Chestnut Street's rehabilitation was a mayoral priority; the mayor's interest was important in planning and completing the project.

OUTREACH TO MINORITY/LOW-INCOME COMMUNITIES

The transitway serves low-income and minority passengers, but otherwise there was no particular outreach to these communities.

CONCLUSIONS AND LESSONS LEARNED

• A clear mayoral mandate and a deadline—completing the project for the Republican National Convention—were critical to reaching decisions on the difficult design issues for Chestnut Street.
• Funding sources—including funding for transit—was important to retaining the dedicated transitway.
• Provisions for operating the street in terms of enforcement are critical to the success of a good design in actual practice.

Clean Fuels Forums (New York City area)

NATURE OF PROJECT

Community outreach, clean fuels promotion

AGENCIES

• New York Metropolitan Transportation Council (NYMTC, the MPO)
• New York City (NYC) DOT
• NYC borough presidents
• Rockland County
• Westchester County
• Private utilities

PROJECT DESCRIPTION

The project consists of a series of forums designed to present information on clean fuels to the public, municipal officials, and the business community, including privately operated fleets. The forums serve as a mechanism for these various parties to obtain information and contacts for follow-up activity. Information is presented on clean fuel technology, state tax credits, and a federally funded rebate program for early adopters. As many as 16 alternatively fueled vehicles are brought for viewing.

AGENCY ROLES

NYMTC is the lead agency coordinating each forum in response to requests from local officials. NYMTC sets the agenda and schedules the presenters. Local agencies provide facilities, food, and outreach. NYC DOT has provided vehicles for several of the forums.

GENESIS

Similar forums had been held on Long Island, sponsored by the Greater Long Island Clean Cities Coalition. Rockland County was aware of these forums and asked NYMTC to
arrange a similar event. NYMTC also disseminated an alternative fuels brochure.

**Funding**

NYMTC staff costs are covered by federal planning funds. Local governments have covered facility and food costs. Private utilities have defrayed some event costs.

**Agency Relationships**

NYMTC coordinates the forums with the active participation of local governments, all of whom are NYMTC members. This activity is specific to each forum and essentially informal.

**Incremental/Comprehensive**

Forums facilitate increased use of clean fuels on an incremental basis.

**Private Sector Involvement**

Utilities have defrayed some costs and participated in the forums. Local businesses have attended forums and as a result become involved with clean fuel programs.

**Impact of Technology**

Clean fuels utilizes various new technologies.

**Impact of MPO Voting**

Not applicable.

**Impact of Major Events**

Not applicable.

**Impact of Politics/Elected Officials**

Elected officials played a constructive role in the Bronx, where heavy truck traffic makes diesel emissions a major health concern. Local officials, including the area congressman and the borough president, promoted the Bronx forum and produced a large attendance by private fleets such as local distributors, Federal Express, an ambulance company, waste management companies, the *New York Post*, and the Hunts Point terminal co-op. There has been significant follow-up by some private fleets. Several switched to oxy diesel for off-road equipment. One distributor is interested in compressed natural gas, but appropriate compressed natural gas trucks are not yet available.

**Outreach to Minority/Low-Income Communities**

NYMTC targeted the Bronx for one of the forums, in part as a low-income/minority outreach.

**Conclusions**

- Participation by local officials has been vital to the success of the forums.
- Example of the MPO's responsiveness to local needs.
- Forums have a synergistic effect with other clean fuels programs, e.g., publicizing the tax credits, rebates, and highlighting the NYC DOT alternative fuels program.

**HOV Lanes (I-30, I-35E, I-635) (Dallas area)**

**Nature of Project**

Planning, design, and construction of HOV lanes

**Agencies**

- Dallas Area Rapid Transit (DART)
- Texas DOT (TxDOT)
- North Central Texas Council of Governments (NCTCG, the MPO)
- City of Dallas
- FTA
- FHWA

**Project Description**

This case study covers the planning, design, and construction of a series of HOV lanes in the Dallas area, which have been constructed on three existing highways: I-30, I-35E, and I-635 (Figure D1).

These HOV lanes are a joint effort of DART and TxDOT; a product of each agency's belief that HOV lanes would be an efficient way to improve mobility. An interlocal agreement spells out the roles of each agency. The first interlocal agreement was signed in 1989 for I-30. Its success led to the construction of HOV lanes on other highways. I-35 is a contraflow lane, converting the highway to five lanes inbound and three outbound in the morning and
three lanes inbound and five outbound in the afternoon. I-35E and I-635 are concurrent flow lanes, one HOV lane in each direction separated from the main line by pavement markings.

DART operates bus service on the HOV lanes. The lanes are also open to passenger vehicles with two or more occupants.

AGENCY ROLES AND RELATIONSHIPS

TxDOT and DART divide planning and engineering of HOV lanes on a 50/50 basis; the agencies alternate responsibility from one project to the next. Either in-house staff or consultants perform the planning and engineering work.

TxDOT is the lead agency for construction. DART is the lead agency for operations and enforcement. DART's responsibilities include opening and closing gates, operating changeable message signs and lane control signals, and operating the motorist assistance patrol.

Maintenance is the joint responsibility of the two agencies. DART maintains traffic control devices and pavement markings, TxDOT is responsible for pavement maintenance.

DART and TxDOT have ongoing contact on each project; however, there are no formal, regularly scheduled meetings. Each agency knows its respective role.

The city of Dallas (and each city affected by a given project) review and comment on schematic design. Typical comments concern modifying operating hours or closing a ramp in the morning to avoid having an impact on the city's arterial street system.

NCTCG played a critical role in promoting and funding HOV lane development and bringing together the two TxDOT districts and two transit agencies in the Dallas–Ft. Worth area.

GENESIS

HOV lane development grew from the need to get the best use of available highway capacity and to address air quality issues. TxDOT viewed I-30 as a good candidate for a contraflow HOV lane because of the difference in inbound and outbound traffic volumes during rush hours. The NCTCG identified HOV lanes as a focal point of air quality improvement plans and allocated Congestion Mitigation and Air Quality (CMAQ) funds for HOV lane development.

FUNDING

FTA was a funding partner on I-30, which opened in 1991. Since then, federal funding for HOV lanes has come through the CMAQ program.

Construction funding is now provided as follows: one-sixth by DART, one-sixth by TxDOT, and two-thirds from CMAQ funds. A new connector between I-635 and I-75 receives 10 percent of its funding from DART, 10 percent from TxDOT, and 80 percent from CMAQ. Overall design
costs are split 50/50 by DART and TxDOT (each agency funds design costs for projects it designs).

There are 114 miles of HOV lanes in the DART Transit System Plan. Availability of funding accelerates the pace of planning and construction.

INCREMENTAL/COMPREHENSIVE

DART and TxDOT are building a comprehensive system, as set forth in the DART Transit System Plan, one piece at a time.

PRIVATE SECTOR INVOLVEMENT

Not applicable.

IMPACT OF TECHNOLOGY

I-30 was the first highway in the United States to use movable barriers in an HOV application with movable barrier transfer vehicles. This technology made possible construction of a reversible HOV lane in which large, heavy concrete barriers are moved four times each day.

Electronic monitoring of traffic at the entry point of HOV lanes can potentially remove the need for an officer at that point. Under this system, an officer at the exit point can see a single-occupancy vehicle enter the HOV lane and take appropriate enforcement action. Operational testing is underway for this type of electronic monitoring.

IMPACT OF MPO VOTING

The NCTCG uses a set of criteria to select projects.

IMPACT OF MAJOR EVENTS

Not applicable.

IMPACT OF POLITICS

Elected officials supported the commitment of the NCTCG to use CMAQ funds for HOV lanes. HOV lanes were a relatively quick answer to congestion and air quality problems.

OUTREACH TO MINORITY/LOW-INCOME COMMUNITIES

Not applicable

CONCLUSIONS AND LESSONS LEARNED

• Federal CMAQ funding made possible construction of the HOV lanes to be used by both buses and high-occupancy passenger vehicles. NCTCG used its control over CMAQ allocations to promote HOV development.
• DART and TxDOT divide planning, design, construction, operation, maintenance, and enforcement responsibilities to take advantage of each agency's strengths. Both agencies agree, for example, that DART is more experienced in operations and enforcement and TxDOT is more experienced in construction, and have divided their responsibilities accordingly.
• One participant cites “directors who don't have an ego” as critical to success of HOV lanes, creating an atmosphere where the various agencies focus on outcomes, help each other, and share credit.

Illinois Balanced Growth Initiative (Northeast Chicago and Near North Suburbs)

NATURE OF PROJECT

Corridor study, smart growth, pedestrian safety

AGENCIES

• Illinois DOT (IDOT)
• Chicago DOT
• Chicago mayor's office
• Chicago Wards 39, 40, 45, 47, 48, 49, 50
• Skokie
• Wilmette
• Evanston
• Lincolnwood
• Chicago Transit Authority (CTA)
• Chicago Area Transportation Study (CATS, the MPO)
• Northeastern Illinois Planning Commission (NIPC)
• Metropolitan Planning Council (MPC)
• Regional Transportation Authority, CTA, and Metra (regional rail system)
• Illinois Environmental Protection Agency (IEPA)

PROJECT DESCRIPTION

This ongoing project is focused on a loosely defined corridor on the north side of Chicago and its northern suburbs. Issues in the area include increasing auto congestion, traffic speeds, worsening pedestrian safety, pedestrian amenities, public transit access, parking, air quality, and quality of life. The area includes both city and suburban neighborhoods with mixes of medium- and high-density commercial,
residential, and retail uses. Programmatic areas under study are

- Transit station area overlay/land-use guidelines: Transit-oriented development land-use, pedestrian, and parking guidelines for rail station areas.
- Land-use sensitive roadway functional classification guidelines: Guidelines for roadway functional classification that incorporate adjacent land-use types.
- Traffic calming program guidelines: Guidelines for the application of various traffic calming measures.

There are several site-specific case studies as well. These include several arterials and a CTA station. One focus of the study is Sheridan Road, a north/south artery fed by the termination of Lake Shore Drive approximately 7 miles north of the Loop.

IDOT is funding and leading the study with extensive input and involvement of the local communities. IDOT's goals are to identify opportunities for state and local officials to harmonize transportation services with mature land uses and infill development; develop a model for an interactive, multijurisdictional, intergovernmental planning process; and develop a toolbox for local officials grappling with transportation systems in mature urban areas.

The consulting firm hired for the study began work in January 2000. Initial activities included a workshop designed to develop an understanding among all parties of what they want to accomplish and what the results might be, as a basis for the study workplan. Project development to this point is described later.

AGENCY ROLES AND RELATIONSHIPS

IDOT is the lead agency and fund provider. IDOT formed an advisory group that includes the Chicago aldermen from the study area, mayors of the four adjacent communities, and the agencies listed previously. The advisory group is playing almost a steering committee role in the project. Although IDOT remains responsible for final decisions, it is giving the advisory group's input a great deal of deference.

CATS staff describe themselves as active observers.

GENESIS

This project results from the confluence of concerns and initiatives at the neighborhood, municipal, and statewide levels. At the neighborhood level, the alderman who represents the 48th Ward on Chicago's north side has been a strong catalyst. This alderman observed that since World War II her neighborhood has struggled under the increasing use of arterial streets for commuting purposes. The focus on facilitating car and truck movement through the neighborhood meant that houses were torn down to make connections and smooth sharp corners in the street grid. Travel speeds increased and it became difficult and dangerous for children to walk to school or seniors to cross the street. The alderman researched how this happened and determined who the key people were to remedy the problems. She also researched models of what has been done elsewhere in the United States and Europe to demonstrate that the transportation infrastructure can be changed for the better and need not be viewed as a given.

The alderman pursued essentially three options. One was to work with the mayor's office and CDOT on traffic calming measures for the neighborhood. These included speed humps in alleys and on residential streets, traffic circles, and “bump outs” in sidewalks to shorten pedestrian street crossings.

Second, the alderman included elected officials from the north and west of her district. She felt that her neighborhood's problems are regional in nature and wanted to avoid “non-solutions,” such as moving traffic from her ward to another area. A key event was an elaborate working breakfast to which the alderman invited elected officials from neighboring wards and the communities north of Chicago. The alderman brought a large map of the traffic shed and discussed how the constituents of everyone in the room suffered from the shed's dysfunction. Each elected official was asked to identify five “hot spots” in their area. This breakfast started to build trust among the elected officials and a sense of ownership in the process.

Finally, the alderman sought the attention of regional planners at the same time (1997) that CATS was developing its long-range plan for the year 2020. CATS held a public hearing on the plan. The alderman brought some 500 constituents to the hearing to demonstrate the neighborhood's view of the severity of its traffic problems. In response, CATS created a community planning concept in the long-range plan. The idea was to bring the highway corridor study concept, which involved local communities in the planning process, to a large city context and to look at how major arterials function in a dual role, serving both neighborhood and regional travel needs. Although no study resulted directly from this action, its inclusion in the long-range plan helped focus attention on central city traffic issues where the existing planning study categories were directed at corridor studies outside Chicago. In a plan update, the IDOT Balanced Growth study is cited as an example of a community planning study.

At the city of Chicago level, the mayor's office and CDOT worked with aldermen and others to address
transportation concerns. CDOT has conducted a number of studies over the years. Some studies addressed traffic issues along Sheridan Road, whereas a more recent study (1996) looked at Sheridan's problems in a broader way—where is the traffic coming from and where is it going? Some years ago the city removed reverse-flow lanes to make the streets less threatening, but CDOT and City Hall recognized that more needed to be done.

The IDOT study came about when neighborhood, city, and regional focus on this area converged with statewide Smart Growth issues. The newly elected governor embarked on building a Smart Growth agenda. The governor's interest was matched by interest from IDOT officials. IDOT decided to undertake two Balanced Growth pilot projects with the objective of developing a wide range of strategies to address the bundle of transportation, land-use, and growth issues included in the term Smart Growth. The corridor approach gave IDOT a way to work on Smart Growth issues in particular contexts. The north side corridor was chosen as one of the pilot projects because of the alderman's previous work, the city of Chicago's concerns with the area, and the opportunity to work with both Chicago wards and suburban communities. (“Smart” Growth can be subject to differing and sometimes negative interpretations; IDOT substituted “Balanced” Growth as a more neutral term.) From the city of Chicago's standpoint, the IDOT study afforded a new opportunity to address long-standing transportation concerns in this area.

**FUNDING**

The project is 100 percent IDOT funded. IDOT had considered applying for federal Transportation and Community System Preservation (TCSP) funding but decided not to pursue that route because of certain TCSP requirements. Use of planning funds ensures that the study focuses on planning as opposed to engineering solutions.

An earlier CDOT study of the Lake Shore Drive terminus was 80 percent federally funded and 20 percent city funded. CDOT also provided the 48th Ward alderman with technical support in collecting information on traffic “hot spots” and organizing events. The IDOT consultant has now taken on those duties as part of the study.

**INCREMENTAL/COMPREHENSIVE**

Traffic issues in the study area have been subject to both incremental and comprehensive approaches. The IDOT Balanced Growth study is a comprehensive approach to transportation and land-use issues in the corridor. At the same time, traffic-calming measures on the north side and elimination of reverse flow lanes on Sheridan Road represent incremental progress.

**PRIVATE SECTOR INVOLVEMENT**

The Metropolitan Planning Council, composed of area businesses and other organizations, is a participant in the study. Loyola University and the University of Chicago are also involved.

**IMPACT OF TECHNOLOGY**

IDOT's consultants are using several information technologies that facilitate effective community participation. The consultants use Geographic Information Systems to portray various transportation problems in the study area. By using this technology the consultant can quickly adapt materials in response to community concerns. Rapid adaptability facilitates the process of citizen understanding and buy-in.

CDOT is also developing intelligent transportation system projects that may be implemented within the study area. These include signal interconnects and real-time transit service information. Such technologies create new possibilities for traffic management and improving transit's attractiveness.

**IMPACT OF MPO VOTING**

Not applicable.

**IMPACT OF MAJOR EVENTS**

No significant impacts.

**IMPACT OF POLITICS AND ELECTED OFFICIALS**

Politics and elected officials have been a motivating force throughout. This includes the 48th Ward alderman's concerns and her involving other elected officials, and the governor's advocacy of a Smart Growth agenda. Chicago's mayor has made a strong effort to improve the city's relations with its neighboring communities, setting a positive tone for city–suburb participation in this project. In addition, the mayor is supportive of Smart Growth concerns and pedestrian access improvements.

Political issues also shaped IDOT's program design. One objective of the planning study is to provide local decision makers with a wide range of strategies that are politically viable to local officials.
OUTREACH TO MINORITY/LOW-INCOME COMMUNITIES

These communities are not specifically targeted for this project, although the study includes low-income neighborhoods. IDOT’s other Balanced Growth study in a corridor southwest of Chicago goes through economically disadvantaged areas and was selected in part to address how to meet the needs of such areas.

CONCLUSIONS

- The working partnership between IDOT and local agencies and officials was built upon separate commitments by each party to address transportation issues in the northeast Chicago and suburban area. Both state and local officials played initiating roles. IDOT decided to look at growth and transportation issues in an urban setting. At the same time, local elected officials were working on a similar set of issues in their communities. The partnership was built on a recognition that both state and local officials would benefit by joining their efforts.
- The political environment was supportive; the new governor was building a Smart Growth program, and the Chicago mayor had been building a better relationship with suburban communities.
- Another key to the successful start of this project was the 48th Ward alderman’s ability to reach out to her fellow elected officials to the north and west of her ward and to include them as equal partners.

Pavement Management System (San Francisco Bay Area)

NATURE OF PROJECT

Street maintenance planning/management

AGENCIES

- Metropolitan Transportation Commission (MTC, the MPO)
- Numerous cities in the Bay Area and elsewhere
- California Transportation Commission
- League of California Cities
- Association of Oregon Counties
- Marion County (Oregon)

PROJECT DESCRIPTION

The MTC’s Pavement Management System (PMS) is a computer-assisted decision-making process designed to help cities and counties prevent pavement problems through judicious maintenance, and to diagnose and repair those that exist in a timely, cost-effective manner.

The program is one of the first in the country to be tailored specifically for cities and counties, rather than for state highways. California currently requires that PMSs be implemented by cities and counties seeking funding for projects through the State Transportation Improvement Program.

MTC's PMS offers its users

- Training sessions and training videos for field evaluation, software use, and analysis;
- A telephone hotline for computer problems;
- Budget option reports for decision makers;
- Assistance in making budget presentations to local boards or councils;
- Technology transfer seminars on pavement practices;
- Users meetings to exchange information, present software innovations, solicit user input;
- A newsletter that covers a range of pavement management issues (Street Talk); and
- A website developed specifically for them (http://www.mtcpms.org).

Ninety-five Northern California cities, counties, and other public agencies, as well as over 100 other agencies outside of California, currently use the MTC PMS program.

Among the three largest cities in the Bay Area, Oakland is currently evaluating the MTC system. Oakland is presently using a different and more costly PMS. Oakland staff feel that because many other cities in the area use PMS it offers several benefits, and it will make the city council comfortable with using results from the system. Results from other cities create a benchmark for comparison among cities with the same climate and similar traffic levels.

San Jose is in the process of converting to the MTC system. Their previous system lacked technical support and it was unclear how the system calculated pavement conditions. MTC’s PMS program offers San Jose a regional system that enables comparison with other cities and good technical support. The major challenge is converting from a system that uses a different scale for pavement conditions.

San Francisco is currently evaluating the MTC’s system. They have not converted to PMS because of the cost of conversion from an extensive inventory of pavement conditions.

AGENCY ROLES AND RELATIONSHIPS

MTC provides the PMS software at minimal costs to municipalities. MTC also provides support and assistance to PMS users.
Each city uses the system to evaluate the condition of its pavement, schedule maintenance, and assemble budget requests.

MTC also uses the results to document pavement rehabilitation and maintenance needs in the Bay Area. This documentation helped contribute to the state legislature's decision to approve the governor's program for using $400 million of the state budget surplus for pavement maintenance and rehabilitation. Another $130 million per year has been approved for the next 5 years.

Agencies in Oregon have become the software developers for the system.

GENESIS

In 1981, several county and municipal public works commissioners, frustrated by difficulties in obtaining funding for pavement rehabilitation and maintenance, asked MTC for assistance in documenting needs. An MTC study estimated that spending for local roadway maintenance in the region fell short by $100 million per year, and that the Bay Area's 17,000 miles of streets and roads had a deferred maintenance cost in the range of $300 to $500 million. In 1984, in response to this study, MTC started its PMS in six Bay Area communities as a pilot program. The full program got under way in 1986.

FUNDING

MTC is using federal transportation and local transit development funds. Each city uses local funds.

INCREMENTAL/COMPREHENSIVE

In each jurisdiction, analysis of pavement conditions is conducted incrementally over a period of several years. The resulting database is a comprehensive assessment of needs.

PRIVATE SECTOR INVOLVEMENT

Consultants are used to assist localities with the system.

IMPACT OF TECHNOLOGY

Technology has affected PMS development in important ways. MTC is increasingly linking PMS to financial reporting and asset databases as those systems are developed in different municipalities. A next step is to integrate mapping software. A web-based system is being used to report software bugs, notify users, and distribute software patches. MTC combines the databases of each user to document regional needs.

IMPACT OF MPO VOTING

None.

IMPACT OF MAJOR EVENTS

None.

IMPACT OF POLITICS

A prime objective of the program is to obtain funding for pavement maintenance by clearly documenting pavement needs. The program has been successful in this respect, particularly where a council member has an interest in pavements. MTC has observed that cities are calling upon consultants retained under the PMS program to present results to city councils because the consultants offer more credibility than city staff. Consultants have also been able to bridge the technical/public works and budget sides at the local level. Some city staff feel that the system helps keep pavement repair decisions out of politics by providing an objective way to allocate resources.

The program also contributed to the state funding for pavement needs.

OUTREACH TO MINORITY/LOW-INCOME COMMUNITIES

Not applicable.

CONCLUSIONS AND LESSONS LEARNED

- The MPO's responsiveness to local needs has produced an effective system to analyze and document pavement management needs. The “report card” from the combined local databases is a powerful tool to showing the need.
- Use of the PMS program throughout the region provides each city with a benchmark of conditions in other cities with similar climate and traffic levels.
- Aggregate regional estimates of local street and road maintenance and repair needs and revenue shortfalls have proven to be an effective method of advocacy at the state level. These estimates carry considerably more weight than lobbying by individual cities.
Public Transit to San Francisco Giants PacBell Park (San Francisco)

NATURE OF PROJECT
Transportation planning

AGENCIES
- San Francisco Department of Parking and Traffic
- San Francisco Giants baseball club
- San Francisco Municipal Railway
- San Francisco Police Department
- San Francisco Public Works Department
- Bay Area Rapid Transit (BART)
- Other area transit properties
  - Caltrain
  - Golden Gate Bridge, Highway and Transportation District
  - Other ferry operators
  - Alameda–Contra Costa Transit
- California DOT (Caltrans)
- California Highway Patrol (CHP)
- MTC
- Neighborhood groups

PROJECT DESCRIPTION
After the voters rejected several proposals for a new stadium for the San Francisco Giants baseball team, the electorate approved a new stadium financed with private monies. The Environmental Impact Report for the ballpark raised concerns about the effects of parking and traffic congestion. Accordingly, the Board of Supervisors for the City/County of San Francisco mandated establishment of a Ballpark Transportation Coordinating Committee (BTCC) to formulate a transportation management plan for the ballpark. The committee included representatives of the city agencies, Bay Area transit providers, Caltrans, CHP, the nearby community, and the Giants baseball club. The San Francisco Department of Parking and Traffic chaired the committee.

The BTCC met monthly beginning 2 years prior to the opening of the new ballpark in April 2000. The committee was able to reach consensus on a range of transportation issues including bus loading locations, bus routes, routing of traffic, parking regulations in the neighborhood, and traffic restrictions before and after games.

Public transit to the park includes a Muni shuttle bus from a nearby BART station and light rail from downtown. The park is 1–1.5 miles from downtown BART stations and the main ferry terminal.

The Giants provided space in the ballpark for a Transportation Management Center, which monitors traffic to the park using Caltrans video cameras. The center also controls seven dynamic message signs on roadways in the vicinity. When activated, the signs advise motorists not destined for the ballpark to use alternative routes.

An important offshoot of the BTCC was the Transit Marketing Subcommittee. The Giants, public transit agencies, and two private ferry operators worked closely together on this committee. The Giants promoted use of transit to get to the ballpark, emphasizing that parking is limited (5,000 spaces for a 40,000 seat stadium that was sold out for the season) and costly ($15–20) and publicized ways to take transit to the stadium. MTC also provided assistance with transit marketing. This program was quite successful. Surveys of over 2,000 fans conducted in August 2000 indicated that 52 percent of all fans attending weekday baseball games at PacBell Park arrived by non-auto modes. For weeknight games, 50 percent of the fans arrived by non-auto modes, whereas 42 percent of the fans used non-auto modes to attend weekend games.

AGENCY ROLES AND RELATIONSHIPS
The San Francisco Department of Parking and Traffic was the lead agency. Other agencies sent representatives to the BTCC, participated in planning, and made schedule and service changes as appropriate.

GENESIS
The San Francisco Board of Supervisors mandated formation of the committee to deal with parking concerns arising from the new ballpark.

FUNDING
Each agency provided staff time for the planning. A portion of the $1.8 million in tax increment funding went toward transportation improvements. A limited amount of City General Funds was also used.

The Giants contributed staff time and hired a transportation consultant who wrote the first draft of the transportation management plan.

Operationally, each agency provides staffing and funding for its own activities. The Giants contributed space inside the ballpark for the Transportation Management Center.

INCREMENTAL/COMPREHENSIVE
This was a comprehensive effort to address parking, traffic, and transit issues associated with the opening of the new ballpark.
PRIVATE SECTOR INVOLVEMENT

The Giants baseball club was a key participant in the planning.

IMPACT OF TECHNOLOGY

Technology played an important role in reducing capital and operating costs. The seven dynamic message signs are solar powered and controlled by pager from inside the park. No conduit had to be run to the signs for communications or power, a significant cost savings.

The Internet is used in two ways. The Giants website prominently features how to use transit to travel to the park. The Transportation Management Center monitors Caltrans video cameras by means of the Caltrans' website.

The dynamic message signs and traffic signal improvements are examples of technology used in the project.

IMPACT OF MPO VOTING

Not applicable. The MTC assisted with transit marketing.

IMPACT OF MAJOR EVENTS

The project was focused on a major event—the opening of the new park. This created a firm deadline and encouraged parties to make decisions on contentious issues.

IMPACT OF POLITICS

Neighborhood residents feared that the opening of the new park would create a traffic nightmare. Their concerns were reflected in the Board of Supervisors mandate for the traffic and transit planning study.

OUTREACH TO MINORITY/LOW-INCOME COMMUNITIES

Not applicable.

CONCLUSIONS AND LESSONS LEARNED

- Fear of potential embarrassment when the park opened kept the process on schedule and facilitated buy-in by the various agencies.
- Monthly meetings of the committee provided a useful forum for participants to express their fears and anxieties face-to-face. Relationships developed on the committee among agency staff and the Giants created a constructive problem-solving focus.
- Reliable transit service, good publicity about transit, limited and expensive parking availability, concerns about traffic congestion, and capitalizing on the image of the park as being downtown, were critical to transit's large mode share for fans attending games.

Transit Priority Demonstration Project (Los Angeles)

NATURE OF PROJECT

Transit priority, bus service improvements including automated traveler information

AGENCIES

- City of Los Angeles DOT (L.A. DOT)
- Los Angeles County Metropolitan Transportation Authority (MTA)

PROJECT DESCRIPTION

L.A. DOT collaborated with the MTA to implement an advanced Transit Priority Demonstration Project for buses along two major transit corridors as part of the Metro Rapid Bus Demonstration Project. The first phase of the project became operational in mid-2000.

Under the Transit Priority Demonstration Project, signal timings can be adjusted automatically as buses approach an intersection in order to help buses catch up to schedule when needed. Four types of signal priority action can be taken, including providing an early green signal and extending the green when a bus is approaching. The system provides information on bus locations and travel times for MTA managers. Using this information, L.A. DOT has developed an automated traveler information system for the project.

This demonstration project has been implemented on Ventura Boulevard and Wilshire/Whittier Boulevards (Figure D2). The Ventura Corridor connects the Metro Red Line subway station at Universal City with Warner Center, a major commercial and business center in the West San Fernando Valley. The Wilshire/Whittier Corridor connects East Los Angeles with the central business district. Together, the two corridors include 200 signalized intersections on more than 38 miles of arterial road.

Travel times have improved by 24 percent on Ventura Boulevard and 28 percent on Wilshire Boulevard. Because
FIGURE D2 New bus stop for the Los Angeles Transit Priority Demonstration Project.

of the combination of bus priority, greater spacing between
bus stops (increased from 0.5–0.6 mile to 0.85 mile) re-
duced dwell times from the use of low floor buses. Ap-
proximately one-third of the reduction in travel times is
attributed to bus priority.

Ridership has increased by 30 percent on each route.
One-half of the additional ridership is from new bus riders,
the other half is from increased ridership by existing cus-
tomers. The delay caused to overall traffic is not significant.

The Transit Priority Demonstration Project currently ex-
ists only in the city of Los Angeles. The MTA and L.A.
DOT have proposed extending the bus priority system to
the other jurisdictions traversed by the initial demonstration
routes—Santa Monica, Beverly Hills, and unincorporated
areas of Los Angeles County—and to 12 additional transit
corridors. These neighboring cities have decided to evaluate
any impact on cross-street traffics before deciding whether
to adopt bus priority.

**AGENCY ROLES AND RELATIONSHIPS**

L.A. DOT and the MTA maintain control of their own opera-
tions and facilities while sharing information and coordinat-
ing their operations. Occasions for bus priority are carefully
defined; it is granted when the bus is running late and either
holding a green light or giving an early green would help get
the bus back on schedule. The L.A. DOT system automati-
cally evaluates each condition in real time, taking into ac-
count the need for pedestrian walk time and cross-street traf-
ic volumes, and then either grants or denies the request.

**GENESIS**

The Transit Priority Demonstration Project came about
through the combination of separate initiatives by L.A. DOT
and the MTA. L.A. DOT developed the priority bus concept,
submitted a detailed workplan to the city council, and was
given approval to work with the MTA on the project.

Meanwhile, the MTA and L.A. DOT were engaged in a
series of restructuring studies in Los Angeles County that
examined duplication of services among the many bus ser-
vice providers in the county and issues of cost-effectiveness
and service. The restructuring study included over 450
meetings that included open public meetings and meetings
with citizen advisory committees, homeowner groups, and
local councils. A recurring comment at these meetings was
the slowness of the bus service. Although the MTA ex-
pected comments on overcrowding, cleanliness, and safety,
the public seemed focused on bus speed.

In looking at this problem, the MTA found that bus
speeds had declined 1 percent per year since the mid-1980s
for a cumulated decline of 12–15 percent. This decline had
a large impact not just on customer service but also on
MTA operations—it took 200 additional buses to compen-
sate for the decline in speed.

At this point the MTA and L.A. DOT joined efforts to
implement service improvements. L.A. DOT rode the bus
lines to determine the cause of the slowdown. They found
that buses were actually stopped 50 percent of the time. The
DOT stated that they could help get the buses through inter-
sections and suggested that the MTA add other steps
to create an overall program that would include traveler information. The overall partnership became the Metro Rapid Bus Demonstration Project and included new bus stations, low floor buses, and a change from schedules based on time points to headway-based scheduling. Expansion of this demonstration program is now an integral part of the MTA's long-range transportation plan for Los Angeles County.

**FUNDING**

MTA funded its costs using federal CMAQ funds. L.A. DOT used existing transit improvement grant funding provided by the MTA.

MTA had applied for participation in the FTA's Bus Rapid Transit (BRT) demonstration project, and was included in that program after the successful pilot project. A dedicated lane was not politically feasible. BRT participants have been quite interested in the project's success and the potential for similar applications in other locations.

**INCREMENTAL/COMPREHENSIVE**

The Metro Rapid Bus Demonstration Project has both incremental and comprehensive elements. As a demonstration project on two routes it represents incremental progress toward the overall goal of improving transit service. As the combination of several methods to improve bus speeds it represents a comprehensive approach to slow bus speeds.

**PRIVATE SECTOR INVOLVEMENT**

Not applicable.

**IMPACT OF TECHNOLOGY**

The Transit Priority Demonstration Project uses sophisticated computerized control of traffic signals. Low floor buses represent another relatively new technology.

**IMPACT OF MPO VOTING**

Not applicable.

**IMPACT OF MAJOR EVENTS**

Funding and completion of the Metro Rapid Bus project was expedited to coincide with the June 2000 opening of the Metro Red subway line extension into the San Fernando Valley. The Metro Rapid Bus was promoted heavily with the Red Line opening, which helped it attract a large amount of public attention.

**IMPACT OF POLITICS AND ELECTED OFFICIALS**

Politics and elected officials played a major role in this project. Approval was needed from the mayor, city council, and MTA Board. L.A. DOT and the MTA staff were careful to keep the Metro Rapid Bus program separate from the politics of rail development. Staff argued that the Metro Rapid Bus program could be done quickly, easily, and at relatively low cost and thus could be viewed as a short-term measure until rail lines are built. At the same time, the program responded to political pressure from rail opponents to improve bus service.

Political support and dedication of key professional staff was vital to getting the Metro Rapid Bus project up and running in 9 months and to obtaining approval for the placement of bus stops at locations that made sense operationally. Both parties are incorporating an ongoing partnership in their respective plans.

**OUTREACH TO MINORITY/LOW-INCOME COMMUNITIES**

This is considered a demonstration program and applied to corridors with a high volume of ridership and high levels of congestion. The Wilshire Boulevard bus route was tied to the Whittier Boulevard route to eliminate a transfer after a separate study found that many lower income and Hispanic customers travel from East Los Angeles to the West Side.

**CONCLUSIONS AND LESSONS LEARNED**

- The relationship between L.A. DOT and the MTA functions as a true partnership characterized by mutual respect for each agency's jurisdiction and responsibilities, shared credit, and complementary program elements. DOT operates the signals and provides the traveler information data, whereas the MTA runs the buses. Each agency recognized that by working together they could achieve results that neither agency could achieve by itself.
- The MTA and L.A. DOT shared a vision of the importance of transit in moving people (rather than moving vehicles). DOT also operates a commuter express bus service and community transit services and so has direct experience with operational transit problems. L.A. DOT was also the lead agency on undertaking the transit restructuring studies that helped define the target corridors. Thus, both agencies had a
shared understanding of problems and challenges prior to undertaking this project.

- Senior management set forth the vision to make the program happen and provided highly qualified staff with the will and vision to work together to complete the project.
- L.A. DOT and the MTA found the combination of program elements that would produce substantial travel time reductions but that also could be implemented quickly, cheaply, and simply. The MTA recognized that bus speeds could be increased only through a combination of steps. At the same time, the agencies recognized that a dedicated lane approach would require additional environmental review and public meetings.
- The project was positioned in a way that would create a politically supportive environment separate from the divisive debate over rail construction. The MTA also chose to implement bus priority in Los Angeles before working with other cities, because of the city's extensive automated traffic signal control program that existed along the two routes. This decision enabled the MTA to speed implementation and allowed both parties the opportunity to evaluate impacts on cross-street traffic.
- The project responded to widespread public need for improved bus speeds, paving the way for both political support and public support.

Walk Philadelphia/Direction Philadelphia (Philadelphia)

NATURE OF PROJECT

Signage for pedestrians and motorists to key attractions and destinations

AGENCIES

- Foundation for Architecture (FFA)
- Center City District
- Philadelphia Streets Department
- Philadelphia Commerce Department
- Philadelphia Industrial Development Corporation (PIDC)
- Pennsylvania DOT (PennDOT)
- FHWA

PROJECT DESCRIPTION

The Direction Philadelphia and Walk Philadelphia programs were implemented in the early 1990s to help motorists and pedestrians, respectively, find their way to key destinations. Program goals are a standardization of directional signage throughout the city, reduction of sign clutter, and improved sign maintenance.

The program was initially focused on central city tourist destinations for both pedestrians and motorists. The program proved so successful that other parts of Philadelphia asked to be added, including University City, the Northwest Corridor (Germantown, Mount Airy, Chestnut Hill), and several residential neighborhoods such as Frankford, Bridesburg, and Port Richmond. Signage in residential neighborhoods is intended to convey local identity and community pride as well as provide wayfinding assistance.

The design and placement of signage is the product of extensive study and discussion among project participants. The Foundation for Architecture (FFA), the sponsoring organization, has held scores of stakeholders meetings for public and community input. FFA views these stakeholder meetings as a central part of program development. Through its design consultants, FFA mounts highly professional, informative, interesting, and fun presentations. This builds excitement and engages the participants. FFA reports that at each stakeholders meeting participants contribute at least a couple of "priceless gems" that could not have come from those primarily involved in the project and that become incorporated in the plans.

Although foundation, city, and federal funds are used for planning, design, and construction, sign maintenance is funded through fees collected from stakeholders who have their attraction listed on a sign. Fees are computed on a sliding scale based on how many signs carry the attraction's name. Fees range from $135 to roughly $1,000. The maintenance fees are a key feature of the project for two reasons. First, they ensure that signage is maintained, solving a major problem that plagued previous city signage. Second, the fees make participants real stakeholders in the project whose participation and approval are required for project implementation. (Depending on the situation, nonprofits are requested or required to contribute fees towards the maintenance of the signs.)

Planning for expansion outside Center City and University City has been spurred by the Philadelphia Industrial Development Corporation (PIDC), a public-private nonprofit organization. One of PIDC's goals is retention of neighborhood-based manufacturing businesses. PIDC staff felt that the physical environment does not support local businesses. PIDC asked the FFA to adapt the design of the signage system to a neighborhood context, appropriate for hospitals, churches, and industrial areas as opposed to the downtown focus on museums and historic buildings. The neighborhood-oriented project began in August 2000, with plans to have gateway signage installed in three neighborhoods by the end of the year.
AGENCY ROLES AND RELATIONSHIPS

The FFA, a 20-year-old nonprofit educational organization, is the lead organization. The Foundation's mission is to raise public awareness of the built environment. It initiated the Walk Philadelphia/Direction Philadelphia project and works closely with community groups, the city, and other organizations.

The FFA chairs a steering committee that meets periodically. The steering committee includes the city of Philadelphia Streets, Planning, Parks, and Public Property Departments; National Park Service; mayor's office; Philadelphia museums and the city council member from the affected area.

The Philadelphia Streets Department took the lead in securing PennDOT and FHWA approval of the design of the Direction Philadelphia signs—necessary because federal dollars are used for fabrication and installation. Obtaining PennDOT and FHWA approval was a considerable task because the Direction Philadelphia signs deviate in color, size, and placement from federal highway standards. For example, instead of being green with white lettering and overhead, many of the Direction Philadelphia signs are blue or red. The Philadelphia signs are smaller than Interstate signs, designed for a city scale, and are on the side of the road, not overhead.

The Streets Department advised on sign placement—for example, at mid-block locations to give motorists adequate warning and avoid information overload at intersections. The Streets Department obtained funding, bid construction contracts to fabricate and install signs, and coordinated implementation with state and federal highway agencies.

GENESIS

In 1985, the FFA held a public forum, “City Edges and Gateways: Getting to the Downtown,” on problems with wayfinding signage in Philadelphia. Signage had long been problematic, because the city was unable to erect adequate signage and individual institutions put up a variety of their own signs around the city. This public forum elicited a huge public response and led the FFA to create the program.

FUNDING

The William Penn Foundation provided an $800,000 grant to develop the initial signage system. The city of Philadelphia provided construction funding using federal transportation funds and provided the local 20-25 percent match from local capital funds.

For planning and installation of gateway signs in neighborhoods, the city's Capital Program provides funding through budget line items initiated by the Commerce Department and Department of Streets. Funding goes to the PIDC, which has hired the FFA as a consultant.

INCREMENTAL/COMPREHENSIVE

There is an interesting mix of comprehensive and incremental aspects to the project. On the one hand, planning and design of the signage system can be seen as a comprehensive planning process; however, the system as designed is simple, flexible, and capable of being adapted and of evolving. The design was intended to be clear and simple, one that others might emulate, not a rigid system. Adaptability is important as the FFA and community groups look at how to extend the signage system to residential neighborhoods.

PRIVATE SECTOR INVOLVEMENT

As described above, the FFA, a wide range of local businesses and nonprofits, and the PIDC played key roles in the project.

IMPACT OF TECHNOLOGY

Signs were designed for durability and ease of repair. High-tech paint finishes came out of the National Aeronautics and Space Administration program and have held up very well.

Data on signage locations and the names of participating organizations are currently kept in conventional computer databases. The FFA sees this information as a logical candidate for a Geographic Information Systems application.

IMPACT OF MPO VOTING

Not applicable.

IMPACT OF MAJOR EVENTS

A new set of signs for historic areas was installed in time for the Republican National Convention in August 2000.

IMPACT OF POLITICS

Staff took the lead on this project. When the program was ready for implementation it was easy for the mayor and city council members to lend their support, because the program is very visible without a high price tag. The mayor cut the ribbon.
OUTREACH TO MINORITY/LOW-INCOME COMMUNITIES

In looking to place signs in various residential neighborhoods, the project is moving beyond cultural and shopping attractions into working class neighborhoods. From the Foundation's standpoint, moving into these neighborhoods helps to show that the importance of the built environment does not stop with major cultural destinations, but includes churches, synagogues, historic buildings, and other neighborhood-based institutions. These institutions are interested in participating both as a wayfinding aid and as an articulation of community pride.

CONCLUSIONS AND LESSONS LEARNED

- This project succeeded because it built a large and diverse constituency of destinations and other interested parties—a time-consuming but effective process. These stakeholders bought into the objective of reinventing Philadelphia as a tourist destination (not just a brief stopover between New York and Washington, D.C.). The stakeholders contributed to the development of a high-quality product, gave support for city and foundation funding of design and construction, and fund sign maintenance. They also provide continuity of support through changing city administrations and changing budget conditions.
- A strong and effective relationship between the FFA and the Streets Department was also a key to success.
- Another key to success has been the simple, flexible, and adaptable design of the signage system, which can now be adapted for neighborhood contexts.
- The project is notable for being initiated by a non-profit group, yet city agencies became integrally involved with funding and implementation. The city's responsiveness to an outside initiative was critical to project success.

Woodward Avenue Heritage Route (Detroit area)

NATURE OF PROJECT

Corridor revitalization, historic preservation, roadway improvements

AGENCIES

- Wayne County
- Oakland County
- Eleven cities spanning the corridor from Detroit to Pontiac
- Michigan DOT (MDOT)
- Southeast Michigan Council of Governments (SEMCOG, the MPO for the area)
- Woodward Avenue Action Association (WAAA)
- Woodward Avenue Heritage Organization Wayne (WHOW)
- Greater Downtown Partnership

PROJECT DESCRIPTION

Woodward Avenue is a broad, four- to eight-lane boulevard stretching 28 miles from downtown Detroit to Pontiac, Michigan. Woodward Avenue adjoins Detroit's theater, art, and educational institutions; medical centers; new baseball and football parks; major office developments; and residential neighborhoods. The avenue encompasses both low-income areas of Detroit and wealthy suburban communities.

Woodward Avenue is the subject of several overlapping projects and organizing efforts that include

- Designation of a Woodward Avenue Heritage Route by MDOT, dedicated in July 1998.
- Designation of an Automobile National Heritage Area by the National Park Service.
- Formation of the Woodward Avenue Action Association (WAAA), a nonprofit group formed by communities in Oakland County.
- Formation of the Woodward Avenue Heritage Organization Wayne (WHOW), by Detroit and Highland Park, the two cities in Wayne County traversed by Woodward Avenue.
- Three blocks of Woodward Avenue in downtown Detroit have obtained National Historic designation, making property owners eligible for tax credits. Tax credits are being used for a large loft conversion in one building in this area.
- The Greater Downtown Partnership is formulating reinvestment strategies for a 5-square-mile area in downtown that includes Woodward Avenue to promote economic revitalization.

Goals of these various projects include economic development and revitalization, historic preservation, tourism development, and roadway improvements such as median improvements and installation of historic lighting fixtures.


- Local support—applications must include resolutions of support from county and local governments with jurisdiction in the area and show evidence of support from landowners and constituent groups.
- Management plan—provide a plan for the protection, preservation, and enhancement of the resources along the route.
• Logical section—the highway must have a logical beginning and end to its Heritage Route section.

Eight Heritage Routes have been designated in Michigan and nine others are in the application or review stages.

The Southeast Michigan Council of Governments (SEMCOG) submitted the Woodward Avenue Heritage Route application on behalf of Oakland and Wayne counties. The application specifically identified a Management Team and an organizational structure that would guide future work. The Management Team consists of an equal number of representatives from Oakland and Wayne counties. These representatives are drawn from two nonprofit groups, WAAA and WHOW. WAAA represents communities in Oakland County along Woodward Avenue; WHOW represents communities in Wayne County along the corridor. The Woodward Avenue Historic Route steering committee consists of representatives from Wayne and Oakland counties, WAAA, and WHOW.

The Heritage Route application included an inventory of cultural, historic, and educational resources on Woodward Avenue. The first step after designation has been to conduct a marketing study that will serve as the basis for further action.

Designation as a Heritage Route opens the door to additional funding sources as described below. It also institutes formal coordination between MDOT and the local Heritage Route sponsor. The local sponsor is kept abreast of MDOT activities and can apply for separate funding to add lighting upgrades or additional maintenance, for example, to highway improvement projects. In this way, MDOT can design highway projects on the Heritage Route for aesthetics in addition to the traditional criteria of utility, economy, and safety.

The multifaceted nature of Woodward Avenue revitalization has the benefit of pulling in a wide variety of different interests and constituents. These include

• Historical preservation,
• Auto heritage,
• Walkable city (Birmingham),
• Educational community and museums,
• Churches of historical significance,
• Sports (new football and baseball parks), and
• Attractive restaurants and ambience (e.g., attracts conventioners from downtown).

AGENCY ROLES AND RELATIONSHIPS

Wayne and Oakland counties provide staffing and coordination.

SEMCOG plays a key role in bringing together the two counties and acting as a neutral facilitator of coordination between Oakland and Wayne counties and the municipalities within each county. SEMCOG also administers the grants and acts as the facilitator providing support in the preparation of applications for funding, the quarterly Management Team meetings, and liaison with MDOT and FHWA.

Representatives of Wayne and Oakland counties; municipalities, businesses and nonprofit organizations along Woodward; SEMCOG; and the Greater Downtown Partnership participate in various ways in WAAA, WHO, and the Woodward Avenue Heritage Route steering committee and management group. Membership of these governmental and private entities overlaps in the different organizations. Thus, although there are formal structures and memberships, in significant part, relationships have been characterized by sustained, informal coordination, and cooperation.

GENESIS

There were several “beginnings” to the Woodward Avenue Heritage Route designation. One beginning was the city of Royal Oak approaching Oakland County for design assistance along a 2-mile stretch of the road. Oakland County planning staff responded that the county would consider the request if the communities north and south of Royal Oak were also actively involved in the corridor planning. That response led to participation by five cities in Oakland County and 2½ years of professional work by the county. Each municipality sent two representatives to the steering committee, generally including one from the city government and one from the private sector, such as bankers, hospital executives, and small business people from the corridor.

Two actions came out of the initial Oakland County planning study. The first was recognition that the houses on Woodward Avenue needed to be renumbered. The numbering system began anew in each community, producing numerous duplicate addresses that caused confusion for both businesses and residents. The need to renumber the street led to the involvement of municipalities north of the original five communities. Renumbering also served to produce a tangible early accomplishment. In addition to the renumbering, parts of the road that had previously been given a different name were renamed Woodward Avenue, producing a consistency in both street name and numbering for the entire road.

Second, the study led to the creation of the WAAA for the purpose of applying for the Heritage Route designation. Formation of the WAAA required that each community commit staffing and become dues-paying members.
The second beginning was a public-private undertaking to restore 8 Mile Road, which is the east-west dividing line between Wayne and Oakland counties. Both counties saw that effort as a success and commended to them the idea of working together to improve Woodward Avenue.

Thus, as the WAAA began to develop a Heritage Route application, staff in both Wayne and Oakland counties looked toward including all of Woodward Avenue in the application. Interestingly, planning staff from both counties describe themselves as initiating the meetings that led to the Heritage Route application. MDOT and SEMCOG also wanted to make sure that the Heritage Route project was developed as one coordinated project along the entire corridor.

In 1997, Oakland and Wayne county planning staff approached SEMCOG to be the facilitator of the project, recognizing that SEMCOG could provide the “neutral” foundation for the project. After preliminary discussions, Wayne County and the cities of Detroit and Highland Park elected to form a sister nonprofit (WHO). WHO is currently being organized as a 501(c)4 nonprofit. The WHO Board is composed of four representatives from Detroit, two from Highland Park, and two from Wayne County.

Planning staff view this structure as creating parity and balance in the relationship between Wayne and Oakland counties. A structure with two nonprofits is seen as actually a simpler organizational approach that reflects the different character of the corridor in the two counties and permits each nonprofit to focus on organizing the municipalities within their respective county.

FUNDING

Most of the funding for this project has been in the form of in-kind services from Wayne and Oakland counties, the various municipalities and the private sector. The Oakland County Planning Department, in particular, has allocated extensive staff time to this project.

The current marketing study is funded by a $40,000 grant from the National Scenic Byways Program, with $10,000 in a local in-kind match. The Woodward Avenue Heritage Route steering committee has applied for a $300,000 second phase grant to implement the marketing plan.

Additional funding may be available from a variety of sources. The project can apply for “enhancement funds” in the Surface Transportation Program. Under the federal transportation (TEA-21) act, 10 percent of Surface Transportation Program funds are allocated to enhancement projects. Projects on Heritage Routes receive additional scoring points in the MDOT ratings process.

Heritage Route designation and the other coordinated revitalization efforts also create the possibility of funding from memberships, corporate donations for events and partnerships, and other grant applications.

INCREMENTAL/COMPREHENSIVE

The process leading up to Heritage Route designation occurred incrementally, starting with the Oakland County planning study for five communities in the southern part of the county and culminating with involvement from the counties and municipalities along the corridor as well as private sector membership.

Improvements to the corridor involve both comprehensive and incremental approaches. The Heritage Route application required a comprehensive inventory of assets along the road. The marketing study is also comprehensive in nature. Improvements, however, occur incrementally as funding becomes available. There is also ongoing private investment.

PRIVATE SECTOR INVOLVEMENT

Private sector support and involvement has been a key part of the process throughout. Private sector participants include businesses and nonprofit cultural and educational organizations on or near Woodward Avenue and the Greater Downtown Partnership.

IMPACT OF TECHNOLOGY

Wayne County is working on an inventory of significant locations along the corridor. This information may become accessible by means of the Internet.

Bus rapid transit technology is also being studied for improving Woodward as a transportation system for tourists and visitors (separate from the Heritage project).

One participant mentioned email as an important new technology that facilitated coordination efforts.

IMPACT OF MPO VOTING

The allocation of votes on the board was not critical to SEMCOG acting as the grant recipient or playing a facilitative role.

IMPACT OF MAJOR EVENTS

Woodward Avenue revitalization will help to build up special events on the corridor, which include the annual...
Thanksgiving Day parade. The 300th anniversary of the founding of Detroit was mentioned from the beginning as a special event for which to prepare.

**IMPACT OF POLITICS**

One of the major political hurdles was overcoming years of distrust between Wayne and Oakland counties. The distrust mirrors differences in politics (Wayne County is Democratic and Oakland County is Republican), differences in the character of the corridor in the two counties, and differences in economic well being. Participants remark that overcoming years of distrust has been a critical and remarkable aspect of the project. This history has been surmounted by a combination of the following steps and factors:

- Focus on a corridor characterized by shared interests.
- Opportunity for funding with designation as a Heritage Route.
- A warming in the political climate between Wayne and Oakland counties, in particular, the successful experience among three counties on the 8 Mile Road corridor.
- County planning staff recognizing that the counties have shared interests and that Detroit is at the heart of the metropolitan area, and working to bridge the differences.
- Artful structuring of the Heritage Route governing structure in two nonprofits, each with carefully balanced memberships.

**OUTREACH TO MINORITY/LOW-INCOME COMMUNITIES**

Participation has included low-income communities in Wayne County.

**CONCLUSIONS**

- Communities with very different characteristics are able to work together when they recognize that they share common goals and the politics are dealt with up front.
- A linear community that traverses numerous jurisdictions can be used as a uniting element to bring various communities together.
- The Heritage Route program can be used to focus investment of federal, local, and private dollars in a single corridor. Although projects proceed individually, each reinforces the others, creating a concentrated impact (at least this is the plan). It is also hoped that government investment will spur private investment in landscaping and historic buildings.
- A strong, shared vision of the needs and possibilities for Woodward Avenue has played a vital role in corridor planning and improvements. The various governmental and private sector entities see the various projects as reinforcing each other and as part of a common whole. Coordination is facilitated because the same people are connected through various organizations.
- The Heritage Route program's requirement that each municipality and county adopt a resolution of support was helpful in overcoming distrust between the different communities. Each community realized that it would not be held responsible for anything without its consent.
- A number of other factors are also helping old animosities melt away. These include the growing economy, which is spurring some private investment in the Detroit section of the corridor; a changing economy with more emphasis on travel and tourism; and an increased recognition that the different communities are each strengthened by acting together.
- Several practical steps facilitated WAAA's development. These included regular monthly early morning breakfast meetings of the steering committee, and solving a practical widely recognized problem—duplicate house numbers—in the early going.
- Some participants feel that low public expectations were ironically helpful because “anything we do is an improvement.” Untapped cultural and historical resources provide much potential for improvements.
## APPENDIX E
### Project List

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<thead>
<tr>
<th>Submitted by</th>
<th>Project No.</th>
<th>Project Description</th>
<th>City Transportation Agency and/or Other City Agency</th>
<th>Non-Transportation City Agency</th>
<th>County</th>
<th>State DOT</th>
<th>MPO</th>
<th>Transit Agency</th>
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<td>Chicago</td>
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<td>City/state/federal legislative agenda</td>
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<td>Texas DOT</td>
<td>23</td>
<td>Representative to MPO surface transportation technical committee</td>
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<td>Administer and manage PT-112 program. Allows the opportunity for input in the development of mission/vision statements and overall MPO procedures</td>
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<td>Federal-aid funding sharing arrangements in particular the 20% in-kind match for the PT-112 and FTA 5303 funds</td>
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<td>(agencies not indicated)</td>
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<td>26</td>
<td>Representative on major investment studies committees</td>
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<td>Representative on RFPs on planning studies</td>
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<td>Freeway service patrol</td>
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<td>Muni and also BART and Golden Gate Transit, San Francisco Giants</td>
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<td>Municipal Railroad</td>
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<td>Public transit to San Francisco Giants PacBell Park</td>
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<td>Bay Area transportation blueprint for the 21st century</td>
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<td>All Bay Area counties, cities and transit operators</td>
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<td>Downtown community development sidewalk project</td>
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<td>Local agencies</td>
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<td>Access to the region's core</td>
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<td>Pilot sustainable development studies</td>
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<td>County, municipalities</td>
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<td>Bronx arterial needs study—public outreach</td>
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<td>Household interview survey</td>
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<td>ITS architecture development initiative</td>
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<td>Interstate Land Management Corp. (management of land beneath and around I-95)</td>
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<td>Operation Crosswalk pedestrian safety campaign</td>
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1 State Environmental Protection Division, Chamber of Commerce, Clean Air Campaign, Regional Business Coalition, TMAs.
2 U.S. EPA, FHWA, Georgia EPD, Georgia Building Authority, Clean Air Campaign, Chamber of Commerce, TMAs, Regional Business Coalition.
3 FHWA, Georgia EPD, GRTA, Clean Air Campaign, Chamber of Commerce, TMAs, Regional Business Coalition, American Lung Association of Georgia, Partnership for a Smog-Free Georgia, Southern Coalition for Advanced Transportation.

Note: TMA = transportation management area; GRTA = Georgia Regional Transportation Agency; EPD = Environmental Protection Department; DPW = Department of Public Works; ITS = intelligent transportation systems; DEP = Department of Environmental Protection; MAPC = Metropolitan Area Planning Council; DOER = Division of Energy Resources; RTP = Regional Transportation Plan; COG = council of governments; EPA = Illinois Environmental Protection Agency; NPC = Northeastern Illinois Planning Commission; MPC = Metropolitan Planning Council; RFP = request for proposal; MTC = Metropolitan Transportation Commission; PMS = pavement management system; HUD = (Department of) Housing and Urban Development.
THE TRANSPORTATION RESEARCH BOARD is a unit of the National Research Council, a private, nonprofit institution that provides independent advice on scientific and technical issues under a congressional charter. The Research Council is the principal operating arm of the National Academy of Sciences and the National Academy of Engineering.

The mission of the Transportation Research Board is to promote innovation and progress in transportation by stimulating and conducting research, facilitating the dissemination of information, and encouraging the implementation of research findings. The Board's varied activities annually draw on approximately 4,000 engineers, scientists, and other transportation researchers and practitioners from the public and private sectors and academia, all of whom contribute their expertise in the public interest. The program is supported by state transportation departments, federal agencies including the component administrations of the U.S. Department of Transportation, and other organizations and individuals interested in the development of transportation.

The National Academy of Sciences is a nonprofit, self-perpetuating society of distinguished scholars engaged in scientific and engineering research, dedicated to the furtherance of science and technology and to their use for the general welfare. Upon the authority of the charter granted to it by the Congress in 1863, the Academy has a mandate that requires it to advise the federal government on scientific and technical matters. Dr. Bruce Alberts is president of the National Academy of Sciences.

The National Academy of Engineering was established in 1964, under the charter of the National Academy of Sciences, as a parallel organization of outstanding engineers. It is autonomous in its administration and in the selection of its members, sharing with the National Academy of Sciences the responsibility for advising the federal government. The National Academy of Engineering also sponsors engineering programs aimed at meeting national needs, encouraging education and research, and recognizes the superior achievements of engineers. Dr. William A. Wulf is president of the National Academy of Engineering.

The Institute of Medicine was established in 1970 by the National Academy of Sciences to secure the services of eminent members of appropriate professions in the examination of policy matters pertaining to the health of the public. The Institute acts under the responsibility given to the National Academy of Sciences by its congressional charter to be an adviser to the federal government and, upon its own initiative, to identify issues of medical care, research, and education. Dr. Kenneth I. Shine is president of the Institute of Medicine.

The National Research Council was organized by the National Academy of Sciences in 1916 to associate the broad community of science and technology with the Academy's purposes of furthering knowledge and advising the federal government. Functioning in accordance with general policies determined by the Academy, the Council has become the principal operating agency of both the National Academy of Sciences and the National Academy of Engineering in providing services to the government, the public, and the scientific and engineering communities. The Council is administered jointly by both Academies and the Institute of Medicine. Dr. Bruce Alberts and Dr. William A. Wulf are chairman and vice chairman, respectively, of the National Research Council.