

5. ATTRIBUTES THAT ENHANCE LOCAL ISTEA IMPLEMENTATION

It is extremely important that a local jurisdiction tailor intermodal planning components to suit its individual needs. The details cannot be prescribed; planners must adapt to changing circumstances at the federal, state, regional, and local levels. The next transportation reauthorization legislation (called next-TEA by some) will influence the future decision-making context, which, in turn, will affect the local implementation process. Environmental conditions, such as land use patterns, air quality, and historical transportation trends, must all be taken into consideration in revising the local planning process.

During the research, successful local intermodal planning practices appeared to share the following five key attributes or planning components:

- Establishing a common vision,
- Generating community support,
- Pursuing funds to implement priority projects,
- Developing enabling organization(s) to meet local needs, and
- Creating system performance measures that clearly relate to market demands.

The three implementation forums conducted in Albuquerque, New Mexico; Austin, Texas; and Queens, New York; as well as the national survey and literature search, pointed to many of the attributes that can enhance local intermodal planning. Table 5-1 summarizes the objectives of each implementation forum, its focus, barriers to implementation, action plan initiatives, a progress report on implementation efforts, and a review of the driving forces of change. Detailed descriptions of the implementation forums are included as Appendix F.

In Chapter 4, the national survey findings pointed to leadership, improved education about ISTEA, adequate funding, and building community support as the primary themes for improving the intermodal planning process. This chapter synthesizes the results of local efforts to improve local ISTEA implementation. The lessons learned from the implementation forums are supplemented with information garnered from the literature review, the stakeholder interviews, and the national survey.

A COMMON VISION

Prior to the Austin-San Antonio implementation forum, an elected official described the need for a common vision, “If stakeholders aren’t involved in pulling together toward a common goal, transportation planning will continue to be splintered, fragmented and only partially and occasionally successful.”

A basic premise of intermodal planning is choice, where transportation options are provided by competing modes, independently or in combination. Choice also means that decision makers need to consider alternative systems to address transportation needs before investing in infrastructure. To be successful, the local intermodal planning process needs to provide for a broad array of modal options in its visioning process.

TABLE 5-1
SUMMARY OF IMPLEMENTATION FORUMS

	Austin-San Antonio Corridor	Queens, New York	Albuquerque, New Mexico
Forum Objective	Develop intermodal planning process model for Austin-San Antonio corridor.	Develop action plan to move the Sunnyside Yard intermodal project toward active planning and decision-making.	Develop initiatives that improve intermodalism in the Albuquerque metropolitan area.
Focus	<ul style="list-style-type: none"> • Re-use or joint use of existing freight corridor, including commuter rail. • Potential for relocating freight traffic to new intermodal corridor: SH 130. 	<ul style="list-style-type: none"> • Transportation potential of the Sunnyside Yard. • Potential for integrating transportation and land use planning. • Overcoming jurisdictional barriers. 	<ul style="list-style-type: none"> • Opportunity exists for managing future development. • What are the key elements of an intermodal plan?
Key Facts	<ul style="list-style-type: none"> • 80-mile corridor. • 5% annual pop. growth in Austin. • NAFTA has increased rail traffic 6-8% annually. • Union Pacific single track along corridor nearing capacity. 	<ul style="list-style-type: none"> • Sunnyside Yard located in Long Island City, a growing commercial area, in Queens Borough of New York City. • Sunnyside Yard is 150 acres of below-grade railroad tracks and vacant land--used by all of the New York region's commuter railroads except Metro-North. • Intermodal facility to relieve overcrowding at Manhattan's Penn Station first proposed in 1929 Regional Plan. 	<ul style="list-style-type: none"> • Significant high-tech economic development. • Relatively low existing congestion except the Rio Grande bridge crossings and intersection of two interstate highways. • Non-attainment area for carbon monoxide and "brown clouds" during winter months.
Historical Intermodal Planning Barriers	<ul style="list-style-type: none"> • Insufficient interjurisdictional communication. • Union Pacific not part of planning process. • Insufficient corridor planning leadership. • Corridor issues beyond traditional planning boundaries. 	<ul style="list-style-type: none"> • Lack of definition and consensus regarding components of Sunnyside Yard project. • Until recently, a lack of leadership within Queens and Long Island City to advance the project. • No active external stakeholder support identified involving New York City officials, state officials, and particularly federal officials. • The multiplicity of governmental agencies involved and the lack of clear roles or responsibilities. 	<ul style="list-style-type: none"> • Until recently, regional leadership has not promoted intermodal thinking. • Very limited linkage between land use and transportation decisions. • Highway emphasis of traditional state DOT.

**TABLE 5-1
(Continued)**

	Austin-San Antonio Corridor	Queens, New York	Albuquerque, New Mexico
Action Plan Initiatives	<ul style="list-style-type: none"> Established vision, government structures, marketing, data collection, and funding work groups. New Austin-San Antonio Regional Transportation Task Force to coordinate ongoing effort. 	<ul style="list-style-type: none"> The scoping of the Sunnyside Yard project. Stakeholder action plan intended to identify potential stakeholders and to actively solicit project support. 	<ul style="list-style-type: none"> Develop and implement an intermodal plan to reduce commute trips by 10% to City and County government employees.
Related Efforts	<ul style="list-style-type: none"> MIS studies by TxDOT in the SH 130 corridor. MIS studies by the Austin San Antonio MPOs in the IH 35 corridor. 	<ul style="list-style-type: none"> MTA Long Island City. The evaluation of a competing intermodal facility, the East Side terminal in Manhattan. Access to the Region's Core Study. 	<ul style="list-style-type: none"> City of Albuquerque Transportation Evaluation Study to develop land use and transportation vision. City of Albuquerque light rail feasibility study. MPO strategic plan to enhance intermodal planning capabilities. Regional Transit Authority study by County of Bernalillo.
90-Day Progress	<ul style="list-style-type: none"> Plans for commuter rail demonstration tour. Commuter rail feasibility study outline. Plans for origin/destination study. 	<ul style="list-style-type: none"> Consultant study has developed list of feasible alternative transportation strategies, both operational and capital, for the Sunnyside Yard. Community meeting held to review alternatives. 	<ul style="list-style-type: none"> Detailed schedule for Civic Center commute alternatives implementation. Working papers on trip reduction options. Development of commuter survey.
Driving Forces of Change	<ul style="list-style-type: none"> Union Pacific's long-range freight needs. Collaborative efforts of new task force. TxDOT staff leadership. 	<ul style="list-style-type: none"> Queens Borough President has pushed for comprehensive review of alternatives in a timely manner. High costs of East Side terminal. 	<ul style="list-style-type: none"> Desire to maintain high quality of life. Mayor has embarked on several intermodal planning initiatives; City staff have played leadership roles. Strong interest in coordination of transportation/land use planning.

The research found that the primary means for evaluating transportation options occurs through the major investment study (MIS) process. Major investment studies are required when an agency identifies the potential need for both a major investment and federal funds. The primary purpose is to provide information about the likely impacts and consequences of alternative transportation investment strategies and to assist the MPO or state DOT in its decision-making process. Mr. James Van Loben Sels, the Director of Transportation at Caltrans in California, pointed to major investment studies as a driving force “pushing us towards a intermodal decision-making process.” During the interview, the research team discussed an example of an MIS process in the Altamont Pass area that bridges the San Francisco Bay Area and the Central Valley of California. The MIS process is the key forum for discussing and analyzing an array of modal options in the corridor. The MIS process is also considering future land use scenarios that are important to the intermodal planning process.

In addition to different modal options, local ISTEA implementation processes need to include land use and air quality considerations. Such a comprehensive visioning process is underway in the Albuquerque region. The City of Albuquerque recently retained a consultant to conduct a major land use and transportation evaluation study to address the long-term mobility and transportation needs of the City. The City initiated the study for to achieve the following objectives:

- Clearly define its sense of direction,
- Develop an integrated set of land use/transportation goals and policies, and
- Develop a strategic plan of action to implement a “place image” that will, it is to be hoped, receive consensus during the plan’s development.

As one of the first tasks, the consultant team developed a “place image” video highlighting how past land use and transportation decisions have shaped Albuquerque and what will happen if current trends continue.

The place image video was recently utilized to frame informed public involvement at a 1½-day town hall workshop co-sponsored by the City and Shared Vision, Inc., a non-profit community organization devoted to comprehensive planning. Panel discussions included presentations on land use and transportation connections, how different transportation alternatives have been developed, and how these alternatives have worked in other communities around the nation. During ½-day break-out sessions, citizens and community leaders were asked what they like about the existing physical form and what changes are anticipated. They were also asked what they like about other communities and what is suitable for implementation in Albuquerque.

The Wisconsin DOT (WisDOT) is taking proactive steps to incorporate local land use objectives into state transportation planning, and state transportation concerns into local land use planning. Recognizing that local resources are often quite constrained when dealing with the complexities of land use-transportation issues, WisDOT is planning to create a new state

grant program to help local governments develop transportation corridor management plans to deal effectively with actual or anticipated growth in their transportation corridors.(21)

Establishing broad goals helps to guide the local intermodal planning process. In the Albuquerque region, the Regional Transportation Plan has a broad goal of a 10% reduction in single occupant commuters by 2015 over what would be expected from current travel behavior patterns. Such goals can provide a focus for specific programs and policies united by a common vision.

The visioning process should provide significant public involvement and define issues clearly in the language of the public. The Capital District Transportation Committee (CDTC) in Albany, New York, reassessed its long-range transportation plan to incorporate the added flexibility and planning accountability features of ISTEA. CDTC devised New Visions, a long-range regional plan that looks forward 25 years. According to the senior planner at the agency, “The New Visions effort seeks to step back from incremental planning and asks more fundamental questions about the type of Capital District its residents wish to create, the role of transportation policy in shaping the future, and creative actions that can be taken.” To represent its many stakeholders, CDTC established nine task forces ranging from Arterial Corridor Management to Transit Futures with more than 100 committed business leaders, environmental advocates, freight operators and users, state and local government leaders, interested residents, and others. Each task force is expected to produce a clear statement of vision, explicit presentation of principles, and a set of actions for consideration in the New Visions plan.(22)

COMMUNITY SUPPORT

According to the research findings, gaining external support for intermodalism is a top priority for improving the intermodal planning process. Following the advice of a midwestern DOT representative that “the benefits of intermodal planning and decision-making must continually be discussed with local decision-makers” should help localities identify sources of support for the intermodal planning process. Several transit agencies reported that formal presentations to local jurisdictions were effective in ensuring that transit was considered in the transportation planning process.

Mobilizing local business leadership behind intermodal planning is another important source of support. Improving communication with the business community was high on the agenda for many MPO and state DOT stakeholders interviewed. However, most of the opportunities they identified for involving the business community in intermodal planning included only goods movement.

The national survey also identified opportunities for increased interaction with business interests at the regional level. Transit agencies believe there is significant importance and potential in mobilizing private sector interests to encourage intermodalism. Transit agencies said that employers should be involved in transit development.

Citizen and business interests can rally behind an intermodal plan if the planning process achieves a broad base of ownership. Members of the Santa Clara Valley Manufacturing Group were the leaders behind two sales tax increases in 1984 and 1992 that

funded an intermodal plan that has had a broad sense of ownership and support from citizens, elected officials, environmental groups and the business community of Santa Clara County, California.

Passed in 1992 with a 54% approval, Measure A included a broad multimodal package of transportation improvements such as a light rail network with connections to BART, a doubling of commuter rail service between San Jose and San Francisco, better access to 50,000 disabled residents, several major highway interchange improvements, widening of key highway links, and signal synchronization on eight County expressways. A recent state Supreme Court invalidated the sales tax increase, saying it was subject to the two-thirds vote requirement of Proposition 13. Although frustrated, the broad coalition that supported Measure A is redefining a course of action to at least partially achieve its intermodal planning vision.

Establishing ongoing mobilization forums is critical to sustaining community support for intermodalism. An important outcome of the Austin-San Antonio implementation forum was the formation of the Austin-San Antonio Regional Transportation Task Force. The task force includes the transit agencies and MPOs from both regions as well as Union Pacific, TxDOT (Texas Department of Transportation), the local community, Texas Transportation Institute, FHWA, and the Greater Austin-San Antonio Corridor Council charged with improving economic development along the corridor. The task force will serve as a forum for future intermodal planning efforts.

The Bannock Planning Organization of the Southeast Idaho Council of Governments (BPO) includes one-third of the Fort Hall Indian Reservation land and is a non-attainment area for PM-10. Because many transportation planning decisions will affect the reservation land, BPO personnel have taken steps to incorporate the region's Shoshone Bannock Indian tribes into the long-range transportation planning process. In order to better understand the Shoshone Bannock tribes' regional land use, transportation, and development objectives, BPO established the Program for Community Problem Solving as an ongoing forum for cross-cultural education and cooperative skills development. Efforts to date have included a cross-cultural workshop, a training session on collaborative planning, and a preliminary negotiation session. The collaborative planning efforts were sponsored by an FTA grant to the National Association of Regional Councils.(23)

The intermodal planning process often includes major long-range capital investments that are 10 to 20 years away from actual project development. Ownership in planning processes is often more effectively achieved when the process includes short-term achievable projects which engender a sense of accomplishment among the participants. In the Austin-San Antonio corridor, an important first achievement was the sponsorship of a demonstration commuter rail train hosted by Union Pacific. In Albuquerque, the short-term focus on reducing commute trips to the Civic Center area by 10% is a means of demonstrating that transportation goals can be achieved with concerted effort.

FUNDS TO IMPLEMENT PRIORITY PROJECTS

Developing a funding package to implement priority projects is critical to local ISTEA implementation. The ability to develop a significant local funding base is becoming increasingly important. The Metropolitan Transit Authority of Harris County (METRO) is actively involved in both transit and streets and roads planning and implementation. In late 1978, METRO was created by Houston area voters. METRO began operations on January 1, 1979, with the charge to find solutions to “congestion problems.” A 1% sales tax, which generates about \$250 million per year in revenues, supports METRO operations and has provided significant leverage in attracting federal funding for capital improvement projects. The local sales tax has enabled Houston METRO to develop a network of 122 bus routes with a fleet of 1,413 buses.

In partnership with the TxDOT, METRO has also developed a network of 63.6 miles of high-occupancy-vehicle lanes that operate in the peak period direction on five of the area’s extensive radial freeways. METRO’s road building role is unique among the country’s transit agencies. A 1988 vote to allocate 25% of the 1% sales tax to streets and roads was pivotal to the agency’s mobility management initiatives; the vote added traffic management and infrastructure improvements to the agency’s mission. METRO’s substantial local funding base has enabled it to become a transit industry leader in intermodal planning efforts.(24)

Regions that proactively identify new sources of funding will be better prepared for the future. The Indian Nations Councils of Governments (INCOG) in northeastern Oklahoma has developed a long-range transportation plan that includes a proposal for a county fuel tax to fund a “dynamic public transit plan.” (25) In the Albuquerque implementation forum, one of the priority intermodal planning issues identified was “how to address funding shortfalls.” There was consensus among the participants that there is a need to develop new funding mechanisms with more of an emphasis on private-public partnerships.

The local ISTEA implementation process should use local considerations in establishing equitable and objective project selection criteria. Application of selection criteria is normally a critical step in how available funds will be utilized. The North Central Texas Council of Governments (NCTCG), the MPO of the Dallas-Ft. Worth regions, utilized the 15 factors contained in the ISTEA legislation as “building blocks for the development of multimodal evaluation criteria.” (26) NCTCG added several regional goals to the factors and then submitted 21 criteria to its policy board and relevant committees. The MPO’s final evaluation criteria for the allocation of STP and FTA Urbanized Area Formula funds reflect regional priorities such as current and future cost-effectiveness, air quality, energy conservation, and social mobility goals. Acknowledging ISTEA’s requirements that transportation plans and improvement programs be fiscally constrained, the final criteria lend particular weight to a project’s local cost participation.

ENABLING ORGANIZATIONS

Clear delineation of organizational roles and responsibilities will enhance the intermodal planning process. At the Queens, New York, implementation forum, an

important barrier to local intermodal planning was the extensive number of governmental agencies that need to be involved in the planning and consideration of the Sunnyside Yard project. Many of the responsibilities of these agencies were vaguely defined. Participants at the implementation forum observed that understanding and navigating through this myriad of government agencies was partly responsible for the poor progress that this project has made over the years. The research team concluded that the resolution of such issues will be critical to successful implementation of the Sunnyside Yard project.

The development of a continuous partnership structure can go a long way towards advancing intermodal transportation. In the Austin-San Antonio corridor, the action plan includes efforts to find a formal mechanism to establish a long-term structure that incorporates intergovernmental decision making. The use of joint-powers authorities is often utilized to plan, implement, and operate interjurisdictional projects.

The enabling organization should include diverse interests. The Minnesota DOT introduced the concept of Area Transportation Partnerships as a means of involving diverse interests in transportation investment decisions at the regional or multi-county level. The partnership consists of local elected officials, local transportation planning representatives, state transportation officials, and concerned citizens. The typical Area Transportation Partnership represents a MnDOT District, one to three Regional Development Organizations, an MPO, and a special interest. The partnership includes local officials responsible for transit operations in urbanized, rural, and small urban areas. According to state DOT officials, the organizational structure of the Area Transportation Partnership has provided a planning “process (that) assures all eligible interest groups (have) access to planning and decision-making and fair evaluation of eligible proposals”.(27) MnDOT utilized conferences, advisory committees, and newsletters in its public involvement process to include diverse interests.(28)

Clear delineation of roles and responsibilities, an organizational structure that enhances decision making, and the inclusion of diverse interest will enable organizations to effectively implement an intermodal planning process.

PERFORMANCE MEASUREMENT

Several observers of the local ISTEA implementation process have concluded that one of the key characteristics of future intermodal transportation planning will be its response to market forces.(29) Local ISTEA implementation processes that clearly relate system performance measures to market demands will be responsive to changing local needs.

Traditional measures of performance (such as a level of services for highways or passengers per vehicle service hour for transit) only measure performance of that particular facility or service. Intermodal planning processes call for a more creative set of performance measures that incorporate user needs and market demands. A summary of research on mobility indexes is highlighted on the following page.

Summary of Research on Mobility Indexes

Recent research by Mazur and Meyer has summarized the attempt to use some form of mobility index in transportation planning:

“A mobility index would provide a means of assessing the ability of people or goods to move throughout a corridor or area in a quick, safe, efficient and reliable manner. Some areas have experimented with a mobility index of one form or another such as areawide level-of-service, the congestion severity index (CSI), the roadway congestion index (RCI), the transportation adequacy measure, and personal mobility index (Ewing, 1992). Other research in the area has resulted in development of countywide mobility index for assessing the economic development impacts of transportation (Eck, 1978). Additionally, Lomax has suggested use of a “speed of person-volume” and a “person-movement index” to evaluate the person-throughput in a corridor (Lomax 1990).” (30)

One example of a performance-based planning process that relates transportation system performance to market demands for development is in Montgomery County, Maryland, a suburb of Washington D.C. The County adopted a 1973 Public Facilities Ordinance to promote orderly growth. Before a development can be approved, the ordinance provides for a development review process that includes two different transportation performance tests. These two tests are as follows:

1. A review of predicted traffic volumes to a level of service for the entire area and
2. A local review that evaluates the development impact on local intersections.

Service levels incorporate transit service availability such that greater traffic congestion is allowed where greater transit availability provides an alternative mode of travel.

The County is divided into 22 policy areas and each policy area has one of six levels of service grouping (Group I—lowest transit availability to Group VI—subway and expanded bus service). An absolute ceiling of development units is set for those policy areas where existing and approved development exceed the level of development set by the County based on the public infrastructure to support this level.

Performance measurement and analysis efforts must also respond to stakeholder concerns. The public participation requirements of ISTEA argue for a performance monitoring system that provides regular feedback to a variety of interested parties. Creative uses of the media and Internet could provide useful information in a variety of accessible formats.

Table 5-2 includes a summary of attributes that enhance intermodal planning. Chapter 6 presents ten specific strategies that enhance the context in which local intermodal planning and policies can occur.

TABLE 5-2	
ATTRIBUTES THAT ENHANCE INTERMODAL PLANNING	
Visioning	<ul style="list-style-type: none"> • Provides for a broad array of modal options. • Establishes broad goals. • Promotes early up-front and continuing public outreach. • Includes land use and air quality considerations. • Defines issues clearly in the language of the public.
Support Community	<ul style="list-style-type: none"> • Identifies potential sources of support • Establishes ongoing mobilization forums. • Includes short-term achievable projects. • Achieves broad base of ownership.
Performance Measurement	<ul style="list-style-type: none"> • Clearly relates system performance measures to market demands. • Responds to stakeholder concerns.
Enabling Organization Development	<ul style="list-style-type: none"> • Resolves issues of authority and responsibility. • Establishes partnership structure. • Includes diverse interests. • Expands roles for existing organizations. • Facilitates action.
Funding	<ul style="list-style-type: none"> • Offers significant local funding base. • Proactively identifies new sources. • Prioritizes projects equitably and objectively in a modeneutral manner.

CHAPTER REFERENCES

21. Wisconsin Department of Transportation, *Translinks 21, A Multimodal Transportation Plan for Wisconsin's 21st Century, Executive Summary*. Madison, WI, (February 1995).
22. Armstrong, C.S., "Albany Sets the Pace of Today's Transportation Planning with an Integrated Approach that Produces Viable Solutions." *In the Spotlight: MPO Best Practices*, Association of Metropolitan Planning Organizations (1995).
23. Association of Metropolitan Planning Organizations, *In the Spotlight: MPO Best Practices* (1995).
24. Crain & Associates, Inc., *Strategies to Assist Local Transportation Agencies in Becoming Mobility Managers*. Transit Cooperative Research Program B-7, Interim Report. Publication forthcoming. (October 1995).
25. Association of Metropolitan Transportation Planning Organizations, *MPO Monitor: Best Practices in '95*. (Summer 1995).
26. U.S. Department of Transportation, *Intermodal Surface Transportation Efficiency Act, Flexible Funding Opportunities for Transportation Investments FY '95*. Washington, D.C. (March 1995) p. 9.
27. Lowe, R. and Bloom, J., "Minnesota's ISTEA Area Transportation Partnerships, a Sub-State, Multi-county Geographic Basis for Making Transportation Investment Decisions." Paper presented to the Transportation Research Board (January 1995).
28. Surface Transportation Policy Project, *ISTEA Year Three: A Special Report on the Implementation of the Intermodal Surface Transportation Efficiency Act of 1991*. Washington, D.C. (January 1994) p. 24.
29. Mazur, G.D. and Meyer, M.D., "Performance Based Transportation Planning: Converting Concept To Practice." Paper Presented to the 1995 Annual Meeting of the Transportation Research Board, Washington D.C. (January 1995).
30. Mazur, G.D. and Meyer, M.D., "Performance Based Transportation Planning: Converting Concept To Practice." Paper Presented to the 1995 Annual Meeting of the Transportation Research Board, Washington D.C. (January 1995) p. 4.

6. RECOMMENDED STRATEGIES

To implement ISTEA effectively, leaders at all levels in the public and private sectors must reshape the context of how transportation and land use problems are defined, options are developed, and solutions are selected. As shown in Figure 6-1, the following types of strategies shape decision making:

- *Structural* strategies focus on increased modal integration, define new agency visions or missions, and establish partnerships that strengthen regional constituencies.
- *Procedural* strategies eliminate regulatory discrepancies, provide intermodal funding incentives, and define mobility in long-range plans.
- *Leadership* strategies develop improved intermodal planning capabilities by providing education about intermodalism, communicating success stories, and broadening the selection criteria of senior transportation officials.

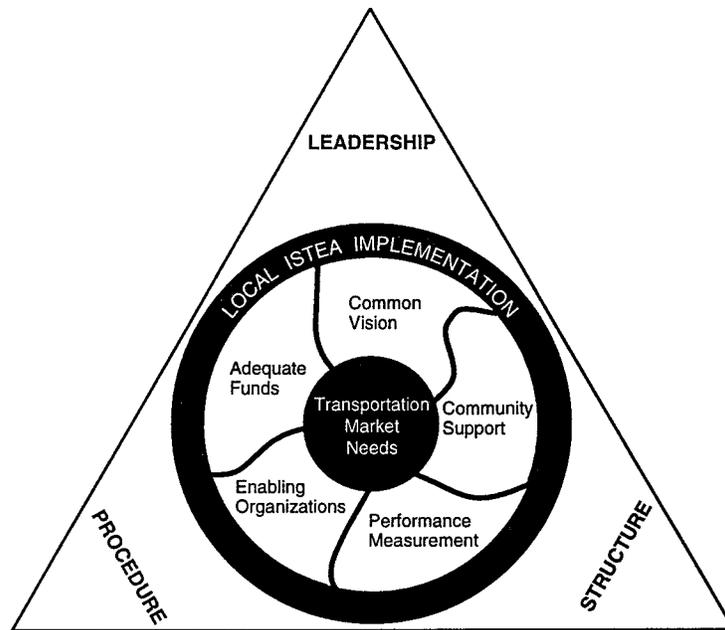
As illustrated in Figure 6-1, structure, procedure, and leadership promote or impede regional or local decision making. The ISTEA implementation regulations are a good example of a procedural decision-making context. The local ISTEA decision-making process should conform to the ISTEA implementation regulations, which require financially constrained, long-range plans. This procedural context shapes the drafting of regional transportation plans by MPOs.

The local ISTEA implementation process cannot be prescribed—it must be developed at the local level. The research found strategies that enhance the context in which implementation can occur. “Context-shaping” strategies recommended for use at the federal, state, and local level are provided in the rest of this section.

STRUCTURAL STRATEGIES

The separation of modes within state and federal transportation agencies, extensive modal orientation in the transportation industry, and reluctance to share power and authority have constrained the implementation of ISTEA. The challenge is to change institutional structures to enable the development of an intermodal transportation system. The first three strategies are designed to provide the framework for improved intermodal planning and decision making.

FIGURE 6-1
DECISION-MAKING CONTEXT OF THE
INTERMODAL PLANNING PROCESS



Strategy 1: Increase the modal integration of state and federal agencies to be consistent with the policies and programs contained in ISTEA.

The structure of transportation agencies, specifically at the federal and state levels, needs to complement the policies of intermodalism and mobility set forth in ISTEA. The different implementation strategies that will achieve modal integration range from full restructuring of transportation organizations to establishing modal teams that advocate modal interests. The U.S. DOT's current effort at merging the highway, transit, and railroad agencies into an Intermodal Transportation Administration is consistent with this strategy. This effort would be a significant step toward altering the federal transportation structure from one centered on modes to an organization whose efforts are focused on the nation's transportation system and the interactions among its many components.

A similar reorganization at the state and local levels would establish consistency in structure between transportation agencies. This would enhance communication between and decision making by federal and local governments. In many states, however, a wholesale restructuring of the state DOT may not be feasible or desirable. Functional integration of major transportation responsibilities could include the consolidation of transportation planning and programming, system design, and budgeting. For example, the Washington State DOT has centralized planning and programming without regard to mode. The state also used the concept of modal advocates to ensure that appropriate solutions are being considered during planning and that appropriate institutional structures are there.

The use of modal teams is another step toward modal integration. In Florida, increased functional integration has taken place through teams at the district level. Each team consists of a highway engineer, a transit official, and District Secretary. The Secretary of Transportation also encourages modal advocacy and encourages competition between modal interests, "The only time you don't see friction is when you don't see movement," he said.

STRUCTURAL STRATEGIES

Key Barriers

- Federal and state DOT structure separates modes
- Extensive modal orientation
- Reluctance to share power and authority
- Insufficient MPO track record and credibility

Recommended Strategies

Federal

- Increase modal integration

State

- Define a new vision and mission statement that focuses on market needs rather than modal solutions
- Increase modal integration

Regional (MPOs, transit agencies, local government)

- Develop partnerships to strengthen regional constituencies
- Broaden MPO policy boards to include all major transportation interests

This research identified different ways to achieve increased modal integration to achieve the objectives of ISTEA. The left side of Figure 6-2 illustrates the typical hierarchical institutional relationships prior to ISTEA. The institutional challenge is to restructure transportation organizations to increase modal integration, encourage collaboration, and foster shared responsibility.

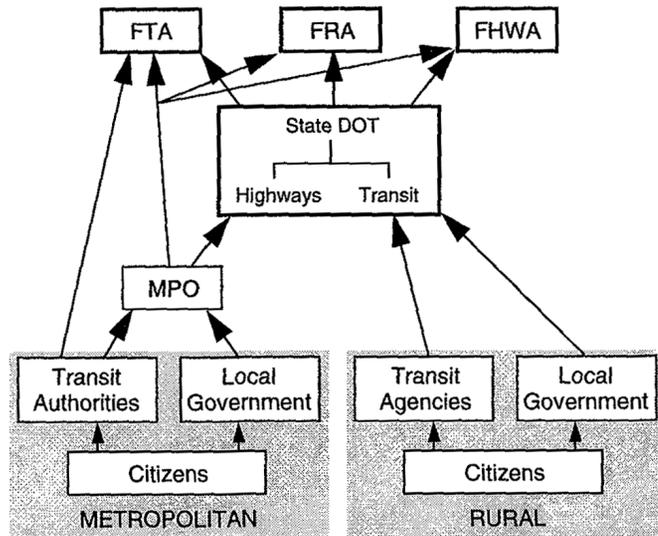
Strategy 2: Transportation agencies—particularly state DOTs, highway agencies, and transit authorities—should embrace intermodal planning in their vision or mission.

Many organizational problems that impede intermodal planning are rooted in agency vision and mission statements. Intermodal planning requires an organizational support structure, cooperation, and dialog among modal transportation agencies.

FIGURE 6-2

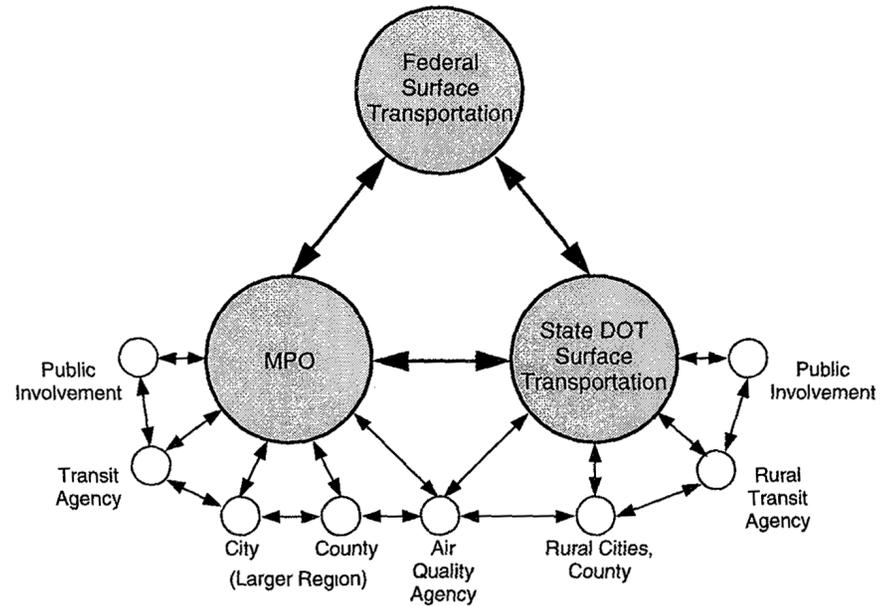
THE ISTEA INSTITUTIONAL CHALLENGES: MODAL INTEGRATION, COLLABORATION, AND SHARED RESPONSIBILITY

6-5



PRE-ISTEA (Typical)

- Structured
- Hierarchical
- Modally separated



POST-ISTEA (Conceptual)

- Collaborative
- Shared responsibility
- Modally integrated

Because an organization’s mission guides its actions and decision-making processes, the mission must reflect broader transportation responsibilities for all transportation agencies. While transportation organizations may continue to address modal objectives, they also should stress the need to actively pursue and participate in intermodal opportunities. In essence, the broader mission is to promote transportation that is safe and efficient and evaluate transportation options to find the best solutions to meet market needs—not fitting the solution to a particular mode.

The State of Oregon has developed an exemplary vision statement:

“The Oregon Transportation Plan envisions a transportation system that moves people and goods in a way that provides for livability and economic prosperity for all Oregonians. The system provides Oregonians with access to goods, services, jobs and recreation, while providing Oregon industry access to national and international resources and markets. To most effectively meet the state’s needs, the transportation system takes advantage of the inherent efficiencies of each transportation mode and encourages interconnection between modes.”

—Oregon Transportation Plan

Strategy 3: MPOs should establish or strengthen partnerships with agencies, local officials, businesses, and community representatives to strengthen support from their regional constituencies.

This strategy calls for an invigorated and innovative MPO structure to work creatively with its local partners and to build an ongoing planning and programming process that facilitates choice, connectivity, cooperation, and coordination.

Structurally, several MPOs have strengthened support from their regional constituencies by doing the following:

- Developing formal partnerships with governmental agencies in the region;
- Including key transportation personnel, such as the transit agency chairperson or general manager, on the MPO policy board;
- Involving the private sector and public interest groups, including non-profit organizations, on the MPO board and advisory committees;
- Establishing intergovernmental task forces to address specific corridor or regionwide needs; and
- Creating a special commission to implement the long-range transportation plan.

The San Francisco Bay Area Partnership is an example of building a local constituency to facilitate intermodalism. Larry Dahms, Executive Director of the Metropolitan Transportation Commission in the San Francisco Bay Area, described the forging of new formal partnerships this way: “Launched almost immediately on the heels of the President’s signing of ISTEA, the 36 governmental agencies comprising this ‘Partnership’ ...covers the spectrum of local to federal agencies-transportation and environment-and multiple modes. Its goals are improved mobility and cleaner air. The Partnership’s initial burst of energy was signaled by adoption of a regional Joint Urban Mobility Program, better known as ‘JUMP Start.’ It consists of 21 multi-agency projects designed to demonstrate an immediate ISTEA benefit—effective projects on the street and/or more understandable planning and decision processes.”(31)

The Ohio-Kentucky-Indiana Regional Council of Governments (OKI) has established two commissions to address two key issues that affect implementation of the long-range transportation plan. The Commission on Land Use focuses on bringing consistency to its long-range plan goals and local land use policies. Its recommendations will be the basis for new transportation-sensitive land use standards and will establish criteria for planning commissions and departments throughout the region. The Commission on Transportation Financing and Transit Institutional Restructuring is studying how to restructure existing transit service institutions and how to finance its plan’s implementation.(32)

PROCEDURAL STRATEGIES

Extensive regulatory requirements, complex and sometimes contradictory grant processes, and extensive reporting also can impede consideration and pursuit of intermodal transportation planning and projects. As one senior state DOT official stated, “the federal government must shift from their role as regulators to a role of a facilitator.” The next three strategies direct this shift.

Strategy 4: Review and streamline procedures and regulations among the surface transportation agencies of the U.S. DOT and other federal agencies. This review should also simplify the regulations and address inconsistencies in order to reduce the MPO and state DOT administrative burden and clarify responsibilities.

The FHWA recently produced a “Regulatory Reinvention Initiative,” which recommends measures to streamline procedures and eliminate regulations, where possible. The FTA recently revised its regulations in order to provide grantees increased flexibility in their procurement decisions. Further efforts to identify and eliminate inconsistencies in rules and regulations within the U.S. DOT itself and other federal agencies would be beneficial. For example, the U.S. DOT and other stakeholders report discrepancies in how alternatives are handled in regulations administered by the Environmental Protection Agency and the major investment study process administered by FHWA. Efforts to simplify ISTEA implementation regulations would benefit understaffed MPOs, state DOTs, and transit agencies.

PROCEDURAL STRATEGIES

Key Barriers

- Federal regulations overly extensive
- State laws limit funding flexibility
- Insufficient tools for comparing mobility projects
- Poor integration of land use and transportation decision making

Recommended Strategies

Federal

- Review and streamline laws, regulations, and guidelines to intermodalism and simplify requirements
- Consider incentives to pursue intermodal solutions
- Develop analytical framework for comparing intermodal solutions

State

- Consider incentives to pursue intermodal solutions
- Define mobility measures in long-range plans
- Develop project selection criteria and procedures that reflect community goals.

Regional (MPO, transit agency, local government)

- Define mobility measures in long-range plan
- Facilitate external support and interest in intermodal approaches
- Develop project selection criteria and procedures that reflect community goals

Strategy 5: Consider funding incentives that promote intermodal planning to enhance the willingness with which state, regional, and local transportation agencies view and pursue intermodal approaches to mobility improvements.

This strategy suggests that intermodal planning and resulting projects receive special promotion and attention. For example, in the recent past, the Interstate Transfer Program provided an opportunity to transfer interstate highway funds to transit uses, and an 85 percent federal match provided an incentive over the standard 80 percent federal transit match.

Several metropolitan areas took advantage of the program. Another example is the promotion and attention that privatization efforts received in the 1980s.

Another incentive would be to amend project selection criteria to give greater weight to projects resulting from effective intermodal planning. Several MPO stakeholders mentioned this strategy as one they had either adopted or were considering.

If federal and state agencies were to commit to a timely review and approval of intermodal projects, with a streamlined process for distributing funding in an expeditious fashion, this would provide an additional incentive.

Strategy 6: State, MPO, and transit agencies should define “mobility” and develop measures that reflect mobility in their long-range transportation plans based upon the needs of the jurisdiction.

A strategy to define mobility is believed to be best implemented by transportation planners and decision makers at the state, regional, and local levels. In this way, mobility can be defined in response to local needs. Planners should assess a project on its quantitative value but also should consider a project’s qualitative impact on the customers that it intends to serve—whether they are commuters, business sector representatives, or other types of traveler.

In *NCHRP Synthesis of Highway Practice 201: Multimodal Evaluation of Passenger Transportation*, Dr. Scott Rutherford states that “A multimodal measure of mobility should be developed to compare effectiveness across modes. This measure should not only reflect mobility implications of highway and transit improvements, but also demand management, land use forms, and nonmotorized travel modes.” The current intermodal planning research strongly supports this strategy.

Strategy 7: MPOs and state DOTs should develop project selection criteria and procedures that reflect state and community goals.

A critical final step in the transportation planning process is the selection of projects to be funded. Project selection criteria provide the framework for (1) taking community goals and priorities, articulated in the development of long-range plans, citizen outreach, and multi-agency coordination and (2) translating these into “on the ground” transportation expenditures. Unless the selection criteria and programming structure capture the community’s priorities as well as enable fair comparison of highway, transit, and alternative modes, traditional modal orientation will continue. Although ISTEA was passed several years ago, many agencies have not yet achieved intermodal objectives because their project programming criteria are inconsistent with intermodalism. As an East Coast Government and Community Affairs manager noted, “many jurisdictions lack a generally accepted means of defining goals that would provide a credible template on which to base project selection criteria.”

A wide array of project selection processes are being utilized that reflect community goals. Typical of efforts to achieve “mode-neutral” criteria is a process used by the North Front Range Transportation Air Quality Planning Council in Fort Collins, Colorado. The

MPO uses 11 criteria for each project and assigns a weight between 1 and 5 to reflect community values. According to local staff, the process has resulted in an excellent mix of highway capacity improvements, transit enhancements, and transportation demand management projects.

Other areas (such as the Rochester, New York, region) first determine how much funding should be made available to each mode and then rank the projects by mode. Several stakeholders during the research argued that the typical project selection scoring system does not adequately account for the local market niches for different modes and that a slightly higher score does not always mean that the higher scoring project is in the best interests of the region.

Regardless of the project selection procedure chosen, the research points to a clear need for developing a project programming structure tailored to local conditions. A western MPO executive director conveyed to the researchers how the MPO originally tried to adapt the project selection criteria from another region but found that their community goals required a totally different approach.

LEADERSHIP DEVELOPMENT STRATEGIES

Agency and elected officials who appreciate the “big picture” are skilled at helping communities address their problems, generate solutions, and follow through on actions that can make the largest contribution to success. Although planners and engineers, who want to evaluate a range of alternatives, and elected officials, who often need immediate solutions, will continue to need to negotiate, the following strategies will improve leadership development.

Strategy 8: Inform elected officials about the benefits and dividends of intermodal planning.

A broad-based effort to inform elected officials and organizational leaders about the benefits of intermodal transportation could initiate or stimulate cooperative efforts. More information could enhance the relationship of transportation planning, land use planning, and air quality as well as help elected officials suggest reasonable alternative solutions to local transportation problems.

LEADERSHIP DEVELOPMENT STRATEGIES

Key Barriers

- Insufficient provision of information on intermodal benefits
- Inadequate collaborative skills
- Insufficient staff for intermodal planning

Recommended Strategies

Federal

- Coordinate initiative to inform elected officials about intermodal planning
- Fund development of intermodal planning success stories

State

- Broaden hiring criteria for senior officials
- Modify incentive structures for senior transportation planning officials
- Communicate success stories (process and results)

Regional (MPO, transit agency, local government)

- Inform local elected officials of the benefits of intermodal planning
- Broaden the selection criteria for senior officials
- Modify incentive structures for hiring senior transportation planning officials
- Communicate success stories (process and results)

Specific actions proposed by the U.S. DOT and the U.S. Advisory Commission on Intergovernmental Relations and others include the following:

- Preparing a video on ISTEA planning for state, MPO, and local policy officials;
- Conducting seminars on ISTEA planning for local elected officials and senior staff for presentation at the National League of Cities, U.S. Conference of Mayors, National Association of Counties, National Conference of State Legislatures, Council of State Governments, and National Association of Regional Councils' annual meetings; and

- Getting on line with the Internet, satellite hook-ups, electronic bulletin boards, and interactive video conferencing.

The National Transit Institute is also developing a curriculum on intermodal planning with plans to conduct local intermodal planning seminars.

Before these ideas can be truly effective, MPO and state DOT staff need to understand how their elected officials learn about transportation issues. For example, staff may need to know what conferences officials attend, what magazines they read, and with whom they speak. With this information, staff can develop an affordable communications plan that sends a consistent message about the intermodal planning aspects of ISTEA.

Strategy 9: Communicate success stories to staff, elected officials, and community organizations.

Management literature shows that people in organizations communicate as much through stories as through facts and data. The strategy here would capitalize on this phenomenon by documenting several success stories surrounding intermodal planning and policies. Case studies of successful practices should document the steps people followed and the challenges they faced and how they overcame them, as well as the results achieved. Because intermodalism involves the use of informal and political processes as well as the traditional analytical ones, people need a road map of how to obtain support and commitment, perhaps more than they need a road map about how to analyze the options.

The Association of Metropolitan Planning Organizations has developed and published mini case studies of successful ISTEA implementation practices around the country, called *In the Spotlight: MPO Best Practices*. These publications are useful, although they do not document the institutional challenges and barriers that were overcome. These and other case studies should be widely disseminated in various media.

Strategy 10: Broaden the selection criteria for hiring senior transportation officials.

The new collaborative skills required to operate in a multimodal environment argue for redefining the job descriptions of senior managers in the transit industry, highway industry, MPOs, and state DOTs. There is a need to supplement the knowledge and expertise within a particular transportation function with criteria such as the following:

- Working effectively in a multimodal environment,
- Managing teams composed of diverse specialties,
- Communicating a shared vision,
- Working constructively with diverse stakeholder groups, and
- Helping diverse organizations reach agreement and take action (versus just studying the issue).

Although many of these are qualitative in nature and, therefore, hard to assess quickly, they will become increasingly important to success in the multimodal environment. The incentive structure and performance criteria for senior transportation planning officials should be revised to incorporate these new roles. Managers who do not look for opportunities in these areas may be left behind.

CHAPTER REFERENCES

31. U.S. Department of Transportation, *ISTEA Regional Roundtable Report and Action Plan, A Progress Report from Our Customers*. Washington, D.C. (March 1994).
32. Armstrong, C.S., “‘Big Picture’ Thinking, New Roles and Strengthened Partnerships are Keys to OKI’s Success,” *In the Spotlight: MPO Best Practices*, Association of Metropolitan Planning Organizations (1995).

7. CONCLUSIONS AND SUGGESTED RESEARCH

CONCLUSIONS

In the 4 years since ISTEA authorization, many regions and states have made significant strides to initiate and improve intermodal transportation planning. Transportation organizations have changed their structures and processes to collaborate successfully and share responsibilities. The research has shown numerous examples of successful intermodal planning practices, including the following:

- Forging of interagency partnerships;
- Expanding MPO policy board membership to reflect multimodal interests;
- Increasing cooperation among modes of transportation in long-range planning efforts;
- Developing intermodal transfer facilities with multi-agency participation;
- Considering an array of modal alternatives, especially tied to major investment study efforts; and
- Creating new project selection criteria to reflect intermodal thinking.

These intermodal planning practices, however, have not been widely adopted from a nationwide perspective.

Many states and regions have found that organizational, interjurisdictional, and resource barriers have impeded the progress of intermodal policies and planning. The research showed that the organizational legacies, regulatory processes, and culture of many federal, state, regional, and local transportation entities cause them to be ill-equipped to enact an intermodal vision.

While there has been some movement toward restructuring at the U.S. DOT, most state DOTs have maintained an organizational legacy of modal separation. While ISTEA shifted some federal transportation funding decisions from the state DOT to a shared responsibility between the state DOT and MPO, conflicts about authority and responsibility between the MPO and state DOT remain. Conflicting views on authority and responsibility, insufficient trust, and conflicting land use and transportation policies have restrained progress in intermodal planning in many jurisdictions. Finally, sufficient funding, education, staffing, and analytical tools are essential to the success of intermodal planning. A deficiency in any of these resources was identified as a significant barrier in many jurisdictions. These barriers have been restraining forces to achievement of several ISTEA institutional challenges, especially decentralization of decision making, broadening participation and collaboration during the planning process, and modal integration of transportation organizations.

Because of human nature and behavior, barriers can be minimized but restraining forces will always be present in the transportation planning process. The severity and pervasiveness of institutional barriers in a given state or region is dependent on an array of local land use and economic conditions, historical legacies of intermodal institutional relationships, and surface passenger transportation market conditions. The research indicates that even when significant barriers exist, driving forces can overpower restraining forces and

result in effective intermodal policies and planning practices. Greater leadership commitment, new regional constituencies, increased funding, and additional provision of information are the primary driving forces that can overcome existing barriers and continue the excellent progress that has been made toward achieving ISTEA's goals. The ability of key driving forces to overpower restraining forces is illustrated in Figure 7-1.

ISTEA policies have been working in many communities, regions, and states. There has been significant momentum toward improved intermodal planning practices. Given time and patience, driving forces of change in ISTEA will enable intermodal planning for the efficient movement of people in a growing number of communities. The result will be improved mobility for all citizens.

SUGGESTED FURTHER RESEARCH

The research effort pointed to four specific areas where further research would be valuable:

1. Development of case studies of successful intermodal planning practices.

Many of the stakeholders interviewed and the respondents to the national survey expressed the need for the development of case studies that document successful intermodal planning practices. The Association of Metropolitan Planning Organizations has developed and published mini case studies of successful ISTEA implementation practices around the country, called *In the Spotlight: MPO Best Practices*. These publications are useful, although they are typically limited to MPOs and do not document the institutional challenges and barriers that were overcome. Development of additional case studies that document how institutional barriers were addressed to implement successful intermodal planning practices would be a welcome addition to the transportation planning literature.

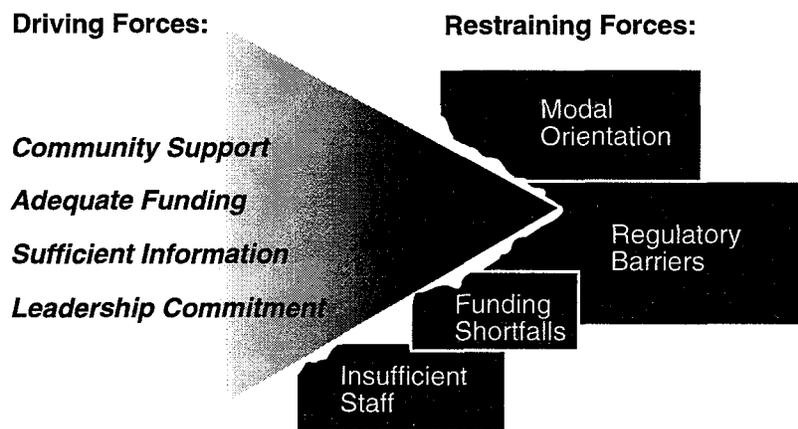
2. Research the effectiveness of different collaborative techniques that foster external support of intermodalism.

A key research finding was that gaining external support for intermodalism is the most critical prerequisite to sound intermodal planning and policies. Successful collaborative processes at the local level are key to such efforts. Research efforts that document the effectiveness of different collaborative tactics could lead to a published guidebook that local communities could utilize to foster increased levels of external support for intermodalism.

3. Conduct research to develop common measures of multimodal mobility.

State, MPO, and transit agencies should define "mobility" and develop measures that reflect mobility in their long-range transportation plans based upon the needs of the jurisdiction. The current research strongly supports Dr. Scott Rutherford's research recommendation that "A multimodal measure of mobility should be developed to compare effectiveness across modes. This measure should not only reflect mobility implications of highway and transit improvements, but also demand management, land use forms, and nonmotorized travel modes."

FIGURE 7-1
DRIVING FORCES CAN OVERPOWER RESTRAINING FORCES



APPENDIX A

**STAKEHOLDER INTERVIEW GUIDE
MPO, STATE DOT, TRANSIT GENERAL MANAGERS**

**TCRP H4C
INSTITUTIONAL BARRIERS TO INTERMODAL TRANSPORTATION POLICIES
AND PLANNING**

**INTERVIEW GUIDE
MPOs, STATE DOTs, TRANSIT GENERAL MANAGERS**

INTERVIEWEE _____

STATE _____

AGENCY _____

STAKEHOLDER TYPE _____

STUDY AND SURVEY PURPOSE - To be explained prior to each interview.

1. Crain & Associates is conducting a study under the Transit Cooperative Research Program (TCRP) that will identify strategies to overcome institutional barriers that hinder achievement of a national intermodal transportation system addressed in the ISTEA legislation.

This study will ultimately provide tested strategies to overcome or minimize the impact of the most pervasive barriers to intermodal planning and decision-making.

2. One of the stated objectives of ISTEA is to promote areawide and statewide planning for transportation improvements based on community and development needs, rather than plans being developed separately by modes (e.g. highway and transit).
3. This interview is intended to help us shape a nationwide survey regarding barriers to intermodal planning and decision making encountered by transportation and regional agencies that we will be conducted next month. These interviews will also be valuable in quantifying the pervasiveness of specific barriers and identifying key leverage points for overcoming institutional barriers to intermodal planning and decision making.
4. The collective responses to these interviews will be analyzed to identify the pervasiveness of barriers and strategies used to eliminate them.

GENERAL INTERVIEW GUIDE FOR SDOTs, MPOs, TRANSIT AGENCIES

PART I

Introduction Question

Would you describe significant impacts ISTEA has had in your area related to intermodal planning and decision-making?

(Areas to touch upon are funding changes, increases in transit projects, flexing of funds, more public involvement, greater awareness of intermodal issues or an increase in intermodal planning and intermodal projects.)

1. ORGANIZATIONAL CAPABILITIES

1-1. Since the inception of ISTEA, has your organization added staff or skills that enable your organization to plan projects effectively on an intermodal basis?

1-2. Has your MPO and State DOT developed new project selection criteria that rates proposed projects on the basis of mobility as opposed to mode?

If no, why not?

If yes, ask:

- Would you give a general description of this process?
- Who were the entities that supported this process?
- Who were the entities that did not support this process?
- How were their objections overcome?
- Please provide a copy of the evaluation form.

2. ORGANIZATIONAL STRUCTURE AND CULTURE

Ask everyone:

2-1. Since the passage of ISTEA, has your organization made changes to incorporate and stress awareness and benefits of intermodal planning?

2-2. Since ISTEA's passage, how would you describe the cooperation between modal agencies, SDOTs and MPOs in your area in regards to intermodal planning and decision making?

- If there is cooperation ask: In those instances when cooperation and coordination are apparent, what is the formula/impetus for this cooperation, who are the main participants?
- 2-3. Have you observed or experienced barriers to interagency cooperation regarding intermodal planning and decision making?
- What are these barriers, their causes, and how can their impact be lessened or eliminated?
- 2-4. Have you observed modal biases on the part of transportation stakeholders?
- If yes, ask: What stakeholders display this and under what circumstances do these modal biases arise?
- 2-5. Is there effective and continuous communication regarding project planning between transit agencies/planning agencies and highway agencies in your area?
- To what can you attribute this?
 - If barriers have been encountered, what are they, and how have they been dealt with?
- 2-6. Typically, within states, the highway agency is part of the State DOT and the transit agency is an independent authority. Do you think this affects intermodal planning, intermodal cooperation, and flexible funding decisions? How? If you feel this is a problem, how would you recommend solving it?
- 2-7. Can you identify other types of modal bias that you've observed or perceive exist that might inhibit intermodal planning and decision-making, and why do you believe each occurs?

FOR MPOs AND GENERAL MANAGERS ONLY:

- 2-8. Has the transit agency staff assumed a larger role in the MPO's technical process, such as evaluating potential projects, and assembling the TIP?

3. **INSTITUTIONAL INCENTIVE STRUCTURES & LEGAL REGULATORY FRAMEWORKS**

Ask everyone:

- 3-1. Have any new laws, regulations, Resolutions been proposed or passed by your state or regional entities pursuant to ISTEA that promote intermodal planning and decisions?

Please elaborate.

- 3-2. Does your state or region have any laws or regulations that prevent tax revenue from being expended on a particular mode of transportation such as transit or highways?
- 3-3. Has your state or region enacted any laws or regulations which have or which could impede implementation of ISTEA's intermodalism goals or have in place existing constitutional provisions, statutes, or regulations which have the effect of impeding ISTEA's intermodalism goals?
- 3-4. Can you identify any other institutional, legal, or regulatory aspects that could be acting as barriers to intermodalism in your area?

4. FINANCIAL RESOURCES

Ask everyone:

- 4-1. Has your state, region, locale exercised the flexible fund provisions in ISTEA?
 - If yes, for what purposes?
 - If no, why not?
- 4-2. Has your agency encountered barriers (e.g., modal bias) that prevent the use of flexible funding opportunities for transit projects or highway projects?

If yes, ask:

 - Please identify these barriers?
 - What strategies have you attempted to overcome these barriers? Which strategies were effective, and which ones were not?
 - What strategies would you envision would be effective? Who would the key stakeholders be in deciding upon flexible funding?
- 4-3. Are any future year projects being re-evaluated in an effort to provide flexible funds for transit and intermodal projects?
- 4-4. What effect does the appropriation level of STP, CMAQ and NHS funding for your area have on making intermodal decisions?
- 4-5. Are you aware of any other financial barriers that have been overcome or that might still impede intermodalism?

- 4-6. What effect does the funding appropriation level of STP and CMAQ funding for your area have on making intermodal decisions?
- 4-7. Are you aware of any other financial barriers that have been overcome or that might still impede intermodal decision making in your area?

5. **SUPPORT OF INTERMODAL PLANNING AND DECISION MAKING**

Ask of everyone:

- 5-1. Do you feel that within your transportation community, strategic goals that foster intermodal planning and policy development are defined? Please elaborate.
- Are there barriers that have impeded this from occurring, what are they, and how were they dealt with?
 - Do organizational mission statements support intermodalism? Do you think mission statements that support intermodalism would foster more intermodal planning, etc. (Esprit de Corps)
- 5-2. To what extent has state and regional politics in your area facilitated or impeded the implementation of ISTEA objectives and intermodal decision-making? Please elaborate.
- 5-3. Apart from transportation and planning agencies, which stakeholders are participating most actively in trying to influence intermodal transportation planning funding decisions in your region/state? Which are least involved?
- 5-4. If you could make one change that would improve your area's organizational capabilities to achieve ISTEA objectives, what would that be?
- 5-5. Do you have any other comments regarding intermodal planning, decision-making, and flexible funding that you would like to mention?

APPENDIX B
NET IMPRESSION[®] QUESTIONNAIRE

**TRANSPORTATION RESEARCH BOARD
INTERMODAL POLICIES & PLANNING**

This questionnaire asks about your experience and opinions on various aspects of intermodal transportation policies and planning since the passage of the Intermodal Surface Transportation Efficiency Act (ISTEA) in 1991. Intermodal planning is one of the stated objectives of ISTEA and is defined here as promoting areawide and statewide planning for transportation improvements based on community and development needs, rather than transportation plans being developed separately by mode. The survey effort is part of a study under the Transit Cooperative Research Program* that will develop strategies to overcome institutional barriers that hinder full achievement of intermodalism as envisioned by ISTEA. Individual survey responses will be kept confidential.

For the scaled questions, please indicate your rating by circling the number from 1 to 7 where 1 means “Needs Major Improvement” and 7 means “Excellent”. If you need more space for the write-in questions, please use additional sheets. Please answer all questions to the best of your ability.

Please return the completed questionnaire by Friday, February 10th, in the enclosed envelope to Crain & Associates, Inc., 120 Santa Margarita, Menlo Park, CA 94025-2725.

1. Leadership Support for Intermodalism. How well does the leadership in your jurisdiction perform in terms of fostering intermodal policies and planning?

	Needs Major Improvement					Excellent	
a. Visible leadership support for intermodal planning and decision-making.	1	2	3	4	5	6	7
b. Fostering a vision and goals that encompass intermodalism.	1	2	3	4	5	6	7
c. Encouraging communication among modes.	1	2	3	4	5	6	7
d. Encouraging communication among levels of government.	1	2	3	4	5	6	7
e. Willingness to experiment with new ideas and ways of thinking.	1	2	3	4	5	6	7
f. Making lower level staff aware of intermodalism guidelines and regulations.	1	2	3	4	5	6	7
g. Effectiveness in influencing external stakeholders.	1	2	3	4	5	6	7
h. Maintaining a long-term focus on transportation system needs.	1	2	3	4	5	6	7
i. MPOs and transit agencies: Visible leadership support for intermodal planning and decision-making at the state DOT.	1	2	3	4	5	6	7
j. Everything considered, how do you rate leadership effectiveness in the support of intermodalism?	1	2	3	4	5	6	7

What suggestions do you have for improving leadership support for intermodalism?

* TCRP studies are sponsored by the Federal Transit Administration and administered by the National Academy of Sciences, acting through the Transportation Research Board and through the Transit Development Corporation, Inc., of the American Public Transit Association.

(OVER)

2. Governmental Coordination and Communication In Support of Intermodalism. How is the communication within and between government agencies in your jurisdiction?

	Needs Major Improvement							Excellent
a. Responsiveness of federal agencies to provide intermodal planning support.	1	2	3	4	5	6	7	
b. Coordination between key state and local parties (MPOs, modal agencies, etc.).	1	2	3	4	5	6	7	
c. Cooperative spirit at the local level.	1	2	3	4	5	6	7	
d. Interlevel communications and cooperation within the state DOT.	1	2	3	4	5	6	7	
e. Continuing communication between TIP/STIP processes.	1	2	3	4	5	6	7	
f. Level of trust between the agencies involved with transportation planning.	1	2	3	4	5	6	7	
g. FTA receptivity towards facilitating intermodal plans.	1	2	3	4	5	6	7	
h. FHWA receptivity towards facilitating intermodal plans.	1	2	3	4	5	6	7	
i. Everything considered, how do you rate the overall effectiveness of coordination and communication regarding implementation of intermodalism?	1	2	3	4	5	6	7	

What suggestions do you have for improving governmental coordination and communication? _____

3. ISTEA Funding Provisions and Regulations. How do the various aspects of ISTEA funding and related regulations facilitate intermodalism in your jurisdiction?

a. Sufficient flexibility in federal resource allocation.	1	2	3	4	5	6	7	
b. State DOT support of MPO role in guiding the use of flexible funds for intermodal planning and projects.	1	2	3	4	5	6	7	
c. Consistency in project funding eligibility among federal agencies.	1	2	3	4	5	6	7	
d. Sufficient federal funding to support mobility projects.	1	2	3	4	5	6	7	
e. Adequacy of local funding to support mobility projects.	1	2	3	4	5	6	7	
f. Everything considered, how do you rate the overall effectiveness of funding provisions and regulations under ISTEA?	1	2	3	4	5	6	7	

What suggestions do you have for improving ISTEA funding provisions and regulations? _____

4. Gaining External Support for Intermodalism. How effective is your agency in generating awareness of the benefits of intermodal planning and mobilizing external support for intermodal objectives?

a. Promoting understanding of the links between transportation, land use, economy, and the environment.	1	2	3	4	5	6	7	
b. Mobilizing local <i>political</i> leadership for the intermodal planning concept.	1	2	3	4	5	6	7	
c. Mobilizing local <i>business</i> leadership behind intermodalism.	1	2	3	4	5	6	7	
d. Mobilizing <i>citizen</i> input on intermodal planning options.	1	2	3	4	5	6	7	
e. Building a constituency for the intermodal planning concept.	1	2	3	4	5	6	7	
f. Educating key parties about the intermodal planning concept.	1	2	3	4	5	6	7	
g. Everything considered, how do you rate the effectiveness of efforts to mobilize key political officials and other external stakeholders in support of intermodalism?	1	2	3	4	5	6	7	

What suggestions do you have for improving effectiveness in mobilizing support for intermodal planning and decision-making? _____

5. **Transportation Planning Processes.** How well does your planning process implement intermodal policies under ISTEA? If the statement is not applicable to your agency, please circle "NA".

	Needs Major Improvement							Excellent
a. Giving equal consideration to the full range of transportation alternatives.	1	2	3	4	5	6	7	NA
b. Adopting effective project selection criteria.	1	2	3	4	5	6	7	NA
c. Adequate planning and analysis tools to make intermodal decisions.	1	2	3	4	5	6	7	NA
d. Effectiveness in incorporating customer concerns into the planning process.	1	2	3	4	5	6	7	NA
e. Openness of planning processes to new <i>ideas</i> .	1	2	3	4	5	6	7	NA
f. Openness of planning processes to new <i>players</i> .	1	2	3	4	5	6	7	NA
g. Providing decision-makers with adequate information.	1	2	3	4	5	6	7	NA
h. Evaluating transportation plans for land use and air quality impacts.	1	2	3	4	5	6	7	NA
i. Everything considered, how effective are your current transportation planning processes in incorporating intermodalism?	1	2	3	4	5	6	7	NA

What improvements in your current transportation planning processes can you suggest that would foster intermodal decision-making?

6. **Intermodal Planning and Implementation Capabilities.** How are your agency's organizational structure, skill levels, and capabilities for implementing intermodal planning in your area of jurisdiction? If the statement is not applicable, please circle "NA".

	Needs Major Improvement							Excellent
a. Moving from philosophical support of intermodalism to an action plan.	1	2	3	4	5	6	7	NA
b. Ability to plan a transportation system aimed at improving the movement of people and goods as opposed to moving vehicles.	1	2	3	4	5	6	7	NA
c. Skills in managing public involvement.	1	2	3	4	5	6	7	NA
d. Skills in planning appropriate intermodal projects.	1	2	3	4	5	6	7	NA
e. Skill in recognizing local barriers and hurdles to intermodalism.	1	2	3	4	5	6	7	NA
f. Training for planning staff regarding the intermodal planning concept.	1	2	3	4	5	6	7	NA
g. Formal education of planning staff on intermodal planning opportunities.	1	2	3	4	5	6	7	NA
h. Amount of staff resources available for intermodal planning.	1	2	3	4	5	6	7	NA
i. Processes for resolving conflicts and disagreements.	1	2	3	4	5	6	7	NA
j. Clear delineation of roles and responsibilities for intermodal projects.	1	2	3	4	5	6	7	NA
k. Everything considered, how do you rate your organization's intermodal planning and implementation capabilities?	1	2	3	4	5	6	7	NA

What suggestions do you have for improving the planning and implementation capabilities of those agencies involved in the intermodal transportation planning process?

Considering all the factors listed above (intermodal planning and implementation capabilities, leadership support, transportation planning processes, governmental coordination and communication, ISTEA funding provisions and effectiveness in mobilizing key political officials and other stakeholders) how do you rate your agency's experience with intermodal planning under ISTEA?

	Needs Major Improvement							Excellent
	1	2	3	4	5	6	7	

(OVER)

8. **If you could make one change that would improve intermodal planning and decision-making under ISTEA, what would that be?** (Attach sheet as necessary)

9. **Describe the best example of intermodal planning in your area. What in your opinion are the reasons for its success?** (Attach sheet as necessary)

10. **Where do you work?** (Check only one)

- State DOT MPO
 Transit agency with ____ peak period buses/trains Other (please specify _____)

11. **What is your job title?** (Check only one for the person completing this questionnaire)

- Executive Director General Manager Secretary
 Deputy Director Director of Planning District Director/Manager
 Other (please specify): _____

12. **What city and state do you work in?** _____
City (optional) State

13. **Are you in an air quality non-attainment area?** Yes No

14. **MPOs and transit agencies: check all of the operating environments that apply to your jurisdiction:**

- Urban Suburban Rural

Thank you for your help!

Please return the questionnaire in the envelope provided.

(Crain & Associates, Inc. - 120 Santa Margarita Ave.; Menlo Park, CA 94025-2725)

APPENDIX C

NET IMPRESSION[®] SURVEY RESPONDENT PROFILE

APPENDIX C

NET IMPRESSION[®] SURVEY RESPONDENT PROFILE

A total of 421 valid questionnaires were tabulated. There were a total of 60 state DOT stakeholders, 181 MPO stakeholders, 160 transit agency stakeholders, and 20 stakeholders who listed themselves as a city, county, or Indian Reservation.

Table C-1 shows the distribution of respondents by state and stakeholder type. Overall, all 50 states and Washington D.C. are represented. By stakeholder group there are:

- 160 transit agency stakeholders representing 42 states
- 181 MPO stakeholders representing 43 states
- 60 state DOT stakeholders representing 39 states.

California had the most stakeholders represented with 34, followed by 24 for New York, 23 for Texas, and 20 each for Ohio and Florida.

Table C-2 shows the respondent job title by stakeholder type. A total of 36% of the questionnaires were completed by the chief executive of the agency, including the job titles of executive director, general manager, or secretary. Another 34% of the questionnaires were completed by the Director of Planning for the agency.

Table C-3 is a breakdown for the transit agency respondents and the relative size of the agency. About 36% of the transit agencies were small with less than 25 buses. About 31% of the transit agencies were medium-sized, with between 26 and 100 buses. Finally, 32% were large transit agencies with more than 100 buses and trains.

Table C-1

RESPONDENT STATE BY STAKEHOLDER TYPE

State	Stakeholder Type				Total Cases*
	State DOT	MPO	Transit Agency	Other	
Alaska	1				1
Alabama		3	1		4
Arkansas	1	4			5
Arizona	1	2	1	1	5
California	2	12	18	4	34
Colorado		3	5	1	7
Connecticut	1	1	2		4
District of Columbia			1		1
Delaware	2				2
Florida		14	6	1	20
Georgia		5	3	1	8
Hawaii	1		1		2
Iowa	1	1	6		8
Idaho	2	3	1		6
Illinois	2	5	5		12
Indiana	1	6	5	1	12
Kansas	1	3		1	5
Kentucky	2	2	1		5
Louisiana	1	1	2		4
Massachusetts	1	5	3		9
Maryland	1	1	1	2	5
Maine	1	4	1	1	7
Michigan	1	5	5		11
Minnesota			3		3

TABLE C-1
RESPONDENT STATE BY STAKEHOLDER TYPE
(Continued)

State	Stakeholder Type				Total Cases*
	State DOT	MPO	Transit Agency	Other	
Missouri	1	3	3	2	8
Mississippi	1	2			3
Montana	1	3	2		6
North Carolina	1	5	3	3	10
North Dakota	1	4	1		6
Nebraska	1			1	2
New Hampshire	1	2	1		4
New Jersey				1	1
New Mexico		3	2		5
Nevada	1	3	2	2	5
New York	3	11	6	4	24
Ohio	2	9	9		20
Oklahoma	1	3	1		5
Oregon	3	2	2		7
Pennsylvania		8	7	3	18
Rhode Island	1	1	1		3
South Carolina			1		1
South Dakota	1	1	1		3
Tennessee		2	4		6
Texas	4	12	6	2	23
Utah	1	1	1		3

TABLE C-1
RESPONDENT STATE BY STAKEHOLDER TYPE
(Continued)

State	Stakeholder Type				Total Cases*
	State DOT	MPO	Transit Agency	Other	
Virginia		5	8		13
Vermont	1		1		2
Washington	3	5	9	2	18
Wisconsin	1	5	6	2	13
West Virginia		1			1
Wyoming	1	1			2
Missing State Designation	7	9	12		28

*Rows do not add up to total cases due to multiple responses.

Table C-2

RESPONDENT JOB TITLE BY STAKEHOLDER TYPE

Job Title	Stakeholder Type				Total Cases*
	State DOT	MPO	Transit Agency	Other	
Executive Director	3	59	31	8	95
General Manager	1	2	49	2	52
Secretary	2				4
Deputy Director	2	10	11	2	24
Director of Planning	33	50	48	15	142
District Director/ Manager	2	1			3
Transportation Planner	8	52	12	5	74
Other	8	3	9	2	20
Missing Title Descriptions					7
Total Cases*	60	181	160	20	421

*Columns and rows do not add up to total cases due to multiple responses.

Table C-3

TRANSIT AGENCY RESPONDENT SIZE

No. of Buses/Trains	Frequency	Percent
1-25, small	54	36.5%
26-100, medium	46	31.1%
101+, large	48	32.4%

Table C-4

RESPONDENT NON-ATTAINMENT STATUS

Air Quality Status	Frequency	Percent
Non-Attainment Area	208	52.4%
Attainment Area	189	47.6%