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The Boston MPO Planning Process and Low-Income Suburban-to-Suburban Transportation Needs

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Prepared for the Metropolitan Area Planning Commission

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Abstract: The rapid evolution in the Boston MPO transportation planning process is discussed as well as its particular application to the suburban-suburban transportation needs of low income individuals. The results of two experiments designed to improve access to transportation for low income suburban individuals are discussed and policy suggestions are made for improving such access.

JEL codes: R41: Transportation Demand, Supply, and Congestion; R58 Regional Development Policy

This report has two objectives. The first is to document the systemic progress made by the Boston Region MPO in the last two years since the publication of the Massachusetts Business Roundtable study, which provided a number of recommendations for the improvement of the Commonwealth's transportation policy (Granberry, Quimby, and Terkla, 2003).

The second objective is to focus on the issue of suburb-to-suburb transportation policy in the context of the MAPC's Community Transportation Project (CTP), funded under a TEA-21 Transportation and Community and System Preservation Pilot Program (TCSP). In particular, we examine how suburb-to-suburb transportation policy has been incorporated into the Boston Region MPO planning process, the results of the CTP experiment, and how the Boston Region MPO process compares to a sample of MPOs chosen from throughout the country.

We find that the Boston MPO has made immense progress in improving the transparency of its transportation project selection process and in developing a clear methodology for project selection. In addition, the Boston MPO's efforts to incorporate suburb-to-suburb transportation planning and to encourage such planning on the part of their constituency of cities and towns place it near the forefront of such efforts among the other MPOs that we sampled. However, we provide some suggestions on how low-income suburb-to-suburb transportation needs can be better identified and more effectively serviced

A Giant Leap Forward in Transportation Planning

In 2003, the results of a fairly comprehensive survey of 17 other states, including the other New England states, many of the northern tier industrial states, and a sample of western and southern states, revealed that Massachusetts was falling considerably behind its competitor states in both transportation planning and development (see Table 1). In particular, the process for many of the Commonwealth's transportation funding decisions was not clear and certainly not transparent to the public. Moreover, it was not clear what factors were being used to make decisions about transportation either at the MPO or state level (Granberry, Quimby and Terkla, 2003).

The survey of state policies focused on their institutional structures and processes for making transportation decisions and the selection criteria used in informing their final

funding decisions. In terms of process characteristics, we classified the role of the legislature and governor in allocating resources to projects and whether a strong state transportation commission and/or state transportation department existed. In addition, we documented whether intermodal and land use planning were clearly integrated in the decision process, whether state monies were available for projects not likely to qualify for federal funds, and whether or not the state had mechanisms in place to reexamine their process of transportation decision making.

The characteristics associated with criteria used by different states were whether the state or MPO seemed to have the most influence in project selection and whether the allocation of transportation was formula driven or whether the merits of transportation projects from particular regions could override the formula. In addition, we were particularly concerned with whether any quantitative criteria were used in the project selection process and whether explicit weighting was given to economic development concerns.

Table 1

<i>PROCESS</i>	Massachusetts	California	Connecticut	Delaware	Florida	Illinois
MPO Composition	<ul style="list-style-type: none"> • Local officials • Transit agencies • State 	<ul style="list-style-type: none"> • City and county reps • State 	<ul style="list-style-type: none"> • Local officials • Transit agencies • State 	<ul style="list-style-type: none"> • Local officials • Transit agencies 	<ul style="list-style-type: none"> • Local elected officials 	<ul style="list-style-type: none"> • Local officials • Transit agencies
Role of Legislature and Governor	Moderate	Weak	Weak	Strong	Strong	Strong
State Transportation Commission?	No	Yes	No, but Board	Yes	Yes	No
State Transportation Dept?	No	Yes	Yes	Yes	Yes	Yes
Intermodal Planning?	No	Yes	Yes	Yes	No	No
Land Use Planning?	No	Yes	Yes	Yes	No	No
Alternative Funds?	Yes	Yes	No	No	Yes	Yes, Economic Development
State Looking to Change Process?	Yes	No	Yes	No	No	No
CRITERIA						
Level with most influence	State	MPO	50/50	State	MPO	State
<i>Funds Allocation Process</i>						
Formulas to MPOs?	Yes	Yes	Yes	No	Yes	Yes
Other				State Legislature		
Quantitative Criteria Used?	No	Yes, on regional level	No	Yes, on both state and regional levels	No	No
Economic Development Criteria?	No	Yes, on regional level	No	Yes, on both state and regional levels	No	No

<i>PROCESS</i>	Maine	Michigan	New Hampshire	New Jersey	Ohio	Oregon
MPO Composition	<ul style="list-style-type: none"> Local officials Citizens Interest groups State 	<ul style="list-style-type: none"> State DOT City and county elected officials Transit reps 	<ul style="list-style-type: none"> Local officials Citizens State 	<ul style="list-style-type: none"> Governor's appointees State DOT staff City and county officials 	<ul style="list-style-type: none"> City and county officials State transit agencies 	<ul style="list-style-type: none"> Local officials Citizens Interest groups State
Role of Legislature and Governor	Weak	Strong	Weak	Weak	Strong	Weak
State Transportation Commission?	No	Yes	No	No	Yes	Yes
State Transportation Dept?	Yes	Yes	Yes	Yes	Yes	Yes
Intermodal Planning?	Yes	Yes	No	Yes	Yes	Yes
Land Use Planning?	No	Yes	Yes	Yes	No	No
Alternative Funds?	No	Yes	Small amounts for rural areas	Yes	No	No
State Looking to Change Process?	Yes	No	No	No	No	No
CRITERIA						
Level with most influence	MPO	State	50/50	State	State	State
<i>Funds Allocation Process</i>						
Formulas to MPOs?	Yes	Yes	No	Yes	No	No
Other			State DOT		State DOT	State DOT
Quantitative Criteria Used?	Yes, on both state and regional levels	No	Yes, on regional level	No	Yes, on state level	Yes, on both state and regional levels
Economic Development Criteria?	No	Yes, on regional level	Yes, on regional level	No	Yes, on state level	Yes, on regional level

<i>PROCESS</i>	Pennsylvania	Rhode Island	Texas	Virginia	Vermont	Wisconsin
MPO Composition	<ul style="list-style-type: none"> Local Interest Groups State 	<ul style="list-style-type: none"> Governor and legislative appointees City and state reps 	<ul style="list-style-type: none"> Local officials 	<ul style="list-style-type: none"> State and Local officials Transit agencies 	<ul style="list-style-type: none"> Local officials 	<ul style="list-style-type: none"> Governor's appointees County representatives
Role of Legislature and Governor	Moderate	Weak	Weak	Moderate	Strong	Weak
State Transportation Commission?	Yes	Yes	Yes	Yes	No	Yes
State Transportation Dept?	Yes	Yes	Yes	Yes	Yes	Yes
Intermodal Planning?	No	Yes	Yes	No	No	Yes
Land Use Planning?	Some	Yes	Yes	No	Some	Potential
Alternative Funds?	Yes, Economic Development	Yes	No	No	No	Yes, Economic Development
State Looking to Change Process?	No	No	Yes	Yes	Yes	No
CRITERIA						
Level with most influence	State	MPO	State	State	50/50	State
<i>Funds Allocation Process</i>						
Formulas to MPOs?	Yes	Yes	Yes	No	No	No
Other				Commission, DOT	Legislature, DOT	META system planning
Quantitative Criteria Used?	No	Yes, on both state and regional levels	Yes, on both state and regional levels	No	No	Yes, on both state and regional levels
Economic Development Criteria?	No	Yes, on both state and regional levels	Yes, on both state and regional levels	No	No	Yes, on both state and regional levels

Table 1 reveals a number of interesting interstate comparisons. While MPO composition is similar across states (largely because federal legislation dictates the composition of these bodies), explicit involvement in transportation planning by elected officials is quite varied. While such involvement is weak in about half the states, in one third the involvement is quite strong. Statewide transportation commissions or boards exist in 2/3 of the sample states and all states, with the exception of Massachusetts, have a strong centralized department of transportation. While the Executive Office of Transportation and Construction would appear to be the Massachusetts equivalent of a strong department of transportation, many other state departments have far more power than was given this Executive Office in Massachusetts.

Massachusetts is one of only five states that have no clear places in the decision process for intermodal or land use planning; however as noted Massachusetts is one of five states actively examining its transportation decision process at state and MPO levels at the time of the survey. With regards to the criteria for project selection, half of the

states use quantitative criteria and half also have explicit criteria to recognize the meeting of economic development goals, with Massachusetts using neither. While quantitative criteria are not a necessity for efficient transportation planning, they are an indication of transparency and clarity in the transportation project selection process.

A number of recommendations are made for improvement in the statewide transportation planning process including improving its transparency so that the role of each decision making body is clearly identified as are the criteria used for making decisions; reorganizing EOTC to centralize more control of statewide transportation planning and funding in one office; establish criteria for project selection; and explicitly recognize intermodal and land use planning in project decision-making (Granberry, Quimby, and Terkla, 2003). Because this study was embraced by both the executive branch and the legislature, many of the study's recommendations are currently being implemented or on their way to being adopted. For example, legislation passed in the summer of 2004 created the Executive Office of Transportation (EOT), which consolidated several transportation agencies under this newly named executive office. This moved Massachusetts much closer to having a department of transportation similar to those in other states.

Although Granberry, Quimby, and Terkla (2003) focus mostly on the state level, because Boston is the largest MPO in the state, many of the state's problems in transportation impact the MPO and to a great degree reflect the planning process at the MPO level. At the time of the study, we also surveyed the major MPOs in the state and most were quite frustrated with what they felt was lesser control of transportation decisions than the 1990s federal highway law – Intermodal Surface Transportation Efficiency Act (ISTEA) was designed to provide (Puentes and Bailey, 2003). Most transportation expenditures were governed by MassHighway approval as opposed to a bottom up planning approach envisioned as the new role for MPOs, which was in sharp contrast to most other states we surveyed (Granberry, Quimby, and Terkla, 2003).

However, as we were completing this study, the Boston MPO was in the midst of responding to a highly critical 2001 review of its transportation planning process by the Federal Transit Administration. One of the chief criticisms was the lack of a clear process for prioritizing transportation projects, which was of course a reflection of

statewide policy. Federal Highway Administration (2004) and Boston MPO (2005) make it quite clear that there has been a vast improvement in the Boston MPO project selection process. While noting that the Boston MPO needs to work to integrate its highway project selection process with the transit selection criteria, the Federal Highway Administration recognizes the huge leap the Boston has made in the last five years, noting “We commend the MPO for its outstanding work in developing project selection criteria (Federal Highway Administration, 2004, p.6).” In fact, the state, which was also undergoing its own process of developing selection criteria, has modeled its procedures after the Boston MPO.

The Boston MPO has recently adopted a quantitative criteria methodology in which categories of road condition, safety, mobility, community, environment, land use, and economic development are used to rank projects as high, medium, or low (MPO, 2005). Within these general categories, the explicit assigning of points is documented for a variety of subcategories that represent particular criteria that the Boston MPO has decided best represent specific objectives it would like to achieve. For example, under the category of “condition,” one of the criteria involves improving pedestrian/bicycle access. If the project constructs or reconstructs bicycle or pedestrian amenities it will rate a “3”, but if it does not address such amenities at all, it will rate a “0.” The average of the subcategory score is then used to determine whether the project receives a high, medium, or low rating for the category based on a normal distribution of all subcategory scores for all competing projects. The same step is followed among categories to determine the project’s final ranking. Thus, not only does the selection process explicitly attempt to quantify a large number of specific project characteristics for evaluation purposes, but it also explicitly incorporates land use planning and economic development as separate categories for evaluation. This is a vast improvement in transportation planning procedures in a very short time period.

The Suburban to Suburban Transportation Problem

With 50 percent of the United States population living in the suburbs (Hobbs and Stoops 2002), and 8.3 percent of those people living below the poverty level (Berube and Frey 2002), opportunities for public transportation for individuals living in the suburbs to commute to other suburbs for shopping and employment has gained attention over the

last ten years. With the passage of the Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA), better known as Welfare Reform, the transportation needs of low-income individuals received attention as limited transportation choices are obstacles to meeting the new work requirement for individuals to continue their assistance. As a result, studies started to examine suburb-to-suburb commuting patterns and the success of programs to address the needs of low-income individuals living in the suburbs.

Literature Review

This review of the literature will examine (1) evaluations of these programs, (2) the spatial mismatch between jobs and housing, especially for low-income individuals, (3) the dependence upon the automobile and the need for multi-modal, suburban transportation, (4) planning strategies for suburban transportation, and (5) specific studies that examine suburban transportation in Boston over the last ten years.

By the mid 1990s, suburb-to-suburb transportation had developed as a component of transportation planning and evaluation studies began to appear. The Federal Transportation Administration's (FTA) evaluation of twenty-three transit agencies which referenced employment, population, and demographic trends highlighted the fact that suburb-to-suburb public transportation is becoming increasingly critical for employee mobility. This report found that transit agencies that employed partnerships with the private sector, used marketing techniques targeting the business community, involved themselves in land use issues, and had central roles in mobility management were more likely to have beneficial suburb-to-suburb transportation programs (Hooper 1995). However, the report also indicates that more evaluation is needed.

The Job Access and Reverse Commute (JARC) program was authorized by the Transportation Equity Act for the 21st Century (TEA-21) to address the needs of low-income employees. A U.S. General Accounting Office evaluation in 2004 concludes that the FTA evaluation of JARC has been incomplete, as it lacks the data and processes necessary to delineate general or universal trends and outcomes. The report does note that FTA is working to develop the capacity to evaluate better its JARC programs (Siggerud and Colwell 2004).

With decentralization of employment over the last quarter of the twentieth century, economic disparities between central cities and their suburbs began to appear. This trend led to the development of the spatial mismatch hypothesis that low-income minorities concentrated in inner-city settings have limited access to the suburban job market (Holzer 1991). Though the spatial mismatch research focuses on urban poverty, its attention to limited transportation opportunities has relevancy for suburban individuals living in poverty. Low-income workers dependent on public transportation are negatively affected wherever they live, and access to an automobile is important for employment decisions (Taylor and Ong 1995). Similarly, Raphael and Stoll (2002) find that employment rates are lower for blacks and Latinos who do not own a car. Also, the spatial mismatch may have a more profound negative affect on women than men (Blackley 1990), and welfare recipients benefit from local employment as those who travel further distances earn less than those employed closer to home (Ong and Blumenberg 1998).

Access to an automobile appears to be important for low-income workers because many face constraints due to limited transportation options. People with automobiles have access to better paying jobs and spend less time commuting (Ong 1996). Most jobs suited for less-skilled workers were not found in the central city but in the suburbs. In a study that estimated job openings and measured the accessibility of these jobs in the Boston area it was found that vehicle ownership is critical for job accessibility, and people dependent on public transportation faced reduced job accessibility (Shen 2001).

The work requirement of welfare reform and limited access to an automobile has drawn attention to limited access to public transportation in the suburbs. As many low-income households are without vehicles, dependency on public transportation creates profound limitations for these individuals. Because public transportation routes and schedules in metropolitan areas have not been designed to serve suburban areas (where most entry-level employment growth is occurring), potential workers are less likely to travel to suburban employment centers (Wachs and Taylor 1998).

As a result, several authors stress the importance of increasing vehicle ownership, as well as the use of vans or minibuses for reverse commuting and suburb-to-suburb transportation. However, the cost of owning an automobile may be a limitation as

demonstrated by the age of the automobile. The average age of vehicles owned by low-income households is ten years compared to 7.3 years for all households (Murakami and Young 1997). Murakami and Young recommend short-term programs that provide vehicles to low-income households because of the lack of public transportation, and advocate long-term programs that include land-use planning and employment growth strategies that support broad, inter-modal structures of transportation.

Access to transportation is one micro level factor vital to individuals trying to find employment, but it also is a macro level factor for regional economic development. Barriers to employment mobility can impede the efficient functioning of labor markets by causing labor surpluses in some regions and labor shortages in others (Hughes 1991). Specifically, Hughes argues that public transportation often does not adequately connect potential workers to suburban employment centers, and jobs at these locations may tend to be higher paying in order to attract an adequate number of workers. In fact, one study found that individuals with higher degrees of access to public transportation (within .4 km of a stop) are likely to have higher labor participation rates (Sanchez 1999). Transportation planning frequently fails to address the spatial mismatch because public transportation schedules are not amenable to nontraditional work routines (Sawicki and Moody 2000).

As expected, community participation is highlighted as very important for suburb-to-suburb planning. One success story is the grassroots movement undertaken in Los Angeles, California to achieve a more inclusive transportation planning process. The Bus Riders Union (BRU), a Los Angeles community-based organization, was able to collect the resources and expertise needed to form a broad coalition with sophisticated methodological and communication (“framing”) techniques. The organizational strength of the BRU derived both from its internal coherence and its ties to external organizations, activists, experts, and academics in the field of transportation planning and urban development. The skills and capacities this strategy bestowed upon the BRU enabled it to file and win a discrimination lawsuit against the Los Angeles Metro Transit Authority (Grengs 2002).

Several reports evaluate public transportation services for low-income residents in the Greater Boston Area. Lacombe (1998) finds that although 98 percent of Greater

Boston's low-income residents live within one-quarter mile of a bus route or transit station, only 32 percent of potential employers in high growth areas for entry level employment identified by the Division of Employment and Training (DET) are within one-quarter mile of public transportation. She finds four deficiencies in the Massachusetts Bay Transportation Authority system that inhibit universal access to available jobs. They include (1) high-growth employment centers are moving to locations beyond existing public transportation routes; (2) the commuter rail often does not serve emerging employment centers and is expensive for low-income residents; (3) suburb-to-suburb routes are not sufficiently expanding to match the development of high growth employment areas; and (4) commutes to suburbs require multiple transfers and can be unmanageable because they take too long and do not match work schedules.

The Boston Region Metropolitan Planning Organization has two reports that examine existing suburban transportation services. The first study incorporates the findings from four case studies of bus and shuttle routes and passenger surveys from 11 suburban transportation systems (Santa Maria 2003). Recognizing that meeting suburban transportation needs is a challenge, this report makes six recommendations to facilitate the improvement of suburban public transportation.

The first recommendation is to approach suburban public transportation like a business. This requires transportation agencies to treat riders like customers they want to see again and to refine a mission statement that reflects the needs of their customers and not the larger suburban population. Second, suburban transportation systems need to plan efficiently. Their niche market allows little room for errors. Planning should try to combine different segments of these limited markets and to connect their customers to activity hubs, like office parks, train stations, or apartment complexes. Third, providers of services must develop and maintain aggressive marketing strategies. The report stresses that many people are unaware of suburban transportation routes and successful providers create programs that provide information to both target markets and the general public. Fourth, the planning process requires the development of partnerships. The need for suburban transportation should encourage planners to develop public/private partnerships with large corporations and other organizations that could benefit from cost sharing. Fifth, suburban public transportation should compete with the automobile.

Reliable service and a professional appearance are key ways for companies to brand themselves in order to attract automobile users. Finally, transportation planners should continue to influence land use change. Even though planners may struggle to provide public transportation in the suburbs, they should not neglect to create a transit-friendly voice in all future land use policy developments.

The second Boston Region Metropolitan Planning Organization report identifies neighborhoods that lack or have limited mass transit service and have the best potential for supporting new service (Humphrey and Ostertog 2005). Employing screening criteria that include census tracts presently not served by MBTA rapid transit, light rail, or local bus routes, the report suggests implementing routes in Wellesley, Winchester, Westwood, Canton, Salem, Waltham, and Peabody.

The screening criteria consist of a mechanism that scores census tracts with a rating of high, medium, or low need of services based on a variety of individual and neighborhood characteristics. The first set of criteria employs reverse commute data that include the number of work trips to suburban locations from Boston, Cambridge, and the intermediate suburbs in relationship to employment density, the number of residents with access to commuter rail lines serving suburban communities, and the presence of a college. The second set of criteria consists of work trips to Boston and Cambridge based on the above data plus commuter rail and rapid transit parking capacity, the number of suburban residents employed in Boston and Cambridge, and the percent of households with less than one vehicle per employed adult. The third set of criteria identifies areas that could support suburb-to-suburb work transit. This group includes additional data like the number of low-income households, the percent of individuals with disabilities, number of intra-town commuters, the presence of a major shopping center, and the percent minority or non-English speaking residents. The last set of criteria is designed to identify areas that could support non-work suburb-to-suburb transportation. These include additional factors like the age of residents and the presence of a hospital in the area.

Based on the above four criteria, a scoring method rated--1 for low, 2 for medium, and 3 for high--the need for service for each census tract. As previously mentioned, areas in Wellesley, Winchester, Westwood, Canton, Salem, Waltham, and Peabody received

the highest ranking. None of these towns has needs for public transportation that would support routes that meet MBTA Service Delivery Policy Standards. In fact, many of these areas have previously had mass transit service, but it was terminated due to limited usage. The report suggests using smaller vehicles that target niche markets for these areas.

The Community Transportation Project

With the adoption of the Transportation Equity Act for the 21st Century (TEA-21) in 1998, the Federal Highway Administration (FHWA) was authorized to distribute \$120 million over a five-year period (FY 1999-2003) on projects that improve the efficiency of existing public transportation infrastructure, reduce adverse environmental effects of transportation, increase employee mobility and job access, and encourage private sector development strategies amenable to healthy regional growth patterns.¹ This component of TEA-21 was administered as the Transportation and Community and System Preservation Pilot Program (TCSP).

One of several critical notions that underpins TCSP is that public transportation services are an integral component of community preservation and have often been distributed in an inequitable manner in terms of costs, effects, and benefits. PRWORA more starkly highlighted the importance of even and comprehensive public and private transportation. Those individuals transitioning from welfare-to-work required the means to find and maintain employment. This has proved quite challenging for individuals living in job-poor areas and/or unable to access job centers via public transportation. As job centers decentralize to suburban locations, public transportation has been unable to adequately connect workers to employment opportunities. The need for efficient suburb-to-suburb and reverse-commute transportation continues to grow as employment decentralization results in reduced employment accessibility for many low-income communities.

As a TCSP grant awardee, the Metropolitan Area Planning Council (MAPC) designed the Community Transportation Project (CTP), which was developed as a response to a number of structural trends and features in the Boston metropolitan area.

¹ Federal Highway Administration, Department of Transportation, <http://www.fhwa.dot.gov/tcsp/>

As noted in the review of the literature, the decentralization of employment opportunities (being experienced by many metropolitan areas) in Boston has resulted in spatial disconnects between certain communities and emerging employment centers. This spatial mismatch creates new transportation needs for those communities not able to readily access public transit and/or employment centers. These communities have often been underrepresented in transportation planning processes, or excluded altogether.

To increase the participation of these communities in transportation planning and resource distribution processes, CTP sought to help CBOs develop the tools necessary to advocate for, and design, transportation services. Informing CTP was the conception that grassroots organizations are most knowledgeable about the transportation needs of their constituents, and should therefore have a greater involvement in designing transportation services for their constituents. The inclusion of these organizations in regional transportation planning would seem to be the most efficient means for ensuring these needs are considered in transportation planning.

Collaborating with MAPC on CTP was the Metro SouthWest Regional Employment Board (MSW REB), a workforce investment board operating in approximately 45 suburban and rural localities south and west of Boston. The MSW REB was given responsibility for facilitating the TCSP monies received by participating CBOs. Funds were provided to CBOs for both capital and operational expenditures on a cost-reimbursement basis. Most of the funds were given to two CBOs, Sisters Together Ending Poverty (STEP) and Driven to Succeed (DTS), which were sought out by MAPC and MSW REB as grant recipients due to their history and capacity for providing transportation services to low-income households.

STEP, a Marlborough nonprofit serving low-income women and their families, implemented a minibus shuttle service to provide its constituents with increased transportation access and mobility. DTS was contracted to provide reconditioned automobiles to low-income families in Boston's MetroWest region.

The MSW REB also established the Transportation Equity Coalition (TEC), a cross-sector network with the stated mission of expanding public involvement in regional transportation planning processes. It was the objective of TEC to form a broadly based coalition capable of actively affecting decision-making as it relates to the distribution of

transportation resources. This initiative, in conjunction with the design and implementation of community transportation services, has provided participating CBOs an opportunity to develop the capacities needed for effective participation in regional transportation planning.

TEC sought to collect community-based organizations, human service providers, housing authorities, municipal officials, state legislators, transportation planning organizations and area residents to address issues of environmental justice in the MetroWest region. By developing a model for community-based transportation design and implementation, TEC advocated expanded transportation services for low-income populations, disabled individuals, and the elderly.

TEC experienced considerable success in bringing together the various transportation stakeholders in Boston's MetroWest region. Membership was broad and diverse, and members showed a continual commitment to TEC and its objectives. Helping TEC achieve this level of commitment from its members was the division of MetroWest into three component regions: North, Central, and South. This strategy had the calculated effect of allowing members to more directly address the transportation issues that affected their locality. By doing this, the interest and involvement of coalition members was heightened and sustained over the course of TEC's life.²

TEC did, however, experience several impediments and constraints that limited its efficacy and duration. Most critically, TEC was provided funding for only 6 months of operation, and a lasting advocacy body did not emerge. Following the cessation of funding, TEC members were unable to supply the time, people and resources necessary to continue regular operations.³

With the TCSP funds allocated to STEP, an on-demand minibus shuttle service was supported to help low-income women and their families meet various transportation needs. Clients could utilize the service for such things as health visits, shopping, and employment. Over the course of the grant, STEP contracted to expand their services in collaboration with other human service agencies, providing additional sources of funding

² Lyn Billman-Golemme (TEC Consultant), Interview by Mike Landon, August 19, 2005

³ Billman-Golemme Interview, August 19, 2005

and broadened services. Ridership was significant, and STEP shuttles continue to provide transportation services to their constituents.⁴

Driven to Succeed was a recipient of two CTP projects, and used funding to provide its clients with a total of 35 automobiles.⁵ As noted in the literature review, availability of automobile transportation has been found to be important for enabling low-income suburban populations to find good jobs. A similar program (Good News Garage) had been tested in the Boston area prior to Driven to Succeed as part of the Department of Labor's welfare-to-work program, supplying a smaller number of cars to low-income households. These cars were often of poor quality, and frequently became additional financial and logistical burdens. Learning from this experience, DTS exercised more selectivity in accepting automobiles for the program and developed a budget that allowed for a full-time mechanic to make repairs at no cost to clients. DTS, however, did not diversify its funding sources, devised only a rudimentary business plan, and was therefore unable to continue after TCSP funding ceased.⁶

While the STEP program seems to have been a successful CTP initiative, the other two programs have not been able to continue without the CTP funds. The automobile program failed for lack of ability to secure diverse, reliable funding sources. The TEC failed because of the lack of a well-developed infrastructure and planning culture to readily forward their ideas and the lack of support staff to keep such a committee/coalition focused together. On the other hand, STEP was able to create a viable transportation shuttle for low-income women and their families by linking their efforts with other human service agencies, which generated sufficient ridership and funds.

Boston and Other Metropolitan Areas' Efforts to Address Suburban Transportation

The CTP initiative was a small project and a first attempt to begin to identify and service low-income population needs for suburban transportation in one small region of the metropolitan area. In order to assess the effectiveness of the Boston Region MPO's

⁴ Edward Tirrell (CTP Project Lead, Metro SouthWest Regional Employment Board), Interview by Mike Landon, July 25, 2005

⁵ Tirrell Interview, July 25, 2005

⁶ Tirrell Interview, July 25, 2005

overall planning process for suburb-to-suburb transportation for low-income individuals, we compare Boston's effort to a sample of MPOs chosen from across the country. We identified ten cities for either their similarities to Boston or large metropolitan areas that might have innovative suburban transportation planning strategies. The cities selected are Providence, New York, Philadelphia, Washington DC, Atlanta, Dallas, Chicago, Seattle, Los Angeles, and San Francisco. Transportation planners were contacted by phone or email and asked a few questions to assess their planning strategies. The MPOs in all cities but New York responded to efforts to obtain information. As a result, Boston's effort is compared to those in nine other metropolitan areas. The intent of these interviews is not to evaluate the efforts of the MPOs, but give an overview of the MPOs' transportation strategies for this limited area of transportation planning.

The initial contact consisted of a simple questionnaire that was intended to give a quick assessment of the overall efforts of the MPO. The following questions were asked:

- Does the MPO have any set-aside funding to address planning for suburb-to-suburb transportation needs?
- How successful has the MPO been in working with community based organizations?
- How does the MPO identify needs?
- Does the MPO have any success stories or strategies that have been found to be helpful?

If the response to these questions indicated that the MPO addressed low-income suburb-to-suburb transportation issues, a follow up interview gathered more information about the MPOs effort. Based on the responses to this survey, we then identified three categories of MPOs. The first category consists of MPOs that appear to have only a limited focus on suburb-to-suburb transportation. The second category consists of MPOs that are addressing suburb-to-suburb transportation, but not focusing on low-income residents in particular. The last category consists of MPOs that are making what appear to be serious efforts to address the suburb-to-suburb transportation needs of their low-income residents.

Metropolitan areas that presently have a limited focus on suburb-to-suburb transportation for low-income residents are Atlanta, Dallas, Philadelphia, and Seattle. Concentrating on its freeway and cross-regional system, the Atlanta Regional

Commission (ARC) appears to focus on traffic mitigation. It provides express bus routes that connect suburbs with the downtown commercial centers. Its local buses operate within county jurisdictions with the intent to connect suburbs within each county. The North Central Texas Council of Governments (NCTCOG), the Dallas MPO, appears to be concerned with traffic mitigation in its suburbs and has no direct funding for suburb-to-suburb transportation. It conducted a Regional Rail Corridor Study in August 2004 and plans to expand service in this area over the next thirty years. It also helps sponsor a ridesharing program.

The Delaware Valley Regional Planning Commission (DVRPC) implemented the Access-to-Job Initiative in the late 1990s to address transportation needs of low-income individuals to assist them to meet the work requirement of welfare reform. This initiative developed a regional strategy that implemented a variety of programs that collaborated with human service providers to meet the needs of low-income residents. However, in the area of suburb-to-suburb transportation, although the DVRPC used 2000 Census data to highlight unmet needs of low-income individuals, it has been unable to fund any new transit routes. The Puget Sound Regional Council, Seattle's MPO, places suburb-to-suburb transportation under its Environmental Justice planning. They have assessed the travel of their low-income residents but have not implemented plans for suburb-to-suburb transportation.

The second group of cities appears to be addressing suburb-to-suburb transportation more formally but is not necessarily focusing on low-income residents. These cities are Chicago, Los Angeles, Providence, and Boston. The Chicago MPO allows Pace, the suburban bus division of the Regional Transportation Authority, to address all suburban transit planning. Pace does not have a direct strategy for low-income riders, but appears to be a leader in seeking out community involvement. In 2002, Pace launched Vision 2020, a major transit plan for Chicago's suburbs. Two recent initiatives demonstrate their commitment to community-based involvement. A technical advisory group provided ideas that helped remove some old non-productive service, realign a number of routes, and extend a couple of other routes. This resulted in an eight percent increase in service on these routes. An additional recommendation from their advisory group was to extend another route into O'Hare airport. They were reluctant to

expand transportation to the airport, but their recommendation received good ratings at public workshops. The success of this route has now resulted in a demand to create an express service to run on top of their regular route so that Northwestern students and faculty can go to the airport faster.

Southern California Association of Governments (SCAG), Los Angeles' MPO, does not explicitly have set-aside funding to address suburb-to-suburb transportation. However, Los Angeles' pattern of land use and the fact that downtown Los Angeles has only five percent of the region's total employment means that the vast majority of travel in the region is suburb-to-suburb. As a result, SCAG employs transportation solutions that are by default geared toward improving suburb-to-suburb travel. The only exception to this would be the light- and heavy-rail system constructed over the last 15 years, which focuses on suburb-to-downtown transportation. SCAG strives for consensus-building in its planning efforts. For example, the Community, Environmental, and Transportation Acceptability Process (CETAP) is recognized as a national model in identifying and preserving future rights-of-way in an inclusive manner and facilitating future transportation and development needs.

Providence was chosen because of its proximity to Boston. The Rhode Island Public Transit Authority (RIPTA) provides 59 bus routes statewide, and 85 percent of Rhode Island's population resides within three quarters of a mile of RIPTA service. They have experimented with suburb-to-suburb routing and report their primary challenge is generating a sufficient number of passenger trips. They encourage community participation and stress that transportation planners can be more effective if they can bring their expertise early to the process to help focus the community's varied interests. RIPTA encounters three major hurdles in planning. First, vehicle speeds and road widths in the suburbs make crossing boulevards on foot to reach a bus stop difficult. Many suburban passengers report they no longer take the bus because they feel unsafe crossing a major artery. The second issue is that suburb-to-suburb bus routes often service only small bus hubs if they serve any hub at all. Not visiting a major hub is a big loss of potential trip generation. The third issue is the variability in suburban work schedules. Suburban businesses are located in office parks and have numerous shifts. Staggered shift times are planned to help ease traffic jams entering and exiting parking

lots. However, not having clearly defined start times limit the effectiveness of suburban bus schedules that cannot meet the variability in shifts changes and causes bus riders to factor more time into their work commute.

Beginning in 2004, the Boston MPO created the Suburban Mobility and Transportation Demand Management Program (SM/TDM). The primary purpose of this program is to reduce the amount of single occupancy vehicle travel in the suburbs and as a result the funding for the program is supported by the federal Congestion Mitigation/Air Quality Program (CMAQ). In the current fiscal year the MPO has set aside up to \$650,000 to fund projects that can meet suburban to suburban transportation needs. Previously funded projects have included summer shuttles for tourist related activities in Essex and Ipswich, an employee shuttle from an MBTA station to serve businesses on Boston's inner ring road (I-95, formerly Route 128), and Framingham's transit system. Three key features of these grants are that they are limited to three years, require increasing matches from the grantees – 20% in the first year, 30% in the second year, and 40% in the final year, and the grantee must demonstrate how the project will be self funding at the end of the third year. Because of the association with CMAQ monies, the project must also designate some air quality improvements.

The Boston MPO also created an Environmental Justice Committee in 2002, which consists of representatives from areas with high percentages of low-income and minority residents. The primary charge of the committee is “to provide input and guidance to the MPO in the consideration of the equitable distribution of transportation benefits and burdens.” (Boston MPO, 2004). Thus, this committee certainly has low-income suburban transportation issues in its purview; even though the concept of environmental justice, which usually refers to the avoidance of high concentrations of negative environmental impacts in low-income communities, is narrower than that.

San Francisco and Washington DC make up the last category of MPOs that are addressing suburb-to-suburb transportation with a focus on low-income individuals. The Metropolitan Washington Council of Governments (MWCG), Washington DC's MPO, has not implemented major initiatives, but they are actively planning in this area. They released “Travel Characteristics and Accessibility Impacts of the 2004 Financially Constrained Long-Range Transportation Plan on Minority, Low-Income and Disabled

Populations,” a thorough assessment of the location in the DC area of jobs and low-income populations. They also created a working group, Access to All, that appears to be strongly advocating for the concerns of their low-income population. The committee is concerned about transportation burdens faced by residents of the eastern side of their region who face long commutes to job-rich western areas of their region. They recommend more transit opportunities for transit-dependent communities, particularly in Prince George’s County.

The Metropolitan Transportation Commission (MTC) is the San Francisco Bay Area MPO. The MTC is the only surveyed MPO currently implementing suburb-to-suburb programs for low-income individuals. They identified five communities in 2004 as pilot programs for the MTC’s Low-Income Flexible Transportation (LIFT) funding. These plans could possibly include projects for refined or improved fixed-route bus service, subsidized taxi service, shuttle service for late-nights and weekends, and organized vanpools to employment destinations. These plans could also possibly include a bicycle purchase program or a car sharing plan. The MTC plans to expand these programs to 25 low-income communities by 2007. One program already implemented is a collaborative agreement arranged by the MTC, between the City of Dixon and Dixon Family Services. Dixon Family Services provides and sells sliding fee vouchers for a taxi service. This program is working closely with the Solano County Welfare to Work Transportation Advisory Committee to identify individuals seeking employment or establishing an employment history prior to securing other transportation options.

Recommendations and Conclusions

In metropolitan regions throughout the United States, it is often the people most dependent on public transportation for employment mobility and other purposes who are least served. They live in households with too little income to purchase or maintain vehicles and/or are located in areas not well connected via public transportation to employment centers. The CTP program was designed to begin to address this problem, but to fully address these issues, such ad hoc programs are not enough. The Boston MPO will have to expand its institutional focus to begin to develop the organizational infrastructure for addressing low-income suburban transportation needs. Commissioning the two studies on suburban transportation issues (Santa Maria, 2003 and Humphrey and

Ostertog, 2005) and creating the SM/TDM are a good start, but these are focused on broad issues of suburban transportation, not just the needs of low-income individuals.

In particular, the set aside for SM/TDM has not yet been used to service these populations. Also, although Humphrey and Ostertog (2005) tried to identify needs of low-income populations, the level of analysis used, a census tract, which averages 4,000 residents and can include as many as 8,000, is too large to identify some of the low-income population needs. As a result, all low-income areas examined were screened out as having adequate access to either rapid transit or bus service even though this access may not be sufficient to get these populations to suburban work opportunities or to meet their service needs, such as access to shopping and medical services, in a manner that does not involve long transportation times, circuitous routes and transfers, and/or long waits at bus stops. A first step would be to conduct similar analysis found in Humphrey and Ostertog (2005) at the census block level, which might identify needs that the more aggregate analysis missed.

Accessible transportation is just one of many critical, interrelated factors affecting employment mobility and general social welfare for many Boston metropolitan area households. Unevenness in the distribution of public transportation resources disadvantages workers who are spatially separated from public transportation networks and/or employment centers. However, there really is no specific program in the Boston MPO that focuses on these issues that have also been outlined in the literature (Lacombe, 1998).

If the Boston MPO wants to seriously address these issues, it probably should create a separate set aside of funds like the SM/TDM that focuses primarily on low-income populations. Ideally, the generation of interests in such funds by potential grantees would be the primary responsibility of a committee of CBOs similar to the Access to All committee in the Metropolitan Washington, DC MPO. Although the Boston MPO's current Environmental Justice committee might also perform this function, its name tends to give the impression of a focus on a different set of issues.

CBOs that serve low-income populations are most immediately aware of their constituents collective transportation needs, and can therefore serve a critical function in broader, regional transportation planning. To effectively engage in transportation

planning and development, CBOs must truly understand both the micro and macro needs of their constituents. Services that account for such things as unconventional schedules and limited financial resources are imperative. Prior to the implementation of any transportation service, the organizations involved must execute a critical and comprehensive survey of the communities and constituents they serve. The completion of such a survey should be required by the funding or administering organization. This will allow for better informing the Boston MPO of the needs of low-income constituents than the information that can be gleaned from aggregate statistical analysis.

More fully understanding the needs and circumstances of clients can allow for increased program collaboration among organizations (such as what STEP accomplished), which may result in opportunities for improved and expanded services and funding sources. In addition, well-devised (and continually evaluated) programs will also yield more impressive results that can be used to convey the importance and efficacy of such services. To improve design and implementation, federally funded programs can also require detailed and regular evaluation of programs.

A prerequisite to successfully advocating for transportation resources on behalf of underserved communities is an understanding of broader transportation planning contexts and processes. Advocates must have knowledge of access points to federal, state and local funding streams, as well as the political and bureaucratic means of pursuing those funding streams. CBOs must therefore have the substantive knowledge and organizational capacity to effectively engage in the appropriate planning processes. This could be accomplished with the creation of a Boston MPO committee similar to Access for All.

To access resources for suburb-to-suburb and reverse commute transportation programs, the establishment of formal bodies or informal networks drawn from the public, private, and non-profit sectors can be instrumental. As policies and issues pertaining to employment opportunity are largely inseparable, bringing together disparate but related entities seems a necessary approach. By developing a broader base of support and input (employers, politicians, civil servants, area residents, human services academics, transportation planners, and workforce development services), programs and policies can be conceived that are informed and supported by diverse knowledge,

interests and experiences. This will allow issues to be framed in broader contexts, that is, as serving or relating to many functions and segments within society. Such an approach is critical for the advancement of any program or policy. A body of diverse stakeholders and experts informing and framing issues allows for indispensable substantive and methodological sophistication complemented by firsthand accounts and input.

The very nature and intention of transportation planning for employee mobility (and related workforce development programs) necessitate inter-organizational and cross-sector collaboration. Such programs as CTP require that organizations of different sectors and levels of government cooperate to achieve common goals and objectives. Joint efforts, however, can be undermined, weakened, or forestalled for a number of reasons. Organizations may lack substantive relations with potential partners or may simply have different goals, objectives, requirements and functions. These aspects can converge, formally and informally, to create an aversion to collaboration, and thus preventing the emergence of what could be useful and lasting partnerships. With collaboration comes the possibility of improved services and increased cost-efficiency. The pooling of resources can make programs more viable and sustainable financially while providing increased and multifaceted services to clients.

One approach that can be used to achieve successful collaboration is requiring that programs funded by federal monies utilize cross-sector efforts. Promoting and providing a context for joint transportation planning among CBOs, other area nonprofits, private sector organizations and government agencies will help develop the connections and capacities needed to form strong and sustainable cross-sector partnerships (GAO, 2003).

Other areas emphasized by the first suburban Boston transportation study (Santa Maria, 2003) as being critical for facilitating the improvement of suburban transportation were the involvement of transportation needs from the beginning of the development process and any land use changes, focusing on the servicing of niche needs, and seeking out associations with private sector employers to help support the funding of transportation services. All of these areas are important to the development of low-income suburban transportation service.

The Boston MPO is trying to incorporate these concerns in their evaluation of proposals for the SM/TDM, and the success of the STEP program indicates that affiliation with private employers is crucial to the long term survival of such niche transportation programs. Employers experiencing labor shortages should be willing to help fund programs designed to make their workplaces more accessible, thus broadening their potential labor pools. In terms of vehicle provision programs, like that of DTS, the donation of vehicles from private donors (such as car dealerships) can represent a potential source of transportation resources for low-income households.⁷

Meeting the range of Boston transportation needs is very challenging as transportation funds at all levels of government are scarce and subject to intense political and bureaucratic competition. Suburban and rural areas can experience additional difficulty in receiving public transportation resources as the cost-efficiency of public transport may be judged to be greater than in urban areas with denser populations. Public transportation systems require ongoing public funding for maintenance and meeting changing demands due to population and employment shifts. The degree to which tax revenues should be allocated to meet these public transportation needs will be a continual source of debate. Nonetheless, as a critical economic unit of a society that holds equality of opportunity as a defining value, the Boston metropolitan area must continually recognize (and act on) the implications that its transportation system has for individual economic opportunity and mobility.

The Boston MPO is to be congratulated on the rapid advances it has made in providing a clear and open framework to its transportation project selection and planning processes. In addition, it has made a significant start in beginning to address suburban transportation needs. Hopefully, this momentum will carry forward to more specific efforts directed at low-income suburban populations and their transportation needs. If regional transportation decision-making is to be more inclusive, the entities controlling planning processes must always be striving to find the most viable means for institutionalizing active public participation at the grassroots level.

An important step could be taken in this direction with the creation of a body that will provide CBOs with improved opportunities to advocate for their constituents' needs.

⁷ Tirrell Interview, July 25, 2005

This could be the Environmental Justice Committee, but we would suggest it be a committee with a different title that focuses specifically on the needs of low-income populations in the suburbs and in urban areas. This new body could more closely examine lessons learned from best practices across the country as we have begun to outline in this report and use this information and the recent CTP experience to design more pilot projects for the Boston region designed to address the specific problems related to transportation needs of the low income suburban populations. It certainly may be worth trying to establish TECs again, supporting them for a longer period of time, and taking advantage of lessons learned from the problems experienced by the MSW REB.

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