Mobility Management

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OVERVIEW

Mobility management seeks to optimize *all* transportation resources in a community. As such, it aims to improve specialized transportation for older adults, people with disabilities, and individuals with lower incomes through a range of activities. These activities look beyond a single transportation service or solution to a "family of services" philosophy that can offer a wide range of services and options to meet an equally wide array of community demographics and needs.

Mobility management's ability to improve specialized transportation holds great promise. The concept involves not only complex applications linking multiple organizations with advanced technologies, but it can also be a nucleus for less complex strategies such as centralized information on specialized transportation services in the community. Given its potential, should more be done legislatively to encourage mobility management? Do we have the metrics to assess whether it lives up to its potential? What else might be done legislatively to make mobility management more widespread?

MOBILITY MANAGEMENT DEFINED

Mobility management as a systems approach to managing transportation resources that, as defined by the National Resource Center for Human Transportation Coordination, emphasizes:

- movement of people instead of vehicles,

- customer needs and the discrete travel needs of *individual* consumers,

- the entire trip, not just that portion of the trip on one mode or another,

- improvements to the effectiveness, efficiency, and quality of the travel services being delivered,

- design and promotion of transit-oriented development, livable communities, and energy efficient sustainable communities, and,

- improvements in the information that is available about those services.

This Center further defines mobility management as "a process of managing a coordinated community-wide transportation service network comprised of the operations and infrastructures of multiple trip providers in partnership with each other." The process is characterized by a focus on individual needs, not on moving the masses, and on innovation, changing usual business practices. Mobility management also:

- Offers a full range of travel options to the single occupant of an automobile,

- Cultivates partnerships and multi-agency activities,

- Offers a single point of access for customers to multiple travel modes,

- Applies advanced technologies,

- Coordinates community-wide planning with transportation, influencing land use and zoning decisions,
- Ensures transit-friendly designs in long-range plans; and,
- Receives support from the business community, citizens, and local government.[i]

A CONCEPT FROM THE 1990S

The mobility management concept appears to have developed in the 1990s, following passage of the 1991 Intermodal Surface Transportation Efficiency Act (ISTEA) with its multi-modal philosophy. At the same time, some transportation agencies were beginning to recognize that their fixed-route transit services were not a "one-size fits all" solution to community transportation needs. As a result, some forward-thinking agencies began to offer additional transportation services, such as carpool and vanpooling, subscription bus services, special shuttles, and dial-a-ride services, among others.

This activity spurred interest within the industry. The Transportation Research Board (TRB) conducted research to investigate how the more creative agencies had moved beyond traditional fixed-route systems, publishing a guidebook with resources for other agencies interested in mobility management.[ii] The report defined a "mobility manager" as a "transportation organization serving the general public that responds to and influences demands of the market by undertaking actions and supportive strategies, directly or in collaboration with others, to provide a full-range of options to the single-occupant automobile."[iii]

Activities under this early definition of mobility management were categorized into four areas:[iv]

- Operations, such as ridesharing and assistance for volunteer and community-based transportation services,
- Technology, for example, telecommute centers,
- Information, such as transit telephone centers with information on all modes and providers, and
- Land use, including efforts to encourage transit-supportive development.

The 2005 Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) legislation embraces mobility management with its inclusion as an eligible activity in FTA's three specialized transportation programs – S. 5310, JARC and New Freedom.

MOBILITY MANAGEMENT AND SPECIALIZED TRANSPORTATION

For specialized transportation, mobility management remains an evolving concept, facilitating transportation improvement through a wide range of options, service providers, and strategies. The activities and strategies that fall under mobility management include, among others:

- "one-stop" information centers that coordinate information on all transportation options,

- travel training and trip planning for individuals,

- transportation brokerages that coordinate providers, funding agencies, and persons needing trips, and,

- planning and implementation of coordinated services, such as local and state coordination councils.

In its broader context, mobility management also includes activities that support transit-friendly land-use policies, including higher density, mixed land-use with interconnected streets, and improved pedestrian access. Mobility management also includes services that support mobility for the general public, not just persons with specialized transportation needs. The American Public Transit Administration (APTA), for example, recognizes and supports transit agencies' role as mobility managers, encouraging transit agencies to look beyond the traditional single-mode model with a multi-modal focus that includes "customer-driven partnerships among multiple transportation providers" so transportation resources are used more efficiently and effectively.[v]

This focus on more efficient and effective use of transportation resources is an important underlying premise of mobility management, in its various permutations.

DOES MOBILITY MANAGEMENT IMPROVE SPECIALIZED TRANSPORTATION?

Expectations are high for mobility management, with the FTA providing new funding resources for its implementation. Mobility management is identified only once in the SAFETEA-LU bill (to provide a definition), but all three of FTA's specialized transportation funding programs specifically list mobility management as an eligible expense — eligible as a capital cost. This means up to 80 percent federal funding, despite the fact that many mobility management activities would typically be considered operating expenses.[vi]

The incentives are in place for mobility management. Indeed, in FY 2008, the FTA provided $26.2 million through more than 150 grants for mobility management under the New Freedom and JARC programs.[vii] Examples of projects include travel training, "one-stop" information centers, and a community "mobility manager."

The Washington, D.C. Council of Governments, for example, provided funds for the Washington Metropolitan Area Transit Authority and several partner organizations to provide individualized travel training to persons with disabilities. The Virginia Department of Rail and Public Transportation funded JAUNT, Inc., a non-profit regional transportation system in central Virginia, with a "mobility manager" position. A primary role of this mobility manager is to assist human service agencies in the community to analyze their transportation-related resources and needs, and to develop recommendations for potential partnerships (e.g., coordination with JAUNT) that will improve their transportation service efficiency and effectiveness.

EXPERIENCE TO-DATE

Limited documentation is available to-date on the results of mobility management projects funded through FTA's specialized transportation grant programs.[viii] However, states are implementing data reporting procedures to capture performance statistics on the projects of their sub-recipients.

Maryland, for example, developed new data reporting forms and procedures starting in FY 2009 for the New Freedom and JARC programs, which are designed to capture information and performance statistics on the funded projects, including mobility management. Using these new reporting procedures, a "one-stop" transportation information and assistance center in rural Maryland, operated by the non-profit Delmarva Community Services, Inc., reports that it provided 824 units of service (also defined as customer contacts) from its start in December 2008 through June 2009, the end of FY 2009.[ix] These units of service ranged from telephone assistance with trip planning to individualized and time-intensive travel training on how to use public transportation.

The state of Wisconsin has a robust mobility management program, focusing its New Freedom grant funds on mobility management positions throughout the state, with 19 mobility managers hired in 2008.[x] Wisconsin has developed reporting procedures that capture the activities and results of its mobility management projects. Unpublished data show the state had 23 New Freedom and JARC mobility management projects in place in calendar year 2008, and 36 in calendar year 2009. Based on the unpublished data, these projects (combined with several others using different fund sources) have a range of results, including the following for calendar year 2008:[xi]

- 1,754 persons provided transit travel orientation;
- 44 persons provided individualized travel training;
- 1,952 volunteer driver trips;
- 2,967 voucher trips; and
- 1,974 shuttle trips.

ROLE OF TECHNOLOGY

The transportation industry recognizes advanced technology for its ability to facilitate transportation coordination, including mobility management. With the range of technologies available and the degree to which technology can be customized for individual transportation projects, Intelligent Transportation Systems (ITS) applications can be developed for most situations.[xii] The technologies that are particularly beneficial for transportation coordination include: [xiii]

- Traveler information through Internet websites, automated phone systems, audible enunciators, kiosks, and transit stops with automated information - These advanced traveler information systems (ATIS) inform riders electronically, providing, for example, scheduled transit times as well as real-time information.

- Electronic fare payment - This technology allows riders or their sponsoring agency to pay with a smart card or magnetic stripe card, facilitating billing and payment.

- Automatic Vehicle Locator (AVL) - Transportation providers can monitor and track vehicles in real time, using global positioning systems (GPS). This gives providers more control to make real-time operational changes and improves customer service. For example, the provider can give accurate information to riders when they ask "Where's my ride?"

- Computer-assisted scheduling and dispatch (CASD) - These systems help transportation providers develop more effective schedules and improve record-keeping.

- Mobile data terminals (MDTs) - MDTs (or MDCs-mobile data computers) are small on-board computers that provide the interface between vehicle operators and the CASD, improving communications and data reporting.

- Coordination and integration software - This technology includes applications that coordinate or link up software and other technology among multiple agencies and/or across multi-modal transit agencies.

Mobility management can use all of these advanced technologies for some strategy or application, given the breadth of activities that fall under the rubric of mobility management.

The U.S. DOT is testing certain of these ITS applications through at least two major programs. The first, conducted in cooperation with the U. S. Department of Health and Human Services, provided a total of $2.7 million to focus on coordination in rural areas with integrated ITS transit technologies. This grant program funded projects at eleven sites, ranging from web-based software to integrate human services transportation referrals with rural public transit operators (New Mexico) to integration of the "Lone Star" card with advanced technologies in place at a large rural transit provider to track human service agency ridership (Texas).xiv

The DOT's second major technology program is Mobility Services for All Americans (MSAA). This initiative builds on the United We Ride initiative for transportation coordination. MSAA envisions that ITS technologies will help enable service coordination by creating a "one-stop, customer-based travel reservation, information, and trip planning service for human service transportation."xv

Through MSAA, the DOT funded a $2.7 million program to demonstrate ITS applications that coordinate and improve specialized transportation. In the first phase, MSAA provided support for eight projects to develop detailed design plans for ITS projects, including four centralized information/call centers for specialized transportation.xvi In its second phase, MSAA selected three of the eight projects for additional federal funding to implement their detailed design plans from the first phase. The three are the Camden County Workforce Investment Board, Camden, NJ; Lower Savannah Council of Governments in Aiken, SC; and Paducah Area Transit System, Paducah, KY.

SUMMARY

With the last transportation reauthorization in 2005, the FTA recognized mobility management as a key activity to improve specialized transportation. FTA's three specialized transportation grant programs all include mobility management as an eligible capital cost, funded at up to 80 percent, even though many of the activities that fall under mobility management would traditionally be considered operating projects, which are funded only up to 50 percent. Through JARC and New Freedom, the FTA provided more than 150 grants for mobility management in FY 2008. Many states and other fund recipients have initiated a wide range of activities, such as one-stop information centers, travel training, volunteer driver programs, and vehicle loans.

Interest in mobility management remains high. Project ACTION, for example, is developing a national strategic plan for mobility management with a "people first" perspective, supporting the notion that improved mobility for those with specialized needs ultimately improves mobility options for everyone.[xvii] Given this strong interest, the question becomes: what more, if anything, should the federal government do to facilitate an expanded role for mobility management through authorization of new surface transportation legislation and the accompanying program guidance?

DISCUSSION QUESTIONS

- How can Congress and FTA help nurture mobility management in the statutory reauthorization and associated program guidance? What incentives or regulatory requirements are appropriate?

- Do we agree that an expanded role for mobility management is desirable and will result in improved transportation services for older adults, persons with disabilities, and low income workers, among others?

- How are we going to measure the effectiveness of mobility management? What performance measures are appropriate? What data is needed?

- How can mobility managers improve coordinated planning and program data collection and analysis?

SPEAKERS

James McClary is a Federal Transit Administration Coordination and United We Ride Ambassador and serves as Principal of McClary Management. He serves on several boards, including those of the Taxicab, Limousine, and Paratransit Association and Steering Committee for Easter Seals Project Action. He also works with the American Public Transportation Association to implement Mobility Management in transit systems. Previously, Mr. McClary owned a private for-profit transportation company of 125 vehicles and 200 employees. He has provided consulting services in 35 states and four foreign countries, managed a 145-bus public transit system in Madison, Wisconsin, and provided training services for six universities.

Lavern Prioleau Glover serves as the Mass Transit Program Manager for the South Carolina Department of Transportation (SCDOT), responsible for developing and implementing the Elderly and Individuals with Disabilities, Job Access Reverse Commute, and New Freedom programs. She is also responsible for developing and implementing compliance and technical assistance for the Human Service providers. She has been employed with the SCDOT for over 23 years. Ms. Glover serves on several boards and committees including the Transportation Association of South Carolina, which assists with developing and improving public transportation, community services and quality of life for the citizens of South Carolina. She is a Certified Transit Program Administrator by the Community Transportation Association of America.

ENDNOTES

[i] National Resource Center for Human Service Transportation Coordination website at http://web1.ctaa.org/webmodules/webarticles/anmviewer.asp?a=372&z=72

[ii] TCRP Report 21, "Strategies to Assist Local Transportation Agencies in Becoming Mobility Managers," prepared by Crain & Associates with Pacific Consulting Group, Transportation Research Board, National Academy Press, Washington, DC, 1997.

[iii] TCRP Report 21, p. 16.

[iv] TCRP Report 21, pages 2-3.

[v] "Mobility Management -- A New Role for Public Transportation," American Public Transit Association, available at www.apta.com/research/info/online/mobility_management.cfm

[vi] Eligible expenses and other parameters are provided in the FTA guidance for the FTA's three specialized transportation funding programs S. 5310, JARC and New Freedom: FTA C 9070.1f, FTA C 9050.1, FTA C 9045.1.

[vii] "FTA Grants Made for Mobility Management in FY 2008," provided under "FTA Grants for Mobility Management Projects Obligated in FY 2008" available at http://www.fta.dot.gov/funding/grants/grants_financing_9293.html

[viii] Some information on mobility management projects is available through the United We Ride website http://www.unitedweride.gov/. Examples of New Freedom projects are provided on the FTA website, and a number are mobility management projects http://www.fta.dot.gov/funding/grants/grants_financing_7633.html; and examples of mobility projects are provided in a draft Easter Seals Project ACTION report on mobility management titled "National Strategic Plan for Human Services Person First Mobility Management," dated June 2009.

[ix] Preliminary data, not yet reported to the state.

[x] "Preparing Coordinated Transportation Plans: A Guidebook for State Departments of Transportation," Research Results Digest 331, prepared through National Cooperative Highway Research Program (NCHRP) Project 20-65, Task 14, by TranSystems under contract to AECOM Consult, Transportation Research Board of the National Academies, April 2009., page 38.

[xi] State of Wisconsin, unpublished data on the state's mobility management projects, for calendar year 2008. Results and activities shown are only a portion of those reported by the state.

[xii] "ITS Applications for Coordinating and Improving Human Services Transportation: A Cross-Cutting Study," U.S. Department of Transportation, Washington, DC, August 2006.

[xiii] "ITS Applications for Coordinating and Improving Human Services Transportation: A Cross-Cutting Study," page 3-2.

[xiv] "DOT/HHS Coordination Operational Tests," listed at http://www.its.dot.gov/msaa/msaa_dothhs_test.htm

[xv] "Mobility Services for All Americans, a Federal ITS Program Initiative, Initiative Overview," sponsored by the Research and Innovative Technology Administration (RITA), U.S. Department of Transportation, at http://www.its.dot.gov/msaa/msaa_overview.htm

[xvi] "USDOT Announces Site Selections For Human Service Transportation Improvement Demos," http://www.its.dot.gov/msaa/msaa_human_service.htm

[xvii] "National Strategic Plan for Human Services Person First Mobility Management (PFMM)," developed by Easter Seals Project ACTION for the Federal Transit Administration's Mobility Management Project, Draft Report, June 2009.