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16. Abstract

Mobility management is an innovative approach for managing and delivering coordinated public transportation services that embraces the full family of public transit options. At a national level, there are currently no industry recognized performance indicators to measure and monitor performance of mobility management programs. This research looks at the state of mobility management practice throughout Texas, as well as national best practices in mobility management. Additionally, this research provides an overview of the varying roles of state departments of transportation in public transit mobility management efforts. The research also presents applied mobility management for agencies seeking to implement mobility management programs as well as a menu of performance measures that can be utilized based on the type and level of program implemented.

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PERFORMANCE MEASURES FOR PUBLIC TRANSIT MOBILITY MANAGEMENT

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DISCLAIMER

This research was performed in cooperation with the Texas Department of Transportation (TxDOT) and the Federal Highway Administration (FHWA). The contents of this report reflect the views of the authors, who are responsible for the facts and the accuracy of the data presented herein. The contents do not necessarily reflect the official views or policies of the FHWA or TxDOT. This report does not constitute a standard, specification, or regulation.

The United States Government and the State of Texas do not endorse products or manufacturers. Trade or manufacturers' names appear herein solely because they are considered essential to the object of this report.

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LIST OF ACRONYMS

AASHTO	American Association of State and Highway Transportation Officials
ACT	Association for Commuter Transportation
ADA	Americans with Disabilities Act
APTA	American Public Transportation Association
ARRA	American Recovery and Reinvestment Act
CCAM	Coordinating Council on Access and Mobility
CCRTA	Cape Cod Regional Transit Authority
CDTA	Capital District Transportation Authority
CO_2	Carbon dioxide
COAST	Council on Aging and Human Services
COG	Council of Governments
CTAA	Community Transportation Association of America
CTAI	Community Transportation Association of Idaho
DOT	Department of Transportation
EPOMM	European Platform on Mobility Management
ESPA	Easter Seals Project Action
FHWA	Federal Highway Administration
FTA	Federal Transit Administration
HB	House Bill
H-GAC	Houston-Galveston Area Council
ITD	Idaho Transportation Department
ISTEA	Intermodal Surface Transportation Efficiency Act
IT	Information Technology
ITS	Intelligent Transportation Systems
JARC	Job Access and Reverse Commute
LTD	Lane Transit District
MDT	Mobile Data Terminals
MPO	Metropolitan Planning Organization
MRPT	Menominee Regional Public Transit
MSAA	Mobility Services for All Americans
NCTCOG	North Central Texas Council of Governments
NTD	National Transit Database
PATS	Paducah Area Transit System
RPO	Rural Planning Organization
RTA	Regional Transit Authority
RTAP	Rural Transportation Assistance Program
SAFETEA-LU	Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users
SEE-MMS	Southeast Europe Mobility Management Scheme
SFMTA	San Francisco Municipal Transportation Agency
SMART	Suburban Mobility Authority for Regional Transportation
TCRP	Transit Cooperative Research Program
TDM	Transportation Demand Management

TFP	Travel Feedback Program
TEA-21	Transportation Equity Act for the 21st Century
TMCC	Travel Management Coordination Center
TRB	Transportation Research Board
TRIP	Transit Reservation Information Program
TTI	Texas Transportation Institute
TxDOT	Texas Department of Transportation
USDOT	U.S. Department of Transportation
UWR	United We Ride

CHAPTER 1. EXECUTIVE SUMMARY

The concept of mobility management is nothing new. In fact, mobility management has been in practice for over 15 years in Europe (*1*), and facets of mobility management, such as travel demand management, transportation management associations, and transportation coordination have been taking place in the United States for decades, with the advent of demand response transportation in the late 1970s. Until recently, however, there has been little need or incentive to implement comprehensive mobility management programs in the United States. Transportation providers across the nation are now dealing with scarce resources and funding. Limited funding for public transportation has created a crisis for many service providers: How do transportation providers do more with less? Now more than ever, transportation providers are turning to alternative and creative means of providing public transit services to an ever-growing population.

In recent public transportation conferences and meetings, mobility management has become a buzzword, a concept to be able to provide services more effectively and efficiently. Across the nation, the term mobility management has many different definitions, and in practice, no two mobility management efforts are alike. As agencies compete for limited federal and state funds, they must demonstrate the ability to sustain current transportation offerings in addition to running service more efficiently (*2*). As such, public transportation providers are now looking to implement mobility management to become more effective at transportation provision, often through specifically designated positions of mobility managers.

Although the concept of mobility management is not new, the practice of public transit mobility management is, especially across the United States. State departments of transportation (DOT), as well as the Federal Transit Administration (FTA), need some means by which to measure success in mobility management programs. Mobility managers need to be able to apply goals, objectives, and performance measures to mobility management programs in order to demonstrate their effectiveness and sustain funding.

This research report creates a framework for mobility management and provides an overview of the many definitions for the term. The report documents federal and state regulations in support of mobility management and describes programs in place in the state of Texas as well as national case studies and best practices. Additionally, the research provides a menu of recommended performance measures that can be applied as appropriate to various mobility management programs and offers suggestions for applied mobility management.

One purpose of this research was to determine whether or not performance measures are currently in use for public transit mobility management. At present time, there are no industry recognized performance indicators to measure and monitor performance of mobility management programs. Since mobility management in practice is broader than traditional transit, measures are needed to adequately demonstrate the success of mobility management programs once they have been implemented.

According to TxDOT, mobility management is an approach for managing and delivering coordinated public transportation services particularly for individuals with special needs such as

older adults, individuals with disabilities, children and youth, and individuals with lower incomes. Mobility management focuses on meeting the needs of the individual using a range of public transportation options and service providers.

The research team investigated 28 mobility management programs, and identified 20 mobility management case studies nationally. In addition, the team also examined state DOT roles in varying levels of support of mobility management. The team outlined best practices in mobility management as well as current performance measures in use by mobility management programs and state DOTs. Research findings show that at the national level, mobility management encompasses much more than public transportation services. Additionally, mobility management does, by definition, not serve a single target population, but rather the population as a whole. For the purposes of this report, the research team suggests the following definition, based on national research of terminology used:

> Mobility management is an innovative approach for managing and delivering coordinated transportation that embraces the full family of transportation services. Mobility management emphasizes the movement of individuals through a wide range of transportation options and service providers, in order to achieve a more cost-effective and efficient transportation system.

Although the above definition is used in this report, mobility management encompasses many ideas, and the recommended definition is certainly not all-inclusive.

As a result, several questions arise: If mobility management is about moving individuals, how do transit providers evolve into becoming mobility managers? How does a transit provider that is committed to mobility management look, operate, communicate, and measure performance differently than an agency that is not involved in mobility management?

Transit providers wanting to transition from traditional transit to mobility management will find that it is important to adopt goals specific to mobility management. The research team developed the following series of overarching goals for mobility management based on the U.S. Department of Transportation (USDOT) transit themes of policy, safety, accessibility, sustainability, equity, coordination, and livability:

- Focus on the individual.
- Improve coordination.
- Promote accessibility and livability.
- Greater diversity of products and services.
- Foster education and awareness.
- Promote financial sustainability.
- Ensure safety and security.

Based on the above goals, the research team designed objectives and performance measures in order to better capture the outcomes of mobility management program implementation. The team worked to develop a menu of meaningful measures that will aid in reflecting individual program strengths and weaknesses. The results of the research and the presentation of the menu

of performance measures are not intended to mandate use of the measures but simply to offer guidance for agencies currently providing or planning to implement mobility management programs. So as not to stifle innovation, mobility managers have the option of selecting performance measures applicable to program typologies as well as specific mobility management actions that have been implemented. Additionally, the menu is not all encompassing and is intended to be expanded as programs change and grow.

Regardless of where a mobility management program resides, the agency undertaking mobility management implementation will need to undergo changes to organizational structure and day-to-day business practices. The changes could include mission shift, changing customer focus, additional coordination and integration, the use of information technology, and internal organizational change. Additionally, applied mobility management has some essential provisions for a successful program that need to be considered in the beginning. Considerations include vetting issues, forging partnerships, qualified staff, funding considerations, and program marketing. Lastly, it is critical to emphasize that mobility management focuses on individual and customer needs above all else. Thus, transportation providers may find that meeting individual needs provides a basis for diversification of transit services in order to sustain successful mobility management programs.

CHAPTER 2. INTRODUCTION

Texas is one of the fastest growing states in the United States. From 2000 to 2010, the state population grew from 20,852,000 to 25,146,000 or 20.6 percent—double the national average. The population is not only growing, but is also becoming more diverse, older, and more urban. Although the percentage of the total Texas population in rural areas is declining, the number of people living in rural areas is increasing. Texas has the largest rural population of any state in the nation, approximately 7.2 million (*3*). With tremendous growth throughout the state, and such a large rural population, public transportation providers find it is increasingly important to maintain and grow current transit systems in order to meet the needs of the changing demographics.

There are currently over 200 providers of public transportation services (including large and small urban transit systems, rural transit districts, and specialized transportation providers) in the state of Texas, each representing varying service regions. Many of the providers are struggling to maintain and grow services in an unstable economy, facing limited funding, and needing to provide more service with fewer resources. While some providers have made efforts to coordinate the provision of transportation services, many have discovered that jurisdictional and legislative barriers to developing a truly coordinated system stand in the way. TxDOT has attempted to address some of these issues previously.

In 2003, the Texas Legislature passed House Bill 3588 (HB 3588), also known as the Omnibus Transportation Bill. One provision of the bill was to require TxDOT to facilitate the coordination of public transportation and human service transportation. TxDOT worked with transportation providers in 24 regions throughout the state in order to identify gaps and overlaps in service, and better coordinate transportation services. The significance of this bill is discussed further in Chapter 4.

While HB 3588 advanced the discussion on how service is coordinated, transportation providers still need to implement coordinated services, especially in light of a growing population and continuously limited funding. Mobility management is one strategy that affords transportation providers the opportunity to receive additional funding based on better service efficiencies and effectiveness; however, transportation providers need to be able to demonstrate the success of programs once these have been implemented. Thus, it is critical to have some means of performance measurement in order to document and communicate the success of mobility management.

PURPOSE

The purpose of this research is to determine performance measures for public transit mobility management. There are currently no industry-accepted performance indicators to measure and monitor performance of mobility management programs. There are some mobility management programs that use performance measures, for example for Job Access and Reverse Commute (JARC) and New Freedom grants; however, these measures are written in such a way as to gauge more traditional transit performance. Since mobility management is a concept that is broader than traditional transit, measures are needed to adequately demonstrate the success of mobility

management programs once they have been implemented. This research report will discuss the concept of mobility management, efforts in the state of Texas, national case studies, and the current state of the practice in mobility management. The report documents goals, objectives, and a menu of performance measures that can be tailored to different types of mobility management programs. The results of the research and the presentation of the menu of performance measures are not intended to mandate use of the measures but simply to provide guidance for agencies currently providing or planning to implement mobility management programs.

RESEARCH APPROACH

The research for this report was structured into three major tracks. In the first, the research team gathered data as a part of the background review and information from transportation providers on current mobility management initiatives taking place in Texas. This information was used to determine what type and level of mobility management programs were in place, and whether performance measures were being used to measure the programs at a regional level.

In another track, the research team reviewed the state of the practice in mobility management on national and international scales. Researchers collected data from transportation providers representing various mobility management programs to determine the types of services provided, best practices, and performance metrics, if any, being used to measure the performance of mobility management programs.

In the third track, researchers utilized the information collected from both the literature review, and state and national case studies to create goals for mobility management. Additionally, researchers created program typologies in order to design a menu of objectives and performance measures that mobility managers may use and apply to specific programs. Researchers then presented this information in a matrix displaying the goals, objectives, performance measures, and outcomes by program typology.

ORGANIZATION OF THE REPORT

This report is organized into seven chapters. Each chapter is integral to the framework and complete discussion of mobility management:

- Chapter 1 serves as the executive summary.
- Chapter 2 provides an introduction.
- Chapter 3 provides a literature review and an overview of applicable state and federal regulations that uphold the practice of mobility management. The chapter also summarizes international initiatives and identifies advocacy groups that support mobility management.
- Chapter 4 discusses public transit mobility management in Texas and discusses previous regional transportation coordination efforts. The chapter also includes a summary of the results of a survey of the current state of the practice.
- Chapter 5 offers documentation on national case studies in mobility management, best practices, and describes the role of different state departments of transportation that support mobility management initiatives.

- Chapter 6 is a presentation of recommended goals, objectives, and performance measures for mobility management. The chapter also offers performance measures appropriate for use by state departments of transportation and discusses applied mobility management for transportation providers and expected outcomes.
- Chapter 7 provides a conclusion for performance measurement in mobility management, as well as areas for future research.

CHAPTER 3. REVIEW OF LITERATURE AND GOVERNMENT REGULATIONS

CONCEPT OF MOBILITY MANAGEMENT AND PUBLIC TRANSIT

The concept of mobility management is consistent with the current focus on livable and sustainable communities. Mobility management embraces affordable, multimodal transportation that is safe, accessible, and economically viable for people and businesses. A mobility management program evaluates the needs of the community, assesses the level of accessibility, identifies the gaps, and then fills the gaps with the most suitable transportation programs. While some of these concepts have been used in part or collectively by a number of well-established systems (such as the Port Authority of Allegheny County in Pennsylvania since 1974), the term mobility management has been used recently in a broader context to encompass the need to coordinate transportation services to meet the demand for public transportation in addition to fixed routes provided by conventional transit systems in major cities.

While the definition of mobility management sometimes varies, it has become a common term among those providing public transportation, from Americans with Disabilities Act (ADA) paratransit service providers to mainstream transit systems. Bill Millar, former president of the American Public Transportation Association (APTA), defines the term as: "Mobility management involves creating partnerships with transportation providers in a community or region to enhance travel options, and then developing means to effectively communicate those options to the public" (*4*).

RELEVANT FEDERAL STATUTES AND REGULATIONS

Support for mobility management at the federal level is vital to the success of mobility management. One of the first legislative developments to spur progress toward mobility management was the passing of the Intermodal Surface Transportation Efficiency Act (ISTEA) in 1991. The act demonstrated a need to create more multimodal transportation options across the United States. Fourteen years later, the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) was passed in 2005. SAFETEA-LU further spurred mobility management by amending the definition of capital to include Mobility Management as an eligible expense under all federal formula funding programs (*5*). Under these programs, federal funds may be available for up to 80 percent of cost for mobility management projects. Since the FTA began awarding funding for activities based around the concept of mobility management, transportation providers find it is even more important to measure the results of program implementation. Additionally, transportation providers have been increasingly interested in the idea of mobility management and how to garner additional funding for program implementation. Federal support for the implementation and continuation of mobility management continues to be important for providers. Several federal laws facilitate mobility management and related approaches. Table 1 lists federal regulations applicable to public transportation.

Table 1. Federal Regulations and Statutes Applicable to Public Transportation.

Title	Relevance
23 United States Code Title 23—Highways	Created in 1962. Authorizes various highway public mass transportation improvements and special-use highway facilities as federal-aid highway projects. Last amended 2005.
Title VI of the Civil Rights Act of 1964	Established in 1964. Assures individuals are not excluded from participation in, denied benefit of, or subjected to discrimination under federally assisted programs based on race, color, or national origin.
49 United States Codes Title 49 Transportation Subtitle III—General and Intermodal Programs Chapter 53—Public Transportation	Established in 1964. These statutes pertain to mass transit projects and programs implemented under the authority of the FTA. Last amended 2005.
ADA (Americans with Disabilities Act)	Established in 1990. Transportation providers must provide accessible vehicles and transportation facilities in compliance with accessibility requirements of the ADA. Also required complementary paratransit service within ¾ mile of local fixed routes.
ISTEA (Intermodal Surface Transportation Efficiency Act)	A transportation bill passed by Congress in 1991 that provides six-year authorizations for development of a National Intermodal Transportation System, which consists of all forms of transportation in a unified, interconnected manner. Three major components of ISTEA are the National Highway System, the Surface Transportation Program, and the Congestion Mitigation and Air Quality Improvement Program.
TEA-21 (Transportation Equity Act for The 21st Century)	Transportation act passed by Congress in 1998 that provides six-year authorizations (1998-2003) and policy for highways, safety, transit, and other surface transportation programs. TEA-21 builds on the initiatives established in ISTEA, and calls for a proactive public involvement process that provides complete information, timely public notice, full public access to key decisions, and early and continuing public involvement in the development of an intermodal transportation system.
SAFETEA-LU (Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users)	SAFETEA-LU is the transportation act signed into law on August 10, 2005 (effective 2004), that establishes policy for highways, safety, transit, and other surface transportation programs and provides funding authorization through fiscal 2009 (currently extended by Congressional Continuing Resolutions into fiscal 2012). SAFETEA-LU built on the initiatives established in TEA-21.
Transportation Job Corps Act of 2009 (Title 49)	Directs the Secretary of Transportation, acting through the Administrator, to establish programs for the award of grants to non-profit organizations, partnerships of transit agencies and unions, and special projects in order to introduce youth and disadvantaged individuals to careers in the transit industry through training and scholarships.
Public Transportation Safety Program Act of 2010	Requires the Secretary of Transportation to promulgate regulations to establish a federal certification program for employees and contractors who carry out state public transportation safety program activities in compliance with this Act. Authorizes the Secretary to carry out certain public transportation safety program activities, including inspection and testing of public transportation systems and accident prevention and investigation.

RELEVANT TEXAS STATUTES AND REGULATIONS

Likewise, it is important for individual mobility management programs to have support at the state level (*6*). In Texas, House Bill (HB) 3588 spurred the state in a new direction for transportation coordination. Although coordination alone is not considered mobility management, coordination is certainly a facet of mobility management in practice. There are three references in the Texas Transportation Code and the Texas Administrative Code that have some impact on mobility management, as outlined in Table 2.

Table 2. State Laws That Impact Mobility Management.

Title	Relevance
Texas Transportation Code, Title 6, Subtitle K, Chapter 461, Statewide Coordination of Public Transportation	To eliminate waste and maximize efficiency, TxDOT is required to encourage public transportation providers to agree on the allocation of specific services and service areas among the providers in an area, and identify inefficiencies in the public transportation services in order to improve upon them.
Texas Administrative Code Chapter 31, Public Transportation	Policies and procedures are set out for TxDOT to follow in accomplishing the duties that the Transportation Code prescribed, including the administration of federal public transportation grant monies and allocation of state funds.
Texas Administrative Code Chapter 380, Medical Transportation Program	The Medical Transportation Program is a program that provides prior authorization for non-emergency transportation services to and from covered health care services, based on medical necessity, for categorically eligible Medicaid recipients enrolled in Medicaid, and eligible recipients enrolled in Children with Special Health Care Needs or Tactical Interoperable Communications Plan who have no other means of transportation.

MOBILITY MANAGEMENT INITIATIVES

Although numerous projects and systems in different states started mobility management operations a decade or more ago, the concept has grown in the last six years, somewhat due to state and federal legislative initiatives. In 2004, the federal interagency Coordinating Council on Access and Mobility (CCAM) was established through Executive Order 13330 entitled *Human Service Transportation Coordination* to coordinate 64 federal programs providing transportation funding for older Americans, people with disabilities, and individuals with low income. The council is comprised of 11 federal departments and agencies, the U.S. Departments of Transportation, Health and Human Services, Labor, Education, Agriculture, Housing and Urban Affairs, Interior, Veterans Affairs, Social Security, the Attorney General's Office, and the National Council on Disabilities. CCAM launched United We Ride as an interagency initiative to coordinate human service transportation across all levels of government and the private and non-profit sectors. United We Ride seeks ways to reduce transportation service duplication, increase efficient transportation service delivery, and expand transportation access for older Americans, people with disabilities, and individuals with low incomes.

In 2009, the USDOT formally announced a mobility management demonstration project through the Mobility Services for All Americans (MSAA) initiative designed to improve transportation services and simplify access to employment, healthcare, education, and other community activities by means of intelligent transportation systems (ITS) technology. The Intelligent Transport System-Joint Program Office under the Federal Highway Administration provides grant money to local communities to help them establish ITS-enabled transportation centers that feature simplified points of access, customer-based travel reservations, information, and trip planning services.

Some of the ITS technologies used by the transportation centers include:

- Geographic information systems.
- Integrated vehicle dispatching and scheduling.
- Automatic vehicle location.
- Communications systems.
- Electronic payment systems/financial tracking and billing systems.
- Advanced traveler information systems.

The demonstration project aids in addressing transportation issues for all individuals through the coordination of transportation services available in a given region. The program helps to provide access for older Americans, people with disabilities, and individuals with low incomes to satisfying activities, full engagement in the community for work, visits to the doctor and educational facilities, social events, and essential trips. To achieve the objectives, mobility management is essential to support inclusion, build economic capital, and reduce unnecessary institutionalization, providing greater life satisfaction for most people.

International Initiatives

While there are several international programs that promote the practice of mobility management, there are three noteworthy initiatives that should be mentioned. The DELTA project, the European Platform on Mobility Management (EPOMM), and the Southeast Europe Mobility Management Scheme (SEE-MMS) are programs that focus on the implementation of projects to better manage mobility (*7*).

The Concerted Coordination for the Promotion of Efficient Multimodal Interfaces (DELTA) project is a 24-month research project funded by the 7th Framework Programme of the European Union. The DELTA project seeks to address the issues and needs of passenger transportation systems that deal with seasonal demand. The project is similar to those in the United States in that it focuses on regional transportation as opposed to national or international transportation. The DELTA project will examine intelligent mobility tools and practice and policy guidelines to better manage seasonal demand for transportation in problem areas. The research project intends to develop a Decision Support Instrument to assist local transportation providers with strategies to minimize unnecessary passenger trips and create more efficient and effective transportation provisions (*8*).

EPOMM offers a clearinghouse of data, training, and best practices in mobility management to all of the partner countries. It operates as a platform comprised of 10 countries in Europe. The significance of the platform is that the concept of mobility management varies from country to country. The European platform attempts to clear obstacles between different countries by promoting the exchange of information and establishing a European vision of mobility management. As a result, mobility management in Europe has a broad reach, including campaigns for walking, cycling, and public transportation; personalized travel assistance; employer incentives; carsharing; safe routes to school; and land use planning for mobility. EPOMM points out that rarely is mobility management a set of isolated measures in practice but rather a bundle of practices working together to achieve a common goal (*1*).

The SEE-MMS program was developed as a result of rapid economic growth in the southeast European cities. The rapid growth led to increased traffic congestion and vehicle emissions, which in turn began affecting public transportation, freight, and tourism. As a result, the mobility management scheme was created to support multimodal transportation, and to urge people to take alternate forms of transportation (other than single occupancy vehicles). Additionally, SEE-MMS leadership hopes the project will encourage local and regional authorities to view the MMS project positively, as a means of enhancing cities' development, and working with other nations to coordinate transportation (*9*).

National Advocacy Groups That Promote Mobility Management

There are many advocacy groups actively promoting mobility management in the United States. The following organizations are examples of advocacy groups that provide extensive outreach efforts on behalf of mobility management:

- United We Ride.
- Community Transportation Association of America (CTAA).
- National Resource Center for Human Service Transportation Coordination (*10*).

Many public transit advocacy groups have mobility management as one of their agenda items. Some examples are:

- American Public Transportation Association.
- Association for Commuter Transportation (ACT).
- Transportation for America.
- Partnership for Mobility Management [which includes the American Association of State and Highway Transportation Officials (AASHTO), American Bus Association, Easter Seals, and the Taxicab, Limousine, and Paratransit Association].

Several special-interest groups promote mobility management related to one or more of the three core attributes of mobility management. First, small local-based transit providers (both for-profit and non-profit) have a great amount of interest in promoting mobility management programs because mobility management increases coordination of multiple small providers rather than a single integrated large-scale transit entity.

Second, rural states and municipalities and their research centers are supporters of mobility management because the idea of utilizing non-fixed-route services connecting scattered small

service areas fits well into their rural settings. The Institute for Human Services serving the Southern Tier of New York State and the Idaho Department of Transportation are examples of this category.

Third, because one of the major goals of mobility management is reaching out to special-needs travelers, many non-transportation advocacy groups that support special-needs groups also have been vocal supporters of mobility management. Examples include the Beverly Foundation for the elderly and Dayle McIntosh Center for people with disabilities. Table 3 lists information about the advocacy groups mentioned above, including the agency service areas.

Table 3. List of Advocacy Groups Promoting Mobility Management.

Agency Name	Coverage Area
ACT-Cascade	Washington, Oregon, and Alaska
ACT-Chesapeake	Maryland, Virginia, West Virginia, and the District of Columbia
ACT-Lone Star	Arkansas, Oklahoma, Texas
ACT-Mid-Atlantic	Delaware, New Jersey, New York, Pennsylvania, and Fairfield County, Connecticut
ACT-Midwest	Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Ohio, and Wisconsin
ACT-Northern California	Counties of Del Norte, Siskiyou, Modoc, Humboldt, Trinity, Lassen, Mendocino, Lake Sonoma, Napa, Marin, Solano, Contra Costa, Alameda, San Francisco, San Mateo, Santa Cruz, Monterey, Santa Clara, San Benito, Stanislaus, Merced, Madera, Fresno, Kings, Tulare, Inyo, Mono, Tuolumne, Alpine, Calaveras, Amador, Mariposa
ACT-Patriot	Massachusetts, Connecticut (except Fairfield County), Rhode Island, Vermont, Maine, and New Hampshire
ACT-Rocky Mountain	Colorado, Utah, Nebraska, New Mexico, North Dakota, Idaho, Montana, South Dakota, and Wyoming
ACT-Sacramento Valley	Counties of Butte, Colusa, El Dorado, Glenn, Nevada, Placer, Plumas, Sacramento, San Joaquin, Shasta, Sierra, Sutter, Tehama, Yolo, Yuba
ACT-Southeast	Alabama, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, and Puerto Rico
ACT-Southern California	Hawaii, Counties in Southern California: San Luis Obispo, Kern, Santa Barbara, Ventura, Los Angeles, San Bernardino, Riverside, Orange, San Diego, Imperial
ACT-Valley of the Sun Chapter	Arizona, Nevada
American Public Transportation Association	United States and Canada
Arlington Transportation Partners	Arlington County, Virginia
Beverly Foundation	Pasadena, California
Community Transportation Association of America	United States
Dayle McIntosh Center	Orange County, California
National Resource Center for Human Service Transportation Coordination	Nationwide
Partnership for Mobility Management	Nationwide
Institute for Human Services	The Institute provides management support, information and referral, organizational development, research and technology services to planners, funders, and providers serving the Southern Tier of New York State
Trans Option	Northwestern New Jersey
Transportation for America	Nationwide
United We Ride	Nationwide
Victoria Transport Policy Institute	An independent Canadian research organization dedicated to developing innovative and practical solutions to transportation problem

Mobility management is also being addressed broadly and inclusively by other groups whose attention is focused on sustainable transportation and smart growth. Mobility management shares additional goals with those focus areas, such as modal diversification, high accessibility, and quality trip information. The goals can be achieved by incorporating solutions promoted by sustainable transportation and smart growth using bus rapid transit systems, walkability improvements, and transit-oriented developments. Sustainability plays a significant role in the creation of mobility management programs. With the advent of "going green," many regions and communities are looking for new ways to not only implement effective and efficient transportation, but also create a coordinated system that promotes sustainability, considering land uses design and the overall effect on the provision of transportation. In this context, advocacy groups supporting smart mobility, smart growth, and other innovative ideas can be included as a part of the larger mobility management advocacy group circle, listed as:

- Institute for Transportation and Development Policy.
- Sierra Club Green Transportation.
- Surface Transportation Policy Partnership.
- Centre for Sustainable Transportation.
- Environmental Protection Agency Smart Growth.
- Clean Air Initiative for Cities around the World.
- World Resource Institute—Center for Sustainable Transport.
- Pedestrian and Bicycle Information Center.
- 1000 Friends of Florida.
- American Farmland Trust.
- Center for Neighborhood Technology.
- Regional Plan Association.
- Smart Growth Online.
- Sprawl Watch Clearinghouse.
- Sustainable Communities Online.
- Urban Land Institute Smart Growth Alliances Information Network.

LITERATURE REVIEW: PERFORMANCE MEASURES FOR PUBLIC TRANSIT MOBILITY MANAGEMENT

Although mobility management as a concept has been used over 20 years, published literature is limited to state reports, with few articles published in traditional research forums.

The Transit Cooperative Research Program (TCRP) *Research Results Digest* (*11*) in 1997 examines the impact of implementation of ADA paratransit requirements on public transportation, presents an overview of federal and state coordination activities, summarizes selected ADA/Health and Human Services coordination models, and presents suggestions for further research. The information presented in the report is derived from a review of the literature, as well as telephone and in-person interviews with transit, health and human services, and federal government staff. The report was a direct result of a financial crisis faced by transit operators and was meant to provide a historical perspective and status of public transportation coordination, an overview of federal and state coordination initiatives, and a summary of model coordination programs. An important outcome of this report was the need to obtain a federal

mandate on coordination, identify best practices of coordination, demonstrate cost savings, and improve services.

The National Council on Disabilities produced a report (*12*) in 2005 that laid the grounds for the need for mobility management based on findings from a 2000 poll. The poll results revealed the limitations imposed on people with disabilities due to lack of transportation, which in turn affected their ability to work, socialize, and even attend spiritual events. The report documents the chronic shortage of funding leading to inadequate transportation systems that result in some members of the population who have disabilities being forced to live in institutions. The research highlighted the plight of individuals with disabilities compared to the general public's transportation choices regardless of where they live.

In 2010, a report by the Panel from the National Academy of Public Administrators (*13*) brought together key stakeholders using collaborative web-based technologies to discuss the following broad question: "What ideas can improve access to affordable and reliable transportation for people with disabilities, older adults, and people with limited incomes?"

As a result of an analysis of all of the ideas, comments, ratings, and input, four overarching themes emerged:

- Theme 1—The process for creating coordinated transportation plans continues to need improvement.
- Theme 2—Significant federal policy barriers still exist to facilitate access to transportation services.
- Theme 3—Mobility management strategies are underutilized in communities across the country.
- Theme 4—There are missed opportunities to bridge gaps between transportation and other community services.

The report's recommendations were detailed and many. Theme 3 is central to this research, since it directly relates to mobility management. Participants in the panel's research generally agreed that the local coordination plans SAFETEA-LU required are a good starting point for improving access and mobility at the community level. In over 18 different ideas submitted, participants stressed the importance of building links between employment, education, housing, health, and transportation services. Participants urged CCAM to become part of a larger dialog and participate in the Partnership for Sustainable Communities Initiative established by the Obama Administration. They also suggested that CCAM build relationships with programs such as Complete Streets to enhance walkable and accessible communities that clearly benefit the mobility of seniors, individuals with disabilities, and others.

One recent publication related to mobility management is a guide for review and assessment of local mobility plans published by the Florida Department of Transportation (*14*). The report provides a practice guide for local officials to review mobility plans as they relate to Florida's growth management legislation and the Community Renewal Act. The best-practice criteria include use of alternative modes, advance corridor management objectives for major highway corridors, reduced vehicle miles of travel, promotion of energy-efficient land-use patterns, and transportation systems that reduce greenhouse gas emissions. The research output is a

spreadsheet template that enables local government personnel to review and assess proposed mobility plans based on a point system related to relevant criteria.

Another relevant TxDOT-sponsored report focuses on providing urban mobility information affecting traffic delays (*15*). The report provides data and estimation procedures that could have an impact on mobility management.

A collaborative report of the Center for Urban Transportation Research (CUTR) and Washington State DOT reviews Washington's key strategies for preserving mobility by improving the efficient operation of the existing transportation facilities through increasing the use of transportation demand management (TDM) strategies to decrease drive-alone rates (*16*). Other advantages of TDM include the ability to reduce the need for new and wider roads, maximize return on infrastructure spending, make the most of current assets, meet individual needs, and result in a huge impact on the community (*17*). To realize such benefits, the report used the Transportation Demand Management Assessment Procedure, which is a sketch planning modeling approach to incorporate TDM into Washington State DOT's travel demand model. The study developed a low-cost method to help Washington State DOT plan TDM strategies as part of the overall transportation planning process.

The U.S. Departments of Housing and Urban Development and Transportation, and the U.S. Environmental Protection Agency have developed a new interagency Partnership for Sustainable Communities to help families in all communities—rural, suburban, and urban—gain better access to affordable housing, more transportation options, and lower transportation costs, while protecting the environment in communities nationwide.

PERFORMANCE MEASURES

Performance Measurement has generated attention at the national level, especially over the last decade. Both the Federal Transit Administration and the U.S. Department of Transportation have placed an emphasis on the need for agencies to utilize performance measurement in order to gauge progress and garner funding. Major investment projects receiving federal funds are subject to evaluation under the Government Performance and Results Act of 1993. The purpose of such evaluation is to improve the effectiveness of programs and accountability to the public through greater focus on results, service quality, and customer satisfaction (*18*). In 2001, the FTA mandated that New Starts program require a Before-and-After Study, which was further strengthened under SAFETEA-LU. The SAFETEA-LU legislation mandated transit projects receiving federal funding to develop a plan, collect data, and analyze collected data to determine the cost and ridership impacts of the transit project (*19*) and submit reports for legislative and administrative oversight.

In managing mobility-oriented programs, research by Ecola and Grant (*20*) pointed out that the focus should be placed on better data collection and on conducting surveys to plan and optimize the use of existing resources. The collected data can be used to assess program impacts and in marketing programs among potential users. Surveys can help to answer questions on quality of service and customer satisfaction. Even qualitative data can be used to provide context and understanding in the underlying reasons for changes in performance. By using both quantitative

and qualitative data in performance measurement, planners can identify strengths and weaknesses of transit organizations, establish goals and objectives, and help improve performance over time using trends or a time series analysis and through comparisons (benchmarking) with other transit organizations of similar size and goals within and outside of a state (*21*).

The research also identified the following four general categories of performance measurements:

- Administration: refers mainly to the financial operations and funding.
- Operations: refers to transit agency's daily operations.
- Planning: refers to policy and service questions in operation.
- Public and market focus: refers to issues of interest to varied stakeholders.

The environment is another category that can be added in performance measurement. In 2007, Bill Millar's testimony before the National Surface Transportation Policy and Revenue Study Commission (*22*) emphasized the need to determine how well the transportation system is performing to expectations and measuring those things that matter. The latter includes energy independence, improved air quality, reduction of greenhouse gases, and housing with efficient and affordable access.

In measuring the performance of an urban demand response transportation system, an integral part of mobility management programs—data—need to be collected for the following items (*23*):

- Revenue hours.
- Revenue miles.
- Vehicle hours.
- Vehicle miles.
- Passengers.
- Passenger miles.
- Operating expense.
- Accidents—major and non-major.
- Requested trips.
- Scheduled trips.
- Completed trips.
- Cancellation—advanced, same day, and late.
- No-show.
- Missed trip.
- Trip denial.
- Trip length.
- Travel time.
- Complaints.

The collected information can help to develop further the following performance measure variables in demand response transportation:

- Operating cost per passenger trip and mile.
- Operating cost per vehicle hour and mile.
- Passenger revenue per total operating cost or fare recovery ratio.
- Passenger trips per vehicle hour and miles.
- Accidents per 100,000 miles.
- No-shows per scheduled trips.
- On-time pick-ups to total pick-ups (on-time performance).
- Complaints per 1,000 passenger trips.
- Average trip length.
- Average vehicle travel time.
- System speed.
- Response time.
- Trip denials per trip requested.

Another factor worthy of consideration in measuring the performance of a mobility management program is the presence of a travel feedback program (TFP). This program refers to forms of personalized communication aimed at changing travel behavior of individuals from car use to non-auto transportation such as public transportation, walking, or biking (*24*). TFPs can be implemented in schools, workplaces, and residential areas to target auto users. By educating individuals on the consequences of their travel behavior and keeping them informed of various alternative transport options, TFPs can motivate individuals to change travel behavior. Considering that TFPs play an important role in motivating individuals to use alternative means of environmentally friendly transportation like public transit, their design and development demands attention.

In rural areas, performance measurement of mobility management programs differs slightly from that in urban settings. In urban areas, the major concerns in performance measurement include managing ridership demand and high costs per passenger trip, while in rural areas the focus is mainly on funding and in maintaining an aging fleet in roadworthy condition to meet service demands (*25*). Some of the performance measures used in rural mobility management programs includes the following:

- Vehicle miles and hours.
- Passenger trips.
- Total operating expenses.
- Accidents/safety incidents.
- On-time trips (performance).
- No-shows.
- Complaint rate.

To enhance the utilization of mobility management programs, travel training services can play an important role. In many rural transit districts, if travel trainers are employed by not-for-profit organizations and public agencies including schools, human services agencies, transit authorities, and self-advocacy organizations, trainers can provide instructions in travel skills as well as encourage and assist individuals with disabilities and frequent users of paratransit services to use fixed and flex-route transit services (*26*). Since trainers can render valuable services in maintaining individuals' mobility and help to meet the broad goals of a state's transportation policy, their presence and training should be considered when developing performance measures for mobility management programs. The significance of supporting travel trainers is to assist individuals in overcoming fears and uncertainties when utilizing public transportation. Trainers aid in making the services more accessible; thus increasing overall ridership.

In mobility management programs, the emphasis is often on information sharing, communication, organization, and coordination. According to Black et al. (*27*), to sustain a mobility management program, the focus should be on economic efficiency, livable streets and neighborhoods, protection of the environment, equity and social interaction, safety, and contribution to economic growth. Various federal agencies and some state governments have developed performance measures in transportation that take into consideration most of the aforementioned factors. These performance measures can be applied when assessing mobility management programs. For example, the USDOT outlined performance measures for its strategic goals of safety, security, connectivity, environmental stewardship, and organizational excellence in its strategic plan for fiscal years 2006–2011. Additionally, other research has discussed a system of performance measures that must be established and tracked for successful mobility management (*28*).

The research team found many different agencies and initiatives in support of the mobility management concept. There is also clear support, financial and otherwise, for mobility management programming at the state and federal levels. Additionally, there are good mobility management programs in place that have been operating in other countries, which provide much to learn from. There has been an influx of recent articles and publications on mobility management that offer a wealth of information on mobility management, including definitions, guidelines, and applications. All of this information can provide mobility managers with the opportunity to begin a new program, knowing that much research has been done on how to run a successful mobility management program.

There are a myriad of nonprofit organizations that provide mobility management services, whether the services offered are specifically recognized as mobility management or not. Additionally, federal and state efforts to coordinate transportation services and make services more accessible and available to community members who need them show strong government support for the concept of mobility management. Good mobility management programs in other countries are important resources for learning. The reduced transit funding coupled with the increased gasoline prices and demand for public transportation have helped to create greater interest in the concept of mobility management among transportation providers, decision makers, community members, and researchers.

CHAPTER 4. PUBLIC TRANSIT MOBILITY MANAGEMENT IN TEXAS

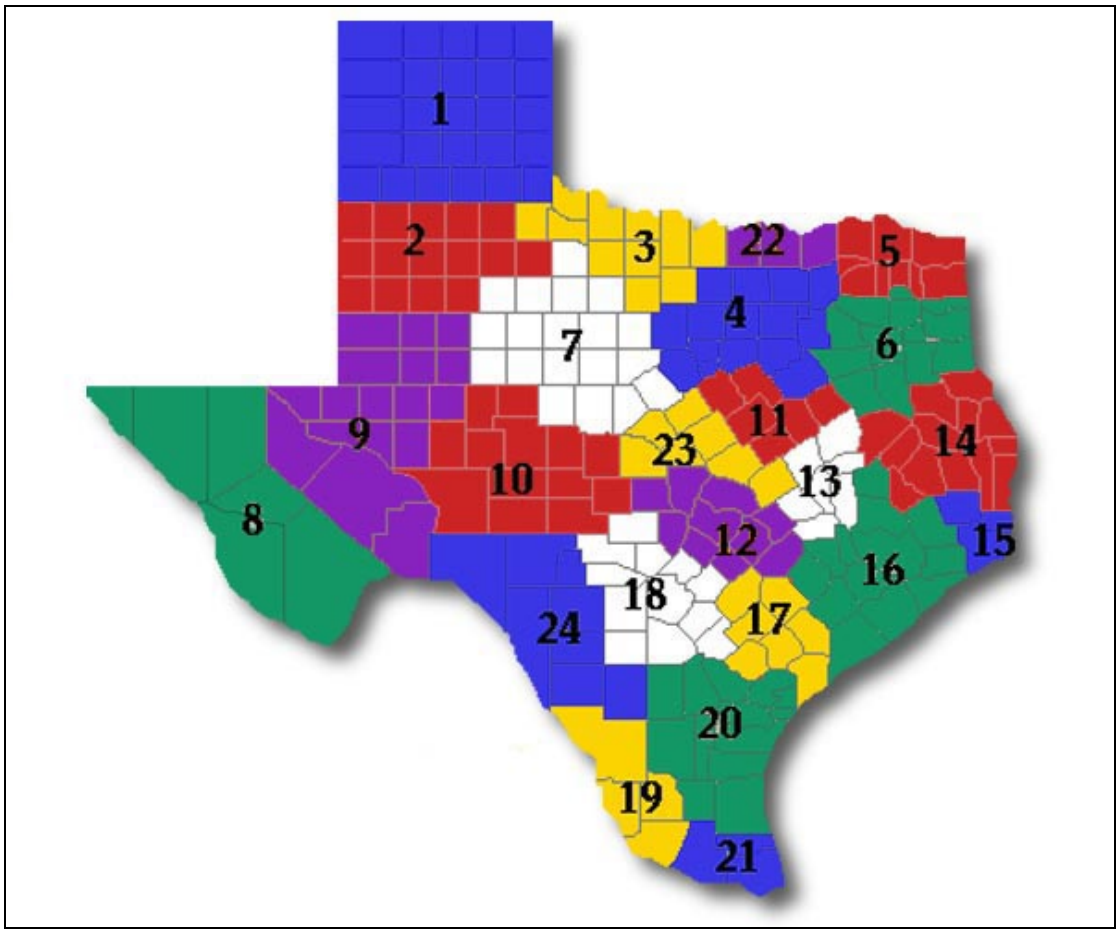
BACKGROUND

Texas has traditionally been a state that relies heavily on single occupancy vehicles. The rapid growth seen in cities and suburban areas has begun to create congestion and accessibility issues as the growth has outpaced the capacity of the roads needed to bring individuals to their destinations. As such, transportation providers, in conjunction with the Texas Department of Transportation and health and human service agencies, have worked to develop a means to support alternative forms of transportation for individuals, as well as develop transportation services in historically underserved areas.

Regional Transportation Coordination Initiative

Chapter 2 briefly addressed HB 3588, and its significance to transportation coordination in Texas. HB 3588 added Chapter 461 to the Texas Transportation Code, to focus on the State's investment in public transportation through the coordination of services. After the bill was passed in 2003, the Texas Transportation Commission established the Regional Planning and Public Transportation Study Group in 2005. The mission of the Study Group was to review public transportation planning and programming practices in metropolitan, suburban, and rural areas. Additionally, the group's charge was to improve the state of the practice in order to enhance service delivery, customer satisfaction, efficiency, and effectiveness within 24 regions around the state. The jurisdictional limits of the 24 regional councils of governments in the state define the regions (Figure 1). The Study Group recommended that each of the 24 regions develop a regionally coordinated public transportation plan in 2006. The initial goal of the plans was to identify regional barriers and constraints to coordination, as well as to document service gaps and overlaps (*29*). Leadership for regional coordination transitioned from the Study Group to the TxDOT Public Transportation Division in 2006.

Based on the initial plans, the 24 regional coordination efforts set to work implementing actionable items, such as better service coordination, growth of service areas, and reduction of gaps. The regionally coordinated planning effort has since become an iterative process, with the regions updating the plans to reflect new growth, service gaps, and agency plans. Additionally, many of the coordinated efforts have been awarded JARC and New Freedom funds for new services as a result of the coordinated efforts. TxDOT continues to support these efforts, offering continued funding and facilitation assistance to help regions update their plans.



Source: Texas Association of Regional Councils (*30*)

Figure 1. Texas Regional Coordination Effort Boundaries.

TxDOT Definition of Mobility Management

Mobility management, as defined by TxDOT, consists of short-range planning and management activities and projects for improving coordination among public transportation, other transportation service providers, and agencies that do not provide transportation but serve individuals who need transportation services. This includes both expenditures for personnel and technology activities.

TxDOT's goals of mobility management are to:

- Build coordination among existing transportation providers and non-transportation providers who serve individuals that need transportation.
- Expand the availability of services to meet the public's unmet transportation needs.

State Support for Mobility Management

Recent official TxDOT-supported mobility management initiatives were initiated in fiscal 2008 using FTA Rural Technical Assistance Program (RTAP) and FTA Section 5304 Statewide Planning funds for 10 statewide workshops that included 23 of the 24 designated regional planning areas and the local workforce and health and human service partners. The desired benefit was to

provide networking for the different partners, and planning for client transportation. In fiscal 2009, TxDOT together with the Community Transportation Association of America, hosted a Texas-oriented transportation coordination institute with most of the resulting projects having a mobility management component.

For fiscal 2010, Texas was awarded a United We Ride grant to promote mobility management and train mobility managers. Participants in the program include the following agencies:

- Dallas Area Rapid Transit in Plano.
- Heart of Texas Council of Governments.
- Wise County in the Texoma Area Paratransit System.
- TxDOT Public Transportation Division.

Furthermore, TxDOT developed a coordinated call for mobility management projects that included several funding streams:

- Section 5304 Statewide Planning.
- RTAP.
- Job Access Reverse Commute.
- New Freedom.
- Intercity Bus.
- Rural Discretionary Funds.

In at least one case, a local entity also used Section 5303 Metropolitan Planning funds. Mobility management will be eligible for any of the funding (*31*).

SURVEY PURPOSE

The research team developed a survey instrument for examining the current mobility management efforts under way, seeking to define the programs and document experiences. Appendix A includes a copy of the survey instrument. Researchers sought to identify all of the mobility management activities under way in the state by contacting all possible entities who could be engaged in the execution of such actions. The survey instrument was sent to all agencies that are recorded recipients of TxDOT funds under the various funding categories that are used for mobility management. Appendix B provides the complete list of survey recipients.

SURVEY DESIGN

Texas Transportation Institute was responsible for questionnaire design and the layout of the online survey. Researchers attempted to use a layout that made it easy for the respondents to read the survey.

The survey was designed with a light blue background and a black sans serif font that stood out on each page. The TxDOT logo was at the top of each page along with the descriptive title *Mobility Management Projects in Texas*. The first page of the survey offered a description of the survey purpose, and TTI also added an indicator bar above each question to let respondents know of their progress in completing the survey.

Survey Instrument

The physical survey instrument was an Internet-based survey and was designed using the publicly available SurveyMonkey™ freeware software. There were a total of 11 questions including some follow-up questions to gather additional information where necessary. The survey questions covered the following items:

1. The type of entity or agency.
2. Does the entity receive funding specifically meant to be used for mobility management?
3. If the entity did not receive funding specifically for mobility management, does the entity offer mobility management in any case?
4. What are the funding sources used by those who receive funding specifically for mobility management?
5. What mobility management activities are provided by the entity or agency? The survey provided eight choices as well as an option to add other activities not named.

   For each activity that was chosen, three additional questions were asked:
   i. Does the agency use or plan to use specific performance measures to monitor achievements?
   ii. If it does, what are the measures?
   iii. What data do or will the agency collect and report to monitor performance?
6. How will the agency evaluate achievements?
7. What challenges are being encountered in implementing mobility management?
8. Does the entity partner collaborate with other organizations? If yes, who are the partners and how do the partners collaborate?
9. Does the entity have a marketing plan or program for the mobility management program? If yes, describe.
10. Does the entity have an accomplishment or innovation in mobility management to share? If yes, describe.

Appendix A provides the full representation of the survey, including copies of the various screens presented to the survey respondents. For each of the mobility management activities listed, if the respondent responded affirmatively that the entity did sponsor the activity, a set of follow-up questions were presented:

1. For this Mobility Management activity, does your agency use or plan to use specific performance measures to monitor achievements [ ] no, [ ] yes. If yes, what are the performance measures? (Please be specific)
2. What data do or will your agency collect and report to monitor performance? (Please be specific)

The follow-up screen was provided each time the respondent indicated "yes" to a mobility management activity.

Entities Surveyed

The survey was sent to any agency or other organization that may have received funding through FTA or TxDOT that could be used for eligible mobility management activities. Additionally, the research team made an effort to send the survey to lead agencies involved in the regional

transit coordination efforts. In many cases, the lead agencies work to represent the interests of all of the agencies involved in coordinated transportation within their respective regions. Many of the lead agencies facilitate efforts that include agency representation from metropolitan transit authorities, rural transit districts, urban transit districts, medical transportation, health and human service agencies, private, and faith-based providers. The research team felt it was important to include the lead agencies as the representatives may have a good perspective on the mobility management effort within the region. Appendix B includes the detailed listing of those receiving the survey instrument, sent out in November 2010.

Survey Distribution Methodology

The survey was directed to the mobility manager or the chief executive of each entity. The chief executives were asked to forward the survey to the appropriate person in the agency most familiar with mobility management efforts. The transmittal email noted that ideally the person would be one with the title Mobility Manager or some similar nomenclature, who is directly responsible for mobility management sorts of activities. The survey was also directed to the staff person involved in the regional coordination efforts for those entities that did not necessarily have mobility management as a staff function.

Respondents

The survey had a good response rate, and the research team was able to collect valuable data on the state of the practice for mobility management in Texas. Survey respondents represented each of the different types of agencies involved in regional coordination and mobility management. Respondents included lead agencies for regional coordination, metropolitan transit authorities, rural transit districts, state funded urban transit districts, transit providers for rural-urban districts, and specialized transportation providers. Table 4 captures the number of respondents and response rates, including the lead agencies that answered the survey. Figure 2 shows a bar graph of the agency respondents by type.

Table 4. Total Number of Survey Respondents and Response Rate by Agency Type.

Agency Type	Total Surveys Sent	Agencies Responding	Response Rate	Percent of Responses
Lead Agencies*	23	17	74%	20%
Transit Authorities	8	3	38%	4%
Rural Transit Districts	29	18	62%	21%
Urban Transit	18	8	44%	9%
Rural/Urban Transit	9	6	67%	7%
Specialized	115	33	29%	39%
TOTALS	**202**	**85**	**42%**	**100%**

**Eleven Lead Agencies are also classified as another type of agency.*
Total 74 completed surveys (85 agencies less 11 responses from Lead Agencies representing two types of agency).

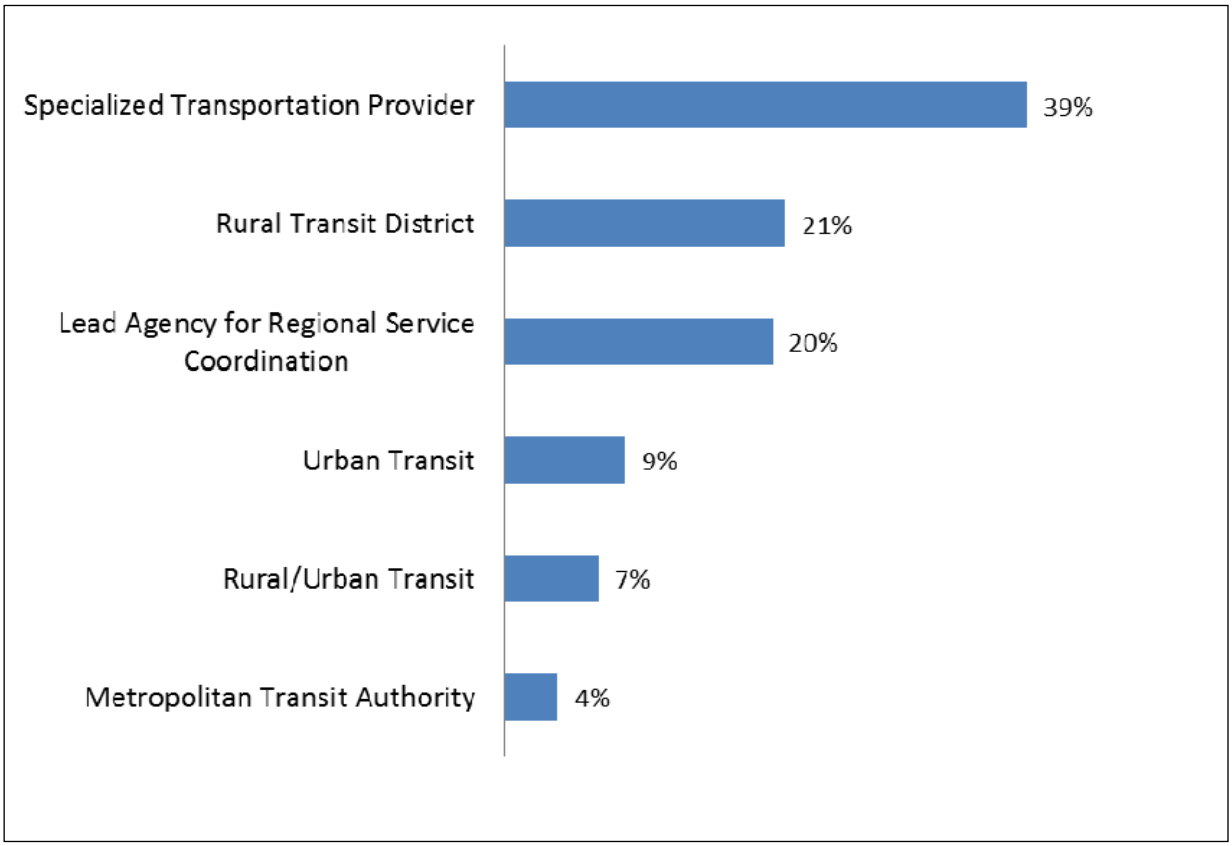


Figure 2. Percent of Survey Responses by Type of Agency.

SURVEY RESULTS

Researchers requested that responses be completed by mid-November; however, the team extended the deadline as responses continued to come in. The additional responses helped to add to the overall sample size, and by the end of November the team received 74 completed surveys representing 85 agency types (11 Lead Agencies are also classified as another type of agency). Appendix B includes the final survey results.

The research team asked the survey respondents to list all mobility management activities the agencies sponsor. The survey provided various categories to capture the activities, including Employ Agency Staff, Fund Transportation, Pay for Rides, Provide Educational Materials, Travel Training, Agency Training, Advanced Technologies, and Other, giving the respondents the opportunity to list additional mobility management activities. Figure 3 depicts the number of respondents undertaking various mobility management activities.

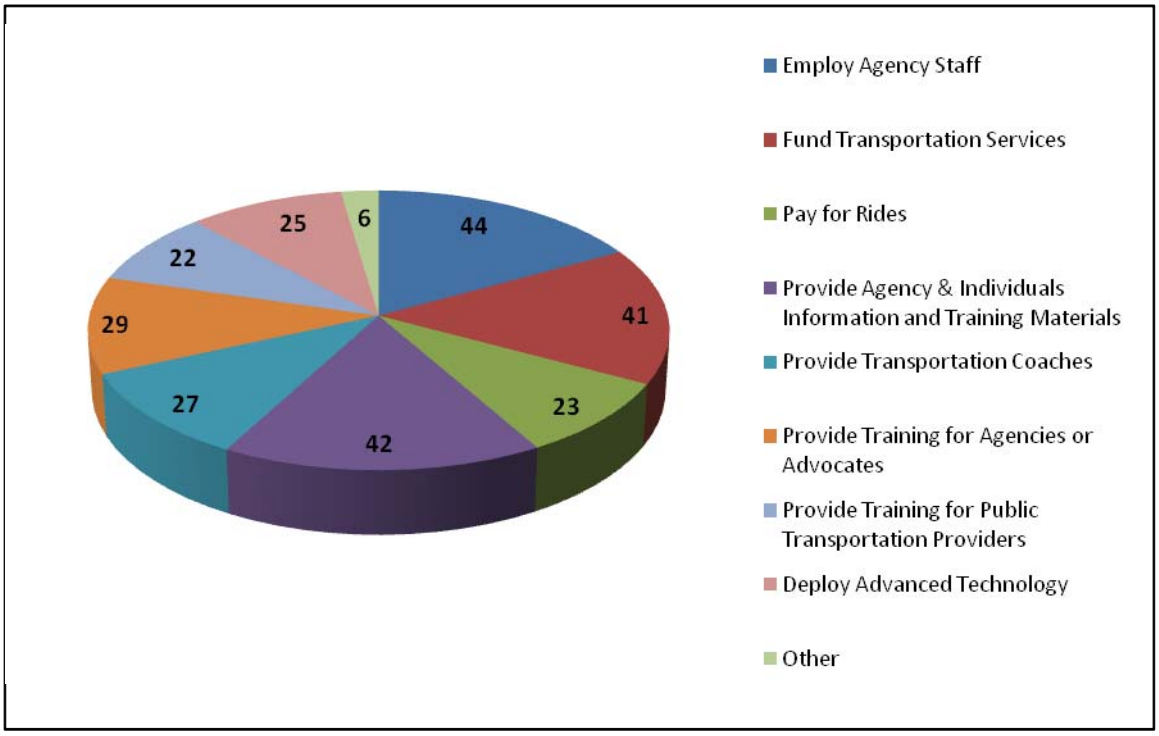


Figure 3. Survey Respondents Sponsoring Different Mobility Management Activities.

In the category of Other, several agencies responded with a variety of mobility management pursuits. Some of these activities included inter-agency coordination and trip referrals, passenger education, Medicaid trip coordination, and participation in regional coordination activities.

The research team found that agencies that have implemented mobility management activities use different methodologies for evaluating the programs. These range from the more traditional transit evaluations such as regular performance reviews and trip tracking, to the more qualitative methodologies such as surveys and client feedback. Examples of some of the evaluation methodologies for mobility management programs in Texas are:

- Increase in ridership.
- Quarterly or annual performance reviews for transit services.
- Client feedback/surveys.
- Completion of a Regional Coordination Plan.
- Track client trip request locations.
- Improvements in service.
- Passenger advisory committees.

The majority of the evaluation methodologies are the same as those used to evaluate public transit services. While there are many good mobility management efforts taking place across the state, there needs to be a method for better tracking the success of mobility management, since it is a broader concept than operating traditional transit services.

The research team also inquired about the challenges agencies face when providing mobility management programs. The individual program challenges certainly varied; however, the number one challenge that Texas agencies face when putting together a solid mobility management program is the lack of funding. Additional challenges include lack of resources (other than financial), jurisdictional boundaries, heavy passenger demand, service area expansion, and lack of public interest. The top four challenges for agencies in mobility management are:

1. Lack of funding; lack of local match.
2. Lack of resources (staff, vehicles, etc.).
3. Lack of support from other agencies; need for local leadership.
4. Service area/scheduling challenges.

Marketing plays a significant role in the success of any new program. In the case of mobility management, educating current and future customers is one of the best ways to increase interest and support for alternative forms of transportation (other than driving alone). Although some agencies exert a substantial amount of effort to support mobility management activities, very few have marketing plans. The absence of a marketing plan could be due to the top two challenges listed previously: lack of funding and lack of resources; however, marketing and consumer education is necessary if mobility managers are to garner support for the program. Figure 4 graphically depicts the survey responses on marketing. Only 15 percent of the mobility management efforts in Texas reported using a marketing plan.

To summarize the results, there are many different mobility management initiatives ongoing throughout the state. There is great potential for more mobility management programs to be implemented, but there are also barriers and limitations to new program implementation, which include funding and resources. In a state that has experienced rapid growth over the last decade and will continue to grow in decades to come, it is critical that Texas begins to focus on mobility as a priority in order to bring more support to future mobility management programs.

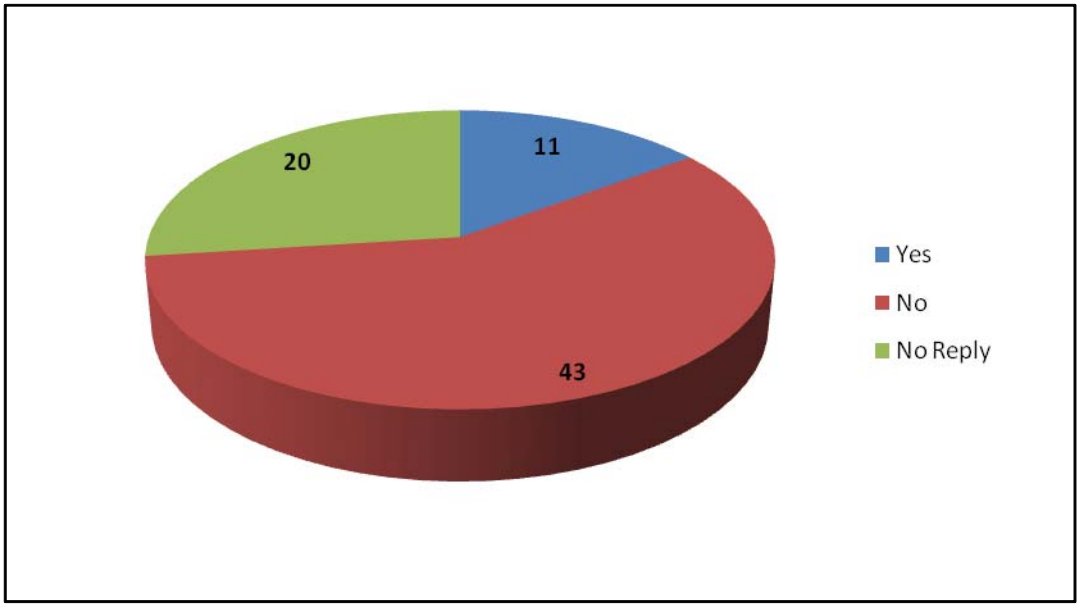


Figure 4. Survey Respondents Using a Mobility Management Program Marketing Plan.

EXAMPLES OF MOBILITY MANAGEMENT PROJECTS IN TEXAS

According to the survey responses, 15 of the 24 Texas regional coordination planning areas have incorporated public transit mobility management strategies. These strategies reflect a full spectrum of activities, including the following:

- Efforts promoting, enhancing, and facilitating access to transportation services for individuals with disabilities, older adults, and individuals with low incomes.
- Development of strategies at the county level that are then combined in a major regional plan.
- Development and support of state and local coordination policy bodies and councils to coordinate in combined rural areas.
- Operation of transportation brokerages to coordinate providers, funding agencies, and services for individuals who are elderly or who have disabilities, regardless of location.
- Development of travel navigator systems and neighborhood travel coordination activities in partnership with independent living centers.
- Development and operation of one-stop transportation traveler call centers, as well as use of intelligent transportation system technologies (including automatic vehicle location, mobile data systems, and automated fare collection systems).
- Establishment of regional mobility managers or transportation brokerage activities that include supporting these new mobility management and coordination programs.

USE OF PERFORMANCE MEASURES FOR MOBILITY MANAGEMENT IN TEXAS

The research team asked the survey respondents to describe performance measures used for mobility management activities. To better organize the overall responses, the researchers grouped the measures currently used into categories based on the mobility management activities currently in place:

- Employ agency staff.
- Fund transportation.
- Pay for rides.
- Provide educational materials.
- Travel training.
- Agency training.
- Advanced technologies.

The performance measures were so similar for many of the categories that activities could be grouped into three major sets, described below.

Under the activities employ agency staff, fund transportation services, and pay for rides, survey respondents listed a variety of metrics, similar for all three activities. The measures used can be grouped into broad categories that include increased ridership, client surveys, increased access, increased referrals, identification of service gaps, and rides diverted from paratransit. However, survey respondents did not specify that data are currently being collected on all of the measures.

The second category deals with training activities for customer education, travel trainers, and agency advocates. The measures utilized in this category include print and media advertising, presentations delivered, number of agreements signed, training provided, interagency contacts made, and new trips generated, either from new ridership or passengers migrating from paratransit services.

In the advanced technologies category, none of the providers have clearly defined performance measures. This is most likely because the technology utilized is so new that the agencies have not had the opportunity to develop a baseline on the performance.

Some Texas mobility management programs are using performance measures; however many of the measures used are better suited to traditional public transit services (passengers per mile, for example), and others have yet to establish mobility management performance measures. There is a need for agencies to have a reference for performance measures that can be applied to mobility management activities, and can be used to build support to continue mobility management programs.

CHAPTER 5. NATIONAL EXPERIENCE IMPLEMENTING PERFORMANCE MEASURES FOR MOBILITY MANAGEMENT

BACKGROUND

This chapter outlines the importance of mobility management in transportation and establishes the need for solid performance measures. This chapter also highlights national case studies in mobility management, both from the program perspective and the state department of transportation perspective. Lastly, the methodology for case study selection is included in the background.

Universally, state agencies and transportation providers are struggling to meet the needs of individuals due to decreases in federal and state funding for transportation programs. Now more than ever, agencies must work together and pool resources to keep providing much needed transportation service in both urban and rural areas. Consequently, states are seeing a major increase in the development of mobility management programs to meet the needs of the population.

Although the U.S. is seeing an increase in programs, mobility management itself is not a new concept in Europe. European countries have been working to collaboratively manage mobility for nearly 13 years through the EPOMM. EPOMM defines mobility management as: "Mobility Management is a concept to promote sustainable transport and manage the demand for car use by changing travelers' attitudes and behavior. At the core of Mobility Management are soft measures like information and communication, organizing services, and coordinating activities of different partners. Soft measures most often enhance the effectiveness of hard measures within urban transport (e.g., new tramlines, new roads, new bike lanes). Soft mobility management measures (in comparison to hard measures) do not necessarily require large financial investments and may have a high benefit-cost ratio."

The concept of mobility management is becoming more widespread throughout the United States (*32*). In May 2011, TTI researchers attended the Performance Measures in Mobility Management Panel at the American Public Transportation Association Bus and Paratransit Conference. The purpose of the panel was to define varying program definitions of mobility management and to discuss the purpose of performance measures. One of the presenters, James McLary, defined mobility management as "a cost-effective approach to reduce problems such as traffic congestion, etc. Mobility management is not just coordination between organizations—it is meeting unmet needs of individuals" (*33*). McLary outlined the following benefits of mobility management:

- Congestion reduction.
- Roadway cost savings.
- Parking cost savings.
- Transportation diversity.
- Transportation safety.
- Pollution reduction.
- Energy conservation.
- Physical fitness and public health.
- Efficient land use.

THE IMPORTANCE OF PERFORMANCE MEASUREMENT IN MOBILITY MANAGEMENT

Performance measurement is a means by which agencies can measure the effectiveness of their mobility management programs through established parameters that provide a means to gauge achievement of goals and objectives. Mobility managers must measure performance because they use the measurements to determine the effectiveness of the programs. Robert Behn, an expert in performance measurement, outlines eight reasons for establishing measures: to evaluate, control, budget, motivate, promote, celebrate, learn, and improve. He is quick to point out, however, that no one measure will fit all eight purposes (*34*).

With the passage of the Government Performance and Accountability Act of 1993, performance measurement has become a legislative requirement. Performance measurement is also an integral component of outcome evaluation and renders several benefits. These benefits include insights into the outcomes of investment in public programs, managerial efficiency, and administrative accountability. Currently, there are 35–40 states that practice performance measurement in delivering public goods and services, including transportation services (*35*).

The USDOT outlined the draft strategic plan for fiscal years 2010 to 2015, entitled *Transportation for a New Generation*. Within the plan, USDOT outlines performance measures related to achieving strategic goals of safety, state of good repair, economic competitiveness, livable communities, environmental sustainability, and organizational excellence. Table 5 lists the goals and outcomes related to public transportation. Many of the performance measures could potentially be adapted to public transportation mobility management programs.

Table 5. USDOT Strategic Plan Performance Measures Related to Public Transportation.

Strategic Goals	Outcomes	Performance Measures
Safety	• Reduction in transportation-related fatalities. • Reduction in transportation-related injuries. • Improved safety experience.	• Rate of transit-related fatalities per 100 million passenger miles traveled. • Rate of serious injuries among transit riders per 100 million passenger miles traveled. • Increase in street policies and safe routes to schools.
Economic Competitiveness*	Maximization of economic returns on transportation policies and investments.	• Increase in percent of population with access to 511. • Increase in travel time reliability in urban areas including: o Hours of congested travel planning time index. o Travel time index.
State of Good Repair*	Increase in proportion of transit assets in good condition.	• Percent of transit assets with a marginal or poor rating. • The average age of rail and bus vehicles.
Livable Communities*	• Increased access to convenient and affordable transportation services. • Improvements in public transit experience. • Improvements in networks that accommodate pedestrians and bicycles. • Improvement in access to transportation for the special needs population and individuals with disabilities.	• Average percent change in transit boardings per transit market (150 largest transit agencies). • Increase in transit trips in non-urbanized areas. • Increase in transit seat miles by urbanized-area transit systems. • Increase in intermodal transportation options for travelers. • Increase in transit vehicle reliability. • Increase in the number of states and metropolitan planning organizations that address all of the SAFETEA-LU elements for walking and bicycle planning activities. • Percent of bus fleets compliant with the ADA. • Percent of key rail stations compliant with the ADA.

Source: U.S. Department of Transportation (*36*)

Table 5. USDOT Performance Measures Related to Public Transportation (continued).

Strategic Goals	Outcomes	Performance Measures
Environmental Sustainability*	• Reduction in carbon emissions, improved energy efficiency, and reduction in dependence on oil. • Reduction in transportation-related air, water, and noise pollution and impacts on ecosystems. • Increased use of environmentally sustainable practices in the transportation sector. • Increased use of environmentally sustainable practices and a reduction in pollution and other adverse environmental effects from DOT-owned or -controlled transportation services and facilities.	• Decreased fuel consumption per vehicle miles traveled, per passenger miles traveled, and per freight ton-mile (net). • Increased percent of transit vehicles using alternative fuels. • Increased transit market share for the top 50 urbanized areas. • A report in 2012 about the feasibility of measuring the percentage of capital improvement projects that include environmental management systems and context-sensitive solutions: o 30% reduction in vehicle fleet petroleum use by 2020. o 26% improvement in water efficiency by 2020. o 50% recycling and waste diversion by 2015. o 95% of all applicable contracts to meet sustainability requirements.
Organizational Excellence*	Development of a diverse and collaborative workforce to serve the nation's long-term social, economic, security, and environmental needs.	• Increase in the education and training level of workforce. • Link between employee performance and strategic goals. • Facilitation of clear, timely, consistent, and inclusive internal cross-modal communications with opportunities for feedback through town meetings and social networking platforms. • Inclusion of employee satisfaction performance standards in the performance plans of operating administration administrators, career and non-career senior executives, and first-line supervisors.

Source: U.S. Department of Transportation (*37*)
*Changes have been made to these topics, and only the latest information has been reported.

In the field of transportation, and as shown above, performance measurement helps to meet regulatory and reporting requirements, such as annual reporting to FTA's National Transit Database and to facilitate performance-based management (*38*). Often, the complexity of a transportation network makes performance measurement a difficult and challenging task. This has led many mobility management program managers to begin thinking about the development of their own performance measures to suit their unique needs and for long-range planning. Still, some mobility management programs in certain states have yet to develop measures. In such cases, lack of performance measures can be partly attributed to the fact that the programs are still new. In other cases, lack of measures may be due to differences in operational, legislative, and

physical conditions, which make adoption of performance measures difficult. A later section will further discuss this issue.

With the motivations for measuring performance, how does a program select measures that adequately capture the purpose of performance measurement but are also unique to the program itself? Further, how do agencies ensure that the measures developed are meaningful and will aid in reflecting the program's strengths and weaknesses? During the Performance Measures in Mobility Management Panel at the APTA Bus and Paratransit Conference in May 2011, panelists presented the reasons for measuring performance. These reasons include accountability (how well is the program doing?), overall evaluation of effectiveness, and appropriate allocation of resources (ensuring that programs are offering the most bang for the buck). Panelists also discussed the functions of performance measures:

- Define what is important to the program.
- Provide baseline information on current conditions and performance.
- Evaluate the success of the program.
- Provide a metric for communications—communication of success.
- Serve as criteria for investment decisions (i.e., save on parking, reduction in new lanes).

Five different types of performance measures will be addressed in the following section. Within those five types are characteristics that describe the performance measures themselves. Some programs refer to performance measure characteristics as hard or soft, which is simply another way to describe quantitative versus qualitative measurements. Hard, or quantitative, measures are fact based and can be measured directly. Soft, or qualitative measures, are intangible and must be measured indirectly. Soft measures are also often far less accurate than hard measures, which means that it is difficult for an agency to rely solely on soft measures. Although hard measures are based on facts, they may not adequately capture the actual effects of a mobility management program. For example, many mobility management programs track ridership as a measure of success, reflecting increases as a direct result of implementing the program. However, increase in ridership as a measure needs to be scrutinized because ridership may increase in an area for various reasons: new park-and-rides, new routes, route changes, etc. Thus, mobility management programs must use both qualitative and quantitative performance measures to provide a comprehensive picture of the program's success (*39*). Table 6 lists the five types of performance measures, adapted from the *Performance-Based Management Handbook* (*40*).

Table 6. Five Types of Performance Measures.

Input Measures	Used to identify human and capital resources needed to generate outputs and outcomes.
Process Measures	Used to distinguish the intermediate steps in the production process of the product or service. For example, if a program is seeking to educate, this measure could be the number of workshops held in the region.
Output Measures	Used to measure the actual product or service completed by the agency/organization. An example is the number of front-line employees trained in available transportation modes.
Outcome Measures	Assess the expected, preferred, or actual result(s) by which the outputs of the activities of the agency/organization meet the desired results. For example, the number of trip denials in the region is reduced as the result of implementing a new demand-response route that filled a service gap. The establishment of a direct cause-and-effect relationship for this measure can be difficult.
Impact Measures	Evaluate the direct or indirect effects as a result of attaining the goals of the program. For example, the agency could compare the outcomes with approximations of what the outcomes would have been had the mobility management program not been established.

Source: *Performance-Based Management Handbook* (*40*)

The performance measurement of a mobility management program is individually driven and uses a market-based approach with an emphasis on the quality of customer experience. Hence, the adoption of an outcome-based model of performance management in a mobility management program may be most appropriate. In such a model of performance measurement, the focus should be on the strategic goals and objectives of the program, and determining whether these goals and objectives are aligned with customers' needs, expectations, and satisfaction (*41*). This requires the collection and analysis of information from various performance indicators in a timely and consistent manner. Often in the selection and adoption of performance measures, the local geography, demographics, and policy objectives of the transit system play an important role. Many of the performance indicators are expressed as the ratio of the aforementioned variables; for example, trip cost per mile and trip cost per passenger mile. The collected information can additionally be used to assess service quality, make important budgetary and resource allocation decisions, monitor and track system performance, identify strengths and weaknesses of the program, make course correction, refine strategies, and make peer comparisons (*34, 42*).

In collecting and processing information for performance measurement, the following factors need to be taken into consideration (*43*):

- Appropriateness of the measure—important in measuring progress toward stated goals.
- Complete, consistent, and useful data—important in verification and quality control practices. Data should include both actual numbers and estimates, if necessary.
- Accuracy and timeliness of data—important to report accurate data.
- Understanding of data limitations—necessary to detect, assess, and eliminate sources of error, where possible.
- Reliability of measurement data—performance can vary from year to year due to random chance and factors beyond the agency's control. Graphing data over time can help to obtain a better picture of performance.

When improving a mobility management program by using performance measures, agencies should pay attention to two important factors. First, the support of senior management staff is essential since they are in an advantageous position to adopt motivational tactics rather than punitive measures in course corrections (fear of punishment can often lead to hiding of data indicating underperformance). They can also help communicate results both internally and externally, and encourage the use of quantitative data along with qualitative narratives (*42*). Second, the linking of performance measures to targets rather than to incentives or disincentives is essential. Sometimes the setting of the targets on some measures that are experiencing a decline due to reduced funding can pose a challenge (*21*).

NATIONAL SCAN PURPOSE AND METHODOLOGY

Researchers conducted a national scan of mobility management programs using several methods, including a geographic comparison of states, a survey of public transportation programs at state DOTs, and references from national advocates for coordinated public transportation. The team also identified states comparable to Texas using several criteria, including population density per square mile, total population, percentage of rural and urban population, and state contribution to public transportation. Appendix C provides the full geographic comparison of the states in relation to Texas.

In another project, TTI researchers conducted a national survey for the American Association of State Highway and Transportation Officials (AASHTO) Standing Committee on Public Transportation. Researchers gathered facts about state DOT data-reporting requirements for rural transit and specialized programs funded through FTA Section 5310, 5316, and 5317 programs. The results of the survey for AASHTO helped determine state DOT programs that are peers to Texas in terms of reporting requirements. For the purposes of this research, the team defined peer states as those states that monitor the federal funding streams for transportation programs in a manner similar to TxDOT. Not all states responded to the AASHTO survey, and as a result, researchers identified additional states and mobility management programs that the AASHTO survey publication does not mention.

Researchers also reviewed national advocates for public transportation coordination. The major national advocacy groups in the United States that are actively involved with coordinated transportation include CTAA, APTA, the National Resource Center for Human Services Transportation (NRC), the Transportation Research Board (TRB), and Easter Seals Project Action (ESPA). These advocacy groups have recognized agencies and programs that are considered best practices of mobility management over the last five years (2005–2010). Some of the programs are award winning, and others appeared in national transit publications and conferences sponsored by CTAA, APTA, NRC, TRB, and ESPA.

CASE STUDY SELECTION AND RESEARCH

Looking into national mobility management programs, researchers quickly discovered that each mobility management program is unique, and the definitions of mobility management tend to mirror the purpose of the program. Narrowing the case studies down also became a challenge because many good mobility management programs exist across the United States, offering

distinct lessons learned. Researchers selected case studies on a state-by-state basis, attempting to highlight the programs within states that are the closest peers to Texas. The team selected additional case studies based on information provided in journals, reports, and conferences—in particular, those findings published by CTAA, APTA, NRC, TRB, and ESPA. Some case selections were the result of awards at the state and national levels on good practices in the provision and management of transportation.

The research team contacted representatives of each mobility management program as well as the state DOT representatives for the programs. Researchers designed two different lists of questions to collect information from the individual mobility management programs and from the state DOT representatives of the programs. The lists of questions follow.

Questions for mobility management programs:

1. How did the mobility management program get started in the area?
2. What is the size of the mobility management service area? How many annual trips are provided? (Please provide maps if available.)
3. What are the sources of funding for the mobility management program?
4. What are the goals or mission/vision of the mobility management program?
5. What types of transit services or modes are planned and coordinated in the mobility management service area?
6. What/who are the partners involved in the mobility management program?
7. Are there any challenges in the mobility management program?
8. What is being done to market the program?
9. What are the performance measures used for the mobility management program?
10. What is the definition of mobility management? What makes a successful program?

Questions for state DOTs:

1. How did the mobility management program get started in the state?
2. What is the DOT's role in mobility management programs?
3. What are the sources of funding for the mobility management program that the state administers?
4. What are the state's goals or mission/vision of the mobility management program?
5. What types of transit services or modes are planned and coordinated in the mobility management service area?
6. What/who are the state's partners involved in the mobility management program?
7. Are there any challenges in the mobility management program?
8. Does the state DOT market any mobility management programs?
9. Does the DOT have performance measures used for mobility management programs, or is that something that is left up to each individual program?
10. What is the definition of mobility management? What makes a successful program?

The programs selected for case studies vary from large statewide efforts to smaller programs in rural areas, each with specialized services and target client groups. The team discovered that although the program definitions of mobility management are similar, the actual implementation of service varies depending on the level of involvement of the state, funding sources, and to some extent the history of local transportation offerings. Most of the programs rely on public

funding, which includes local, state, federal, or a combination of funding streams. Additionally, the state DOTs vary in their respective involvement in mobility management. Some departments are more heavily involved, awarding funding to mobility-centric projects, while others prefer to have an external agency coordinate the statewide mobility management programs. Appendix D lists the mobility management program contact information.

STATE DEPARTMENTS OF TRANSPORTATION

This section outlines the performance measures that state DOTs use for mobility management programs. Upon further review of DOT involvement in mobility management programs, researchers found that most state DOTs rely on the regional efforts to draft performance measures, based on the premise that each mobility management program is unique and would therefore have different performance measures. The rest of the DOTs rely on more standardized measures, whether from a statewide mobility program or from FTA guidance on Section 5316 and 5317 funds. Table 7 outlines the states reviewed and their performance measure characteristics.

Table 7. Usage of State Performance Measures by Type.

	Performance Measures		
Department of Transportation	**Traditional**	**FTA Provided (5316/5317)**	**Regionally Designed**
California Department of Transportation			X
Florida Department of Transportation	X		
Idaho Transportation Department			X
Illinois Department of Transportation	X		X
Kentucky Transportation Cabinet			X
Michigan Department of Transportation	X		
New Jersey Department of Transportation			X
New York State Department of Transportation	X		X
Oregon Department of Transportation		X	
Utah Department of Transportation		X	
Washington State Department of Transportation			X
Wisconsin Department of Transportation		X	

The research team reviewed national case studies in mobility management, and found that performance measurement largely varies among the different programs. Some state DOTs, which often act as fiduciary agents to the programs themselves, choose to use performance measures related to funding streams. In the case of funding for some mobility management programs, formula funding for Section 5316 JARC and Section 5317 New Freedom is often used. Both federal programs have performance measures that FTA uses to determine the effectiveness of the funding once it is distributed within the states. State DOTs sometimes use these same performance measures to measure success within individual mobility management programs. Table 8 outlines the FTA performance measures for JARC and New Freedom formula funding.

Table 8. FTA Performance Measures for JARC and New Freedom.

Type of Performance Measure	Information Provided
Trip based	• Estimates of one-way trips provided and jobs accessed in the service year; route length and region served for all modes of transit. • New route miles and additional hours of service. • Additional square miles of service area, additional service hours within the existing ADA service area, and/or additional service hours beyond the existing ADA service area.
Information based	• Estimates of customer contacts for the mobility management, one-stop center, and trip planners. • Number of individuals trained for one-on-one travel training and group training; New Freedom driver training. • Number of web hits for Internet-based information. • Descriptive information for informational materials/marketing.
Capital based	• Number of vehicles and one-way trips for vehicles for individuals, agencies, vanpools, carsharing, and accessible taxis. • Descriptive information on ITS-related hardware or software improvements; other capital projects or infrastructure improvements. • Number of elevators, wheelchair lifts, and wheelchair securement devices.
Planning studies	• Descriptive information on service planning and feasibility studies.

Source: FTA (*44*)

Based on the review of the performance measures used in the case studies for this project, no single set of universal performance measures is used in all mobility management programs. Although the state may have some influence on performance measure selection, especially in those instances where the state is providing program funding, the measures may still not be adequate to truly measure the success of the mobility management program. The general consensus from the program sponsors shows there is a need for unique measures that target the effect of the program on the population, but there are not enough resources to document the ideal performance measures for mobility management. Some programs are beginning to partner with local universities to tap into research resources for this purpose. For example, Tompkins County in New York has partnered with Cornell, Ithaca College, and Tompkins County Community College to research best practices in mobility management, including the use of ITS, to identify performance measures, and to develop a business model that could be applied to other mobility management programs. Lane Transit District in Oregon is working with a research team from Portland State University to conduct a case study of the mobility management project, and performance measures may be developed from the data research. Portland State University will also be conducting focus groups with key stakeholders and interviews of case managers for the purpose of furthering Lane Transit District's mobility management program.

Examples of State DOT Activities for Mobility Management

State DOT involvement in mobility management varies widely. Some DOTs heavily promote mobility management, to the extent that they select an outside agency as the statewide program coordinator. The Community Transportation Association of Idaho (CTAI) is one example of statewide mobility coordination in practice. Other states feel that mobility management is a

critical component to statewide coordination; however, the state DOT may be limited in the ability to support mobility management due to financial, staff, or legislative limitations. Many mobility management programs have been implemented because of statewide transportation coordination efforts, and some states used the initial interagency coordination as an impetus for a mobility management program. This is especially significant because states recognize it is difficult to maintain interagency coordination when no distinct mobility manager is designated to coordinate transportation across the providers. Additionally, agencies that were involved in statewide coordination efforts simply did not have the resources to afford a full-time mobility manager. On the other hand, many states will not fund mobility managers for transportation authorities because such an initiative is seen as a conflict of interest, since the transit providers themselves are responsible for planning the services.

There are several examples of state DOT involvement in mobility management. Many mobility management programs are funded through FTA Section 5316 and 5317 funds, where the state acts as the fiduciary agent. In a recent TTI survey for the AASHTO Standing Committee on Public Transportation, 26 state DOTs described data collected for Section 5316 and 5317 programs. The survey data indicated which state DOTs were actively involved in collecting data about mobility management programs. Researchers identified peer states for Texas from the information collected on state monitoring of Section 5316 and 5317 programs. Though many states monitor Section 5316 and 5317 funding statewide, not all states have mobility management programs. Further, some states have successful mobility management programs, but may not necessarily use or monitor Section 5316 and 5317 funding, which makes the use of the AASHTO survey an imperfect methodology for determining peer states to Texas. However, researchers identified Illinois, New York, Idaho, Utah, Wisconsin, Michigan, Florida, Colorado, and Oregon based on Section 5316 and 5317 program data collection. Researchers added four additional states (California, Washington, Kentucky, and New Jersey) because of selected case studies in mobility management.

Examples of State Leadership

This section outlines examples of state leadership in mobility management. The most common element in all of the state DOT programs is the promotion and support of mobility management programs, whether through funding of mobility management projects or helping to coordinate and build regional transportation mobility programs.

The Illinois DOT has a two-pronged approach to mobility management. As the fiduciary agent for transportation programs, the Illinois DOT primarily reviews and approves transportation projects that have mobility management as the core function. The Illinois DOT also approves Section 5316 and 5317 projects that may not necessarily have mobility management as the main function, but that are mobility-centric. To meet the human services coordination requirement for Section 5316 and 5317 projects, the Illinois DOT divided the state into 11 different regions, requiring that each region develop a human services coordination plan. Once the plans were developed and planning commissions for each region had been established, the plan coordinators shifted into a mobility management role for the region. The regions took approximately four years from the initial development of the plan to convert to actual rubber to the road mobility management.

The New York DOT is the designated recipient for the rural recipients of Section 5316 and 5317 funds, as well as the six small urbanized areas in New York State. The funding is granted to providers through a competitive selection process. In the small urban areas, the designated recipient of Section 5307 Urban Formula funds is actually the primary funding source, and the DOT is mainly the fiduciary agent. As such, the DOT has a limited role when working with the metropolitan planning organizations (MPOs) and the transportation mobility authorities. Downstate New York (New York City) has 13 designated recipients for federal funding; however, none of the agencies was willing to take on the responsibility of becoming the fiduciary agent for Section 5316 and 5317 funds. Thus, the New York Metropolitan Transit Authority is the recipient of the funding through a supplemental agreement with the DOT. In downstate New York, the DOT is a voting member of each MPO, allowing the DOT input into funding for mobility projects and determining future mobility programs. In the rural regions, the DOT is heavily involved in the coordinated plans, and provides assistance with transportation coordination and mobility management planning. The DOT representative emphasized the challenge to change the mindset that mobility management is not about public transit, but rather about mobility.

The Idaho Transportation Department (ITD) developed 17 local networks from a "where do you need to go" perspective because the state is mostly rural. Each network, or district, worked to develop a plan based on regional needs, and strategies to implement the plans. Once the plans for each district were complete, the ITD then turned project management and development over to each individual district. When the ITD sent out a call for projects for Section 5316 and 5317 funding, the districts had to submit projects based on strategies in the plan. According to the ITD, this method of project selection changes service provision from provider driven to consumer driven. For example, a provider cannot modify or add service to an area unless it is outlined in the district plan. Each District Coordinating Council makes the decision of how the funding for mobility is awarded. No transportation provider may be a member of the District Coordinating Council, which prevents conflicts of interest in funding awards. In the beginning, the ITD spent much time and many resources helping each district build and coordinate plans and priorities. The ITD recognized the need for each district to have a mobility manager to continually identify needs and assist with interagency coordination. Thus, district mobility managers serve each of the 17 districts in the state of Idaho under the management of CTAI.

The Utah DOT also played a role in the start-up and implementation of mobility management programs. From the beginning, the Utah DOT allowed mobility management activities to be eligible for Section 5316 and 5317 funding. Initially, the Utah DOT completed mobility management studies to identify specific needs by region and then divided the state by Associations of Governments areas. The Utah DOT contracted consultants to work with the Associations of Governments to develop regional mobility plans. Once the plans were complete, the Associations of Governments then had the responsibility of hiring mobility managers for their respective regions. Currently, the Utah DOT plays the role of fiduciary agent, allowing the majority of the planning and mobility management to occur at the regional level.

State DOT Use of Performance Measures for Mobility Management

As discussed in the previous section on performance measurement, some states use performance measures already outlined for managing JARC and New Freedom funds, whereas other states

look to the mobility management programs themselves to determine performance measures. The states listed in the leadership examples above also support the local mobility management programs through the development of performance measures. The following are examples of state-designed performance measures.

The Illinois DOT looks at performance measurement in mobility management as a business product in the world of coordinated transportation services. The Illinois DOT specifically looks at how many memoranda of understanding or agreements may be created through service coordination and partnerships. The Illinois DOT worked with the mobility managers to put together a toolkit designed to help new mobility programs to access information housed at local agencies. In effect, for example, it allows the mobility manager to research data on individual rider needs. One of the major reasons that the Illinois DOT does not have specific data associated with performance measures is because there are variations in how transportation services are provided throughout the state. One of the goals for the Illinois DOT within the coming year is to begin to assess programs from the urban and rural perspective to establish service baselines.

The New York DOT publishes a quarterly report of basic performance measures for mobility management programs. The report mainly consists of soft measures, such as website hits, etc. One of the concerns that the New York DOT has is the establishment of what is actually measured. At times, it is confusing for mobility managers to communicate the soft performance measures because the programs themselves often look at hard performance measures that are information or service based. The New York DOT is working closely with all of the partner agencies and mobility management programs to establish better reporting mechanisms (*45*). Thus far, the DOT has difficulty establishing which transit trips are products of the mobility management programs and then further defining those trips by mode.

The Wisconsin DOT uses traditional performance measures for the mobility management programs within its state. The measures are information and service-based, including trip planning, the number of one-way trips, on- and off-the-bus travel training, marketing materials distributed, presentations, and the number of volunteer drivers trained. At one time, the mobility management programs in Wisconsin were publicized as some of the best examples nationally. However, issues with inconsistent funding have thwarted the programs' previous success and, as a result, many of the programs in Wisconsin have fallen by the wayside.

The Michigan DOT looks at performance measures in terms of efficiency and effectiveness as well as equity. Efficiency is the relationship between inputs and service-level outputs. Effectiveness, on the other hand, refers to the use of outputs to achieve objectives, such as ridership generation. Based on available data, three aspects of service performance are evaluated: cost efficiency, service effectiveness, and cost-effectiveness. The Michigan DOT's performance indicators are also used in an initiative to increase transit efficiency and effectiveness. Through these measures, the Michigan DOT looks at operating costs of labor, vehicle hours, passenger trips, and subsidies. The Michigan DOT also looks at differences in the efficiency of service between urban and rural systems.

NATIONAL CASE STUDIES IMPLEMENTING PERFORMANCE MEASURES FOR MOBILITY MANAGEMENT

This section summarizes the 20 case studies researchers selected as the mobility management programs with the best examples of performance measures. Additional case studies that the researchers identified for honorable mention are included at the end of this section. These honorable-mention case studies reflect unique business practices in mobility management, but do not necessarily have the best examples of performance measures. Table 9 lists the 20 mobility management programs in 13 states identified as case studies for TxDOT Project 0-6633. Researchers classified the 20 programs using the type of service area and the size of the community where the program is located. They defined the types of areas as urban, suburban, rural, or tribal. Identifying each mobility management program by service area and size of the community was necessary to determine performance measures for mobility management at the urban and rural levels.

Table 9. National Case Studies for Mobility Management by Region.

Regions/States	Mobility Management Program Name	Type of Service Area
NORTHEAST		
Massachusetts	Cape Cod Regional Transit Authority	Suburban
New York	Capital District Transportation Authority Tompkins County Department of Social Services	Urban Rural
New Jersey	Travel Management Coordination Center Demonstration Project	Rural
SOUTHEAST		
Florida	Broward County Transit	Urban
MIDWEST		
Illinois	Transportation Reservation Information Program, Coles County Council on Aging Pace	Rural Urban
Kentucky	Paducah Area Transit System	Suburban
Michigan	Suburban Mobility Authority for Regional Transportation (SMART)	Urban
Wisconsin	Menominee Regional Public Transit	Rural/Tribal
WEST		
Utah	WasatchRides	Rural/Suburban
WEST COAST		
California	Paratransit, Inc. Marin Access San Francisco Municipal Transportation Agency	Urban/Suburban Urban/Rural Urban
Idaho	Community Transportation Association of Idaho	Entire State, Rural
Idaho/Washington	Council on Aging and Human Services	Rural
Oregon	TriMet Lane Transit District	Urban Rural
Washington	King County Mason Transit	Urban Rural/Urban

Although the case studies represent several states in different regions, the greatest concentration of strong mobility management programs is in the western part of the country. Washington, California, and Oregon appear to have a higher concentration of programs than other states. However, other states such as New York and Illinois also have strong programs. In the state departments of transportation section of the report above, researchers reviewed whether these strong state programs are the result of unique funding streams, statewide support, or simply a new way to meet a need that did not exist earlier.

Case Study Profiles

The next section presents a brief summary of each individual case study, in order of region. Appendix E includes the detailed versions of the case studies, including maps. The mobility management programs in the summaries that follow are listed by program name (if the name is something other than the agency where the program is housed), sponsoring transit authority (if located in an urbanized area) or sponsoring agency, and state.

Cape Cod Regional Transit Authority (CCRTA), Barnstable County, Massachusetts

Partners: Bus operators, state agencies, human service agencies, the Cape Cod Baseball League, the Department of Mental Retardation, the Department of Public Health, Medicaid, and the Cape Cod Child Development Program.
Service Area: 396 square miles.
Annual Trips: 520,532.
Mission: Accessible, efficient transportation.
Vision: Safe, reliable, affordable services.
Goals: To meet the public need for transportation services.
Performance Measures: The Cape Cod mobility management planning process was reviewed and implemented through the Cape Cod American Recovery and Reinvestment Act (ARRA) (2009) Mobility Management Project (MA-96-X009-01). A project manager for intelligent transportation systems manages this project. The project reports to an ARRA mobility management oversight committee, and the CCRTA administrator chairs the committee. The committee meets weekly, at a minimum, at CCRTA's administrative headquarters at the Hyannis Transportation Center. It uses Microsoft Project to manage the project schedule and milestones. The project manager provides written progress reports on each task of the CCRTA ARRA Mobility Management Project.

Capital District Transportation Authority (CDTA), Albany, New York

Partners: State, regional, and local agencies; supermarkets; homeowners; neighborhood associations; and Catholic charities.
Service Area: 23,000 square miles.
Annual Trips: 15,407,000.
Mission: The CDTA plans, finances, implements, and delivers transit services that take people where they want to go in the capital region safely, efficiently, and at a reasonable cost.
Vision: CDTA is a growing and vibrant company that seeks to continually increase ridership and the use of its facilities by providing services that people want and need.
Goals: To meet the public need for transportation by rail, bus, water, and air for this region.

Performance Measures: Primary measures are through customer surveys of existing routes and other data submitted to FTA through the National Transit Database (NTD) form on total riders per route type, revenue miles, and riders per hour for each category of route (trunk, express, neighborhood, shuttle, rural, etc.).

Tompkins County Department of Social Services, Tompkins County, New York

Partners: The Ithaca-Tompkins County Transportation Council, Cornell University, Ithaca College, Tompkins Cortland Community College, the metropolitan planning organization, social service agencies, and Tompkins Consolidated Area Transit.
Service Area: 98.2 square miles.
Annual Ridership: 3.5 million in 2010.
Mission: To provide multimodal integration to meet the accessibility and mobility needs of the population, through coordination in an equitable and sustainable manner.
Vision: To adopt the notion of sustainable accessibility.
Goals: To coordinate, through the federally required coordinated plan process, to provide equitable services by filling service gaps; and to promote energy conservation and meet community social objectives through multimodal integration.
Performance Measures: Three of the programs in the county have individual performance measures: the rideshare program, the City Van, and the Way to Go marketing program (online). Since FTA funds are used, the data are fed through the standard form provided for input into the NTD. As a result, effort is being made to streamline the performance measures. This attempt may be complicated by the introduction of a pilot service along the lines of Independent Transportation Network America, a national nonprofit, where relatives of seniors in need of transportation services pay fares.

Travel Management Coordination Center Demonstration Project, Camden, New Jersey

Camden's mobility management program is a Mobility Services for All Americans (MSAA) demonstration site.
Partners: New Jersey Transit, medical agencies, faith-based organizations, and United We Ride.
Service Area: 222 square miles.
Annual Ridership: Unknown because service is just starting.
Mission: To provide transportation services to the underserved population in the rural county of Camden.
Vision: To ensure that transportation services are sustainable.
Goals: To develop a travel management coordination center; to increase access to human services transportation and existing public transportation; and to implement an ongoing, comprehensive, inclusive, and responsive project-planning process.
Performance Measures: Not available because this program is just starting services during this summer.

Broward County Transit, South Florida

Includes Miami-Dade and Palm Beach Counties.
Partners: Regional transit agencies, social and human service agencies, and bus contractors. Planning partners include the MPOs in Broward, Miami-Dade, and Palm Beach Counties.
Service Area: 410 square miles.

Annual Ridership: 36,639,256.
Mission: To comply with ADA requirements for those with special needs. Transportation Options received the Community Transportation Association of America's Urban Community Transportation of the Year Award in 2008.
Vision: To continue the service while developing sustainable ways to provide affordable service to seniors and the disabled population of this area.
Goals: To increase coordination with other agencies, to improve communication with them, and to identify new funding sources for sustainability.
Performance Measures: Measures include the number of riders requiring assistance, switching modes, vans in service, vehicle trips eliminated, vehicle miles eliminated, employer contacts made, parking spots saved, parking needs reduced, and major accomplishments made.

Transit Reservation Information Program (TRIP), Coles County Council on Aging, Coles County, Illinois

Partners: TRIP operates in an 11-county region, with other transit providers, the Illinois DOT, and the Area Agency on Aging.
Service Area: 510 square miles.
Annual Ridership: 2,753.
Mission: To provide passengers with a single point of access to this region.
Vision: To provide integrated services within this region and beyond through coordination.
Goals: TRIP provides coordination between existing service providers for trips not provided by local service providers. While the preference is for medical-, work-, or education-related excursions, anyone can use TRIP for any reason.
Performance Measures: TRIP is developing a survey for customers to fill out and for transportation providers to establish performance measures. The Program may also use another measure, charging fares on credit cards to prevent no-shows, with an additional fee of $0.05 per trip charged. In addition, data submitted through the Illinois DOT to FTA can be used as measures.

Pace, Chicago, Illinois

Partners: Workforce boards, employers, economic development groups, real estate firms, local businesses, taxi companies, and medical facilities.
Service Area: 3,688 square miles.
Annual Ridership: 35.07 million in 2010.
Mission: To ensure compliance with the law (ADA), using a variety of services including taxis and vanpools to provide shuttle services for employers, local circulators, etc., and to provide travel training.
Vision: To provide integrated service.
Goals: To provide quality service in the most efficient manner possible while making the service sustainable.
Performance Measures: These include on-time performance, ridership trends, trips per hour, trip length, dwell time, ride time, and passengers' complaints per 1,000 miles. Passengers fill out surveys to offer their feedback.

Paducah Area Transit System (PATS), Purchase Area Regional Transit, Paducah, Kentucky

PATS is an MSAA demonstration program.
Partners: Purchase Area Regional Transit, the Kentucky Public Transit Association, Kentucky Commonwealth Providers, human service agencies, the Fulton County Transit Authority, Murray Calloway Transit, Easter Seals, child care facilities, nursing homes/assisted living facilities, medical facilities, 911 and emergency shelters, elected officials, and the private sector.
Service Area: Paducah, McCracken County, and the remaining eight-county Jackson Purchase area of western Kentucky (2,394 square miles).
Annual Ridership: 500,000.
Mission: To explore and implement transportation opportunities that enhance the social, economic, and environmental well-being of the greater Paducah community.
Vision: To maintain and expand services to enhance transportation opportunities while ensuring sustainability.
Goals: To provide customers with a single point of access to receive affordable, accessible regional transportation, human services, and community information facilitating greater personal mobility for all individuals in the Jackson Purchase region.
Performance Measures: Performance measures include ridership; the number of trip requests; on-time performance; the number of passengers per revenue mile; stakeholder opinions; assets used by transit providers; the number of funding agencies; staff at provider agencies; service hours; and interviews with management, key staff, human services, and clients.

Suburban Mobility Authority for Regional Transportation (SMART), Detroit, Michigan

The SMART service area includes Wayne, Macomb, and Oakland Counties.
Partners: Employers, local businesses, medical and social service agencies, communities, private transit operators, taxi companies, senior service programs, and public school districts.
Service Area: 1,074 square miles.
Annual Ridership: 12,535,869.
Mission: To provide safe, easy, and dependable transportation in partnership with communities.
Vision: To help reduce transportation costs and conserve resources.
Goals: The overarching goal is to expand transportation services for those who are transit dependent, in partnership with communities, while meeting their specific needs including those covered by ADA.
Performance Measures: SMART uses ridership numbers. SMART also uses surveys to plan, forecast, and apply for federal grants. The surveys gather information from riders on board transit services and from stakeholders.

Menominee Regional Public Transit, Tribal Lands of the Menominee, Wisconsin

Partners: The human service department, medical clinics, the Area Agency on Aging, tribal organizations, county agencies, tribal schools, the head start program, and the casino on the reservation.
Service Area: 391 square miles.
Annual Ridership: 80,000.
Mission: To improve the public transportation services within the reservation and county for work, medical, recreation, education trips, etc.

Vision: To provide all transportation services that the people in the county and reservation may need.
Goals: To enhance access to employment, health care, recreation, education, and all other social services needed.
Performance Measures: A quarterly review of all services examines what is working and what is not working, and includes customer demands that have/have not been met, ridership numbers recorded by bus drivers, and a customer satisfaction survey filled out by riders.

WasatchRides, Utah Transit District, Wasatch Front, Utah

WasatchRides includes Salt Lake, Davis, and Weber Counties.
Partners: Utah Paratransit, the division of Services for Persons with Disabilities, the division of Health Care Financing Statewide, the transportation broker for PickMeUp, Hearts to Go, Rise (a nonprofit organization), and countywide programs like Salt Lake County Aging Services, Utah Valley Transit, and the Ride Program of Weber and Morgan Counties.
Service Area: 1,400 square miles.
Annual Ridership: 37,969,645.
Mission: To guide local and regional efforts to improve access and mobility for community members through coordination of transportation.
Vision: To improve transportation, access, and mobility for seniors, the disabled, and lower-income individuals.
Goals: WasatchRides' goals are to coordinate transportation resources to improve cost efficiencies and mobility for older adults, persons with disabilities, and low-income residents along with others who cannot or choose not to drive in the service area.
Performance Measures: Since the program began in 2010, little data exist to develop performance measures.

Paratransit, Inc., Sacramento, California

Partners: 12 human services agencies. Each agency operates some vehicles that Paratransit, Inc. provided directly. The combination makes up its entire operating fleet.
Service Area: Sacramento County, except for the southern portion, covering 400 square miles.
Annual Ridership: 460,000.
Mission: To expand mobility options by advocating for a fully accessible, useable, and integrated public transportation system.
Vision: To provide innovative, sustainable, community transportation services.
Goals: To establish a structure that can eventually be managed locally, to increase time and financial investment of partner organizations, to increase the number of individuals/organizations reached over time, to identify barriers to effective coordination/service provision, and to recommend ways to overcome them.
Performance Measures: Measures used include the number of individuals who visited the website, how many people visited Find the Right Ride, how many received the e-newsletter and read it, how many were trained in the travel ambassador program, and how many organizations have formally trained travel trainers.

Marin Access, Marin County Transit District, California

Partners: The Metropolitan Transportation Commission, senior centers, taxi companies, social service agencies, volunteer programs, nonprofits, and the Marin Mobility Consortium.
Service Area: 529.8 square miles.
Annual Ridership: No data because program recently started.
Mission: To plan and take action as a consortium of agencies and advocates.
Vision: To expand transportation options for Marin's senior, disabled, and low-income residents.
Goals: Coordination of transportation resources for Marin's older adults, persons with disabilities, and lower-income residents along with others who cannot or choose not to drive.
Performance Measures: This system began on October 1, 2010. Marin Access has not yet developed the measures, although there are measures in the contracts for the volunteer driver programs and the contract for the mobility management operator.

San Francisco Municipal Transportation Agency (SFMTA), San Francisco, California

SFMTA is in a region with a complex transportation network with nine counties acting as congestion management agencies and 28 transit-operating agencies.
Partners: The Metropolitan Transit Commission, local governments, the San Francisco Municipal Railway, the Bay Area Rapid Transit District, the Alameda-Contra Costa Transit District, the San Mateo County Transit District, the Golden Gate Bridge, the Highway and Transportation District (Golden Gate Transit), the Santa Clara Valley Transit Authority, Caltrain commuter rail, and private-sector entities such as Silicon Valley Partners.
Service Area: 47.35 square miles.
Annual Ridership: 210,848,310 in 2006.
Mission: SFMTA is responsible for all modes of transportation within the city and county of San Francisco, including public transit, bicycling, pedestrian planning and accessibility, and traffic and parking management.
Vision: To provide timely, convenient, and environmentally friendly transportation alternatives to enhance the quality of life in San Francisco.
Goals: To improve safety, cleanliness, sustainability, service delivery, communication, financial sustainability, work environment and workforce, and information technology.
Performance Measures: SFMTA uses numerous measures: the number of safety incidents per 1,000 vehicle miles, customer satisfaction scores for cleanliness, cleaning per 100,000 vehicle miles, cleaning per station/terminal, number of complaints, percentage of single occupant vehicle trips versus total trips taken, Transit Effectiveness Project, maintenance of 85 percent on-street parking meter occupancy, and development of a baseline to reduce customer inquiries/complaints, among many others.

Community Transportation Association of Idaho (CTAI), Idaho

Partners: The Idaho Transportation Department developed the CTAI as a nonprofit membership association dedicated to creating partnerships, improving efficiencies, and building a multimodal system of connected travel in the state.
Service Area: Does not provide service and hence has no ridership.
Mission: Citizens in communities throughout the state will have affordable access to transportation services and connect to their communities.

Vision: Communities will experience visible relief to air quality and congestion problems through comprehensive transit networks, and through community leaders coming together to support efforts and improve citizen's mobility and independence.
Goals: CTAI will continue to work with communities, stakeholders, and advocacy groups to identify unique mobility needs and strategies, build partnerships among providers to improve efficiencies within existing services, and advocate for improved options to connect rural and urban communities in Idaho.
Performance Measures: Measures include ridership data in categories (seniors, disabled seniors, disabled wheelchair bound, etc.), other users, below poverty level, etc.; community social/environmental costs measured through preservation cost per mile and human services cost per mile; cost of auto fatalities/injuries; the number of bike-related fatalities and health cost; and general mobility measures such as percent satisfied with their options to use single occupancy vehicle, walkability/bikeability, etc.

Council on Aging and Human Services (COAST), Eastern Washington and Western Idaho

Partners: Public transportation operators, private for-profit providers, area agency on aging, schools, sheltered workshops, hospitals, head-start programs, and volunteer drivers.
Service Area: Three counties in eastern Washington and five counties in western Idaho, serving a total of 22,000 square miles.
Annual Ridership: 700,759.
Mission: Directed at mobility, customer service, and transportation need.
Vision: Mobility is a foundation of a democratic society: mobility should not depend on individual circumstances such as income, age, disability, or other personal characteristics.
Goals: COAST's charge is to arrange transportation to help people get to their doctor's appointments, shop for groceries, attend meal sites, and access many other destinations, in a safe, affordable manner through coordinated transportation and brokerage services, no matter where they live within the service area.
Performance Measures: Measures use ridership miles and vehicle miles submitted to the NTD using the federal form. Information on the number of volunteer drivers, private vehicles used, trips by taxis, trips per year, one-way trips, and miles traveled are all available and used.

TriMet, Oregon

TriMet serves three counties: Clackamas, Multnomah, and Washington.
Partners: The American Red Cross, the American Cancer Society, the Serendipity Center, Pacific University's School of Occupational Therapy, Goodwill, the Coalition for a Livable Future, the Regional Transportation Coordinating Council, the Community Transportation Association of America, East County U-Ride, various senior centers, Northwest Portland Ministries, the Oregon Transit Association, the Pacificab Company, the Port City Development Center, Transportation Reaching People, Tri-Met, the Urban League of Portland, and Wapato Shores Transport, among many others.
Service Area: 570 square miles.
Annual Ridership: 100,409,748.
Mission: To build and operate a total transit system to connect people to their community.
Vision: To make Portland the most livable place in the world, while maintaining transit equity, environmental justice, and sustainability.

Goals: The goals include frequent, reliable, and comfortable service; access to transit via walking, biking, or driving; stops with comfortable waiting areas and amenities; accurate, reliable service information; safe trips; and improved customer satisfaction.
Performance Measures: Multiple indicators are used to assess efficiency and effectiveness, including average weekday and weekly boarding of riders, annual passenger revenue, operational cost per boarding, system cost per vehicle hour, weekly boarding rides per full-time employee, bus miles per vehicle accident, average weekly vehicle hours, and rides per vehicle hours (weekly and weekday), among other measures.

Lane Transit District, Lane County, Oregon

Partners: Volunteer drivers, the Senior Companion Program, the Department of Human Services Program, the Senior Connections volunteer program, the state DOT public transit division, and a potential future relationship with the American Cancer Society and veterans' transportation. In addition, the Lane Transit District (LTD) has a contract for developmental disabilities through county government, nursing homes, etc.
Service Area: 4,554 square miles.
Annual Ridership: 241,936.
Mission: To create a meaningful interface and partnerships between public transit, human service agencies, and riders.
Vision: To bring together divergent philosophies and approaches to arranging, scheduling, and paying for transportation; to combine and simplify rules and streamline procedures wherever possible; and to provide a local access point for transportation services that focus on the needs of older adults, people with disabilities, and those with limited income.
Goals: A major goal is to design functional customer-oriented assessment to help the agency gather information on unmet needs, which is critical for rural transit and ADA.
Performance Measures: LTD is working with Portland State University to conduct a case study of the mobility management project so that LTD can develop performance measures from the data obtained. Currently, LTD uses performance measures through a cost-allocation methodology based on the program's funding (through federal grants), which includes cost per ride, cost per hour, cost of decision-making process, and cost of assessments.

King County, Washington

Partners: The King County Department of Transportation, social organizations, medical centers, human service organization, schools, corporations (Microsoft), retail centers, the museum, and the zoo.
Service Area: 2,307 square miles.
Annual Ridership: 118,000,000 in 2008.
Mission: To provide reliable, convenient, and safe public transportation services throughout the county.
Vision: To improve the region's economic vitality and environmental quality.
Goals: To ensure riders are aware of their transportation options, and are safe and satisfied with their trip; to coordinate school transportation and human services transportation to ensure that transportation dollars are used to maximize effectiveness; and to match the needs of riders with the most appropriate transportation choice.

Performance Measures: To evaluate the total system or route performance, the following measures are used: annual boarding/platform hour, percentage of high-occupancy vehicle use to commute trip reduction employment sites, percentage of households that use transit, percentage of population within census blocks with a density of three households per acre or less, within 0.25 miles of a bus stop of hourly service or better, and finally transit vehicle carbon dioxide (CO_2) per passenger mile divided by the average King County automobile CO_2 use per mile.

Mason County Transit Authority (Mason Transit), Mason County, Washington

Mason Transit covers the Olympic Peninsula and the city of Olympia.
Partners: Jefferson Transit, the Mason County Work Source, local school districts, Olympia Transit, and other regional transit providers. The local mobility coalition also facilitates partnerships including the area agency on aging, the community action program, the Louis-Mason volunteer center, and the social agencies involved.
Service Area: 961 plus square miles.
Annual Ridership: More than 5 million rides in 2010.
Mission: To develop a coordinated system of affordable public transportation that operates within financial limits and maximizes the use of existing transportation resources including volunteers.
Vision: To provide transportation to all areas of Mason County.
Goals: To transport customers on a regional level between counties and urbanized areas to reach their destinations without jurisdictional boundaries.
Performance Measures: Mason Transit has the same performance measures for both demand-response and flexible-route services using the following: fares per unit operating costs, operating cost per passenger trip, operating cost per vehicle revenue mile, operating cost per vehicle revenue hour, etc.

Honorable Mentions in Mobility Management Practice

As stated earlier, the selection of only 20 systems was challenging because many mobility management programs across the nation offer unique practices and lessons learned. The following paragraphs outline a few of the programs that had unique characteristics to offer.

Mobility Management, Inc., Savannah, Georgia: Mobility Management, Inc., was developed because of a visitor mobility plan, created by a local task force. Savannah is a second-tier city with smaller hotels, and when the Trade Center was constructed, conventions had to house attendees at different hotel properties since downtown Savannah does not have a single large hotel property. When transportation became an issue for conventioneers and the Trade Center, Mobility Management, Inc. was created. Mobility Management, Inc. offers transportation options for conventioneers to offset the cost of providing transportation in Savannah, which conventions would incur at another city. An occupancy fee at local hotels of $1.00 per room per night for occupied rooms funds the program. Once a month, the hotels submit their fees to the city, which provides the funds to Mobility Management, Inc., through an operating agreement. Additionally, the City of Savannah's Mobility and Parking Department contributes funds to the program. The funding provides a new visitor shuttle in downtown, operation of the water ferry system, streetcars, downtown shuttles, and a training program for front-line employees to educate visitors on available transportation services.

Berkshire Rides, Berkshire County, Massachusetts: Berkshire County is small and rural, and the transportation services in the area are people centered. Berkshire Rides has been offering mobility management services since before the concept was defined. Mobility management in Berkshire County began as a grassroots effort when residents started discussing the service gaps in the fixed-route system. The county created Berkshire Rides, which offers demand response during regular fixed-route hours, as well as service to close the gap when the fixed routes are not running. Additionally, Berkshire Rides serves small towns around the county to bring people to the fixed-route bus stops. The majority of Berkshire Rides funding comes through a JARC (Section 5316) grant, and the program also receives some funds through passenger fares and a United Way grant. Berkshire Rides also applies to the Berkshire Taconic Community Foundation for additional grant funding. The Berkshire Taconic Community Foundation funds education, health care, basic human services, transportation, the arts, youth, and senior programs.

Case Study Summary

The 20 systems selected from a national sample of systems touted by CTAA, APTA, FTA, TRB, and other nationally recognized transportation organizations exemplify the range of mobility management activities that have evolved from local public transportation and human service transportation providers. The leaders of these mobility management programs used local initiatives to coordinate resources from various local, state, and federal partners to provide an essential service to a segment of the population that otherwise would not have transportation services.

Although many mobility management programs were implemented due to service needs of seniors, individuals with disabilities, and low-income populations, program focus has varied depending on the size and location of the system. For example, Sacramento's program has used creative methods for funding transportation for a variety of clients. The focus of COAST (run by the Council on Aging and Human Services) in Washington and Idaho is oriented toward transportation services for the rural areas of the service region.

Funding of services appears to be an area with the biggest difference among mobility management programs, which, in turn, has affected fare structures and service availability. The urban-based services have a variety of fares and services, while the more rural-based services have zero to low fares to ensure affordability and greater usage. Programs such as Innovative Paradigms (Sacramento, California) use a variety of cost-reduction strategies (use of shared maintenance facilities and charging for the use of its maintenance facilities by other operators) to lower operating costs and pass the savings on as lower, affordable fares.

Based on the research of performance measures in the 20 case studies, the main focus of mobility management programs is on cost efficiency and effectiveness, reflected in similar efforts made by all agencies to collect data on ridership, vehicle miles, and cost of operation. Only a few programs in states like Florida, Oregon, and Washington have integrated into their performance measures the variables of social and environmental responsibility, which includes the collection of data on reduction in emissions resulting from a modal shift in transportation, mainly automobiles to public transit.

Although the type of service provided varies from demand response to fixed route, there is no one best approach. Each system has used unique approaches to coordinate an integrated service that can meet different needs for those who have no other transportation options, especially in urban areas with service gaps and rural areas with limited financial and physical resources.

While performance measures are varied and range from standard transit performance measures to more unique approaches, the common struggle for all mobility management programs is the justification for continued service to state and federal funding partners. The most difficult performance measure to communicate is perhaps the most essential—the hidden cost to the public if the services were nonexistent in the first place.

Consequently, the majority of mobility management programs are customer-based, single sources of information for trip planning. The programs generally involve coordination where intelligent transportation systems and other management tools help agencies overcome institutional barriers to provide efficient delivery of public transportation services.

The purpose of this research is to identify a single set of universal performance measures. Given the variety of service delivery styles and characteristics, as well as differing populations served, the identification of a single set of performance measures poses a difficult task. An additional challenge is to develop performance measures that demonstrate the impact of mobility management and the overall effect on the cost of providing services.

USE OF PERFORMANCE MEASUREMENT IN MOBILITY MANAGEMENT NATIONAL CASE STUDIES

Approximately one-third of the mobility management programs reviewed for Project 0-6633 use traditional performance measures for mobility management programs. The measures are termed traditional since these are similar to those used for gauging success in traditional transit systems. The systems that use traditional transit performance measures include Pace, Illinois; PATS, Kentucky; Mason Transit, Washington; Capital District Transportation Authority, New York; and TriMet, Oregon. The performance measures commonly used among these agencies are summarized in the following categories:

- Riders/trips per revenue hour.
- Total passengers/increase in ridership.
- Operating cost per passenger trip.
- Operating cost per revenue vehicle mile/hour.
- On-time performance.

Other case studies—including Coles County Council on Aging, Illinois; SMART, Michigan; and Menominee, Wisconsin—use customer surveys in conjunction with quarterly program reviews to determine the successes and challenges of the mobility management program. Coles County is planning to use the results from the latest customer survey to design performance measures for the mobility management program.

The remaining mobility management programs reviewed for this project use either more detailed versions of the traditional performance measures or unique performance measures to determine

the success of the individual mobility management programs. King County, Washington; Paratransit, Inc., California; CTAI, Idaho; SFMTA, California; Marin Access, California; and Broward County Transit, Florida use in-depth performance measures for their programs that are tied to larger program goals. For example, CTAI groups each of the performance measures into a set, or family, of measures, and each family of measures is tied to an overall agency goal. The four families of performance measures for CTAI include ridership, community costs (social, economic, and environmental), general mobility measures, and facilities and equipment. Most of the performance measures reviewed within the mobility management programs are measures required to receive continuation of funding and measure program success. Some programs, such as Broward County Transit, Florida, have optional measures. Broward County's optional measures are a way to measure additional successes within the program, including reductions in fuel use and emissions, and special events organized. Other programs' performance measures focus more on individuals because mobility management programs are also in the business of individual travel needs. In the case of Marin Access, California, performance measures focus entirely on the customer, with measures including window of time for passenger pick-ups, passenger dwell times, availability of operators to meet trip needs, and staff availability for scheduling and dispatching.

Unique performance measures are critical to the success of some mobility management programs. Each mobility management program is like an individual fingerprint, due to many variables, including demographics, funding, and geography (urban vs. rural). As a result, many mobility management programs outline unique performance measures to better highlight the program's success. Some of the unique performance measures for mobility management are:

- Number of commuters switching modes.
- Parking spots saved/parking needs reduced.
- Gasoline saved.
- Emissions reduced.
- Transit vehicle carbon dioxide (CO_2) per passenger mile divided by single occupancy vehicle CO_2 use per mile.
- Barriers overcome.

The performance measures adopted by a mobility management program usually conform to federal, state, and community goals, and these measures make possible peer comparison with similar agencies both inside and outside the state. Most programs display some degree of flexibility in the selection and development of performance measures in evaluating cost efficiency and effectiveness of the system. In this case study research, it is evident from the review of 20 mobility management programs that some have well-defined measures to evaluate their performance, while others have yet to develop these. The latter is true in the programs that have developed because of gradual dissemination and acceptance of the idea and principles of mobility management, as seen in the case of Marin Access. Other programs have experienced delays in the formalization of mobility management programs, such as Cape Cod Regional Transit Authority and Berkshire Rides in Massachusetts, and simply have yet to develop performance measures.

The analysis of performance measures in the case studies has revealed that differences do exist among performance measures adopted in rural and urban mobility management programs. In the

rural counties with low population densities and large distances separating one community from another, a combination of simple performance measures is used in program evaluation. The performance indicators commonly used range from ridership, vehicle miles traveled, the number of trip requests, trip time, and cost of operation per passenger/mile, to the number of funding agencies, a customer satisfaction survey, and/or customer complaints. Reliance on such measures is evident in Coles County, Illinois; Menominee, Wisconsin; Tompkins, New York; CTAI in Idaho; Lane County, Oregon; and WasatchRides in Utah. Sometimes individual programs add indicators to the list of performance measures such as the number of staff at provider agencies, service hours, the number of meetings with stakeholders, and assets used to scrutinize needs for management and coordination of human and physical resources, and for improving service quality and sustainability. All of these measures can be grouped under the rubric of organization and play an important role in making the optimum use of limited resources. The emphasis and importance of such organizational performance measures are noticeable in Paratransit, Inc., California, which serves both the rural and suburban populations in the northern part of the state.

In the case of COAST, among the traditional performance measures adopted to gauge connectivity and mobility, the measure that stands out is the number of volunteer drivers. The inclusion of volunteer drivers can be validated on the grounds that it helps estimate the system's cost efficiency. However, the appraisal of the safety of the system through the use of performance measures such as the number of serious injuries among transit riders and traffic fatalities per 100 million vehicle miles traveled seems to have been overlooked in this system and others in assessment of performance.

In the urban areas, the mobility management programs are more complex in character because of their multimodal arrangements (*46*). In evaluating such systems, data are often collected through well-developed performance measures, which can then be placed into the broader categories or objectives of connectivity, mobility/congestion reduction, safety, environment, organization, customer, and market focus in accordance with state and federal guidelines.

The review of case studies shows that most mobility programs tend to focus on two or more categories of objectives and accordingly have adopted performance measures that are best suited to attain their goals. For example, the Capital District Transportation Authority program in Albany, New York focuses on connectivity, customer, and market. Some of the performance measures used in gauging connectivity includes total ridership and riders per revenue hour. The data on ridership are plotted at regular time intervals to study the trends in ridership. In maintaining its customer and market focus, the program pays attention to the communities' service needs including those of elderly, people with disabilities, and low-income individuals. Capital District Transportation's commitment to enhance connectivity, customer satisfaction, and market expansion through constant evaluation of performance measures has helped them to improve ridership and earn FTA's Annual Award for Success in Enhancing Ridership in 2009.

The mobility management program of Pace, Illinois, has the largest paratransit service in the nation. In providing efficient and quality service to its special population of elderly, people with disabilities, and low-income individuals in its service area, the program focuses on improved mobility, congestion reduction, market expansion, and customer satisfaction. In attaining the

first two objectives, the program has adopted performance measures such as on-time performance and trips per hour. To monitor market and customer satisfaction, data on customer complaints per 1,000 miles and the number of outreach efforts organized are recorded periodically.

Similar to Pace, San Francisco Municipal Transportation Agency places a strong emphasis on objectives. Additionally, SFMTA has adopted measures aimed at promoting environmentally sustainable transportation. To achieve organizational excellence, the mobility management program evaluates data on employee retention rate and satisfaction and the percentage of new hires and promoted officials in the transit agency. In alignment with its goal of promoting technological advancements in the system, SFMTA's mobility management program has adopted measures to monitor the number of successful intelligent transportation system initiatives deployed and percentage of projects completed on time.

The mobility management program of Broward County Transit in south Florida is another award-winning program. In 2008, it received an award from CTAA for providing quality transportation services to seniors, individuals with disabilities, and low-income individuals in a cost-efficient and effective way. A review of the program's performance measures shows that the focus is on attaining multiple objectives, which include connectivity, customer satisfaction, market expansion, security, and environmental protection. To measure connectivity, performance indicators such as the number of trip requests, number of vehicle trips eliminated, number of vans in service, number of commuters switching modes, and total vehicle miles eliminated are taken into consideration. To assess customer satisfaction, emergency rides home and media events organized in the community are counted and recorded. Additionally, the program's initiatives in transportation planning, new service, and organization of educational events are measured to assess the success of market expansion. Broward County Transit measures the number of informational materials on safety and transit service distributed to community members to help address the program's security concerns. Lastly, Broward County Transit calculates fuel saved by switching modes of transport and reduction in emissions to meet environmental objectives.

In Michigan, SMART's performance measures tend to focus more on customer and market objectives as well as intrastate peer comparisons. Consequently, it periodically conducts onboard and stakeholder surveys to collect data on ridership demand and seek funding from federal and local sources. SMART's performance measurement endeavors mainly aim at improving and expanding the mobility of community members, including that of the special population.

TriMet's mobility management program in Oregon has adopted performance measures that focus on various aspects of connectivity, mobility/congestion reduction, safety, organization, and customer satisfaction. In assessing the connectivity aspect of the mobility management program, TriMet relies on numbers in ridership, trips (weekday and weekend), revenue, vehicle hours, and cost per ride/vehicle hour, while on-time performance data are used to monitor mobility/congestion reduction in the service area. Among all the cases reviewed, TriMet has one of the few programs where a ratio variable of bus mileage to the number of vehicle accidents is used to assess the safety of the program. In advancement of the department's ability to manage for results and achieve the goals of the program, organizational performance measures like bus and rail operator attendance

are used. Like many other mobility programs, TriMet also conducts regular customer surveys to understand needs and make adjustments in services.

The review of case studies shows that recently created mobility management programs that have already adopted performance measures to evaluate their system tend to rely more on traditional measures (aimed at measuring connectivity, mobility, and marketing). The examples of such systems include Mason Transit and WasatchRides. Analysis of performance measures used in mobility management programs serving rural, suburban, and urban populations has revealed some of the weaknesses in the design, development, and adoption of performance measures. In most of the mobility management programs, performance measures aimed at promoting safety and security of the system are not included. In addition, very few mobility management programs have adopted measures to evaluate the organizational efficiency of the program. Organizational efficiency has the potential to be easily evaluated through the collection and analysis of data on collaboration and coordination among various service providers as well as employee retention and satisfaction, which play a crucial role in the efficient management and operation of any system.

BEST PRACTICES IN PERFORMANCE MEASURES FOR MOBILITY MANAGEMENT

Upon reviewing national case studies, researchers found there is not a single set of performance measures by which to measure the success of a mobility management program. Although many of the case studies profiled in this research do have performance measures, the measures themselves are not an ideal means of gauging the outcome of a mobility management program. Of the 20 national case studies on mobility management, researchers selected the following systems as examples of current best practices in performance measurement:

- San Francisco Metropolitan Transit Authority in California.
- Tri-Met in Oregon.
- CTAI in Idaho.
- Paratransit, Inc., in Sacramento, California.
- King County in Washington.
- Marin Access in California.

CTAA, APTA, TRB, and other nationally recognized transportation organizations have recommended many other mobility management programs. However, researchers chose these six programs simply because the programs demonstrated usable performance measures. SFMTA has the most detailed listing of performance measures, especially since its mobility management service area is urbanized and encompasses many modes of transportation; however, even SFMTA's performance measures are still more targeted to transit in general. Researching performance measures shows that all programs lack performance measures specifically designed for mobility management programs. At the recent APTA Bus and Paratransit Conference, Timothy Papandreou, a representative with SFMTA, stated that the goals SFMTA adopted are warm and fuzzy, but do they work? The critical component to designing a workable mobility management program is to tie goals and performance measures back to a performance plan. Each performance plan, like a fingerprint, is unique for different mobility management programs. The SFMTA example is a strong example for urban areas, but how can mobility management be successful in rural or suburban areas?

Marin Access' list of performance measures is somewhat less detailed, but Marin Access' service area is more rural. Each program has unique characteristics, such as innovative funding and partnerships for Paratransit, Inc.'s operational costs. In another example, TriMet shows a high level of coordination and planning between land uses and transit.

CONCLUSION

Previous literature reviews outline five basic types of performance measures, including input, process, output, outcome, and impact measures. This basic outline is suited to any type of mobility management program, and measures can be designed to fall under each of the typologies. The following list outlines example measures that could potentially be applied to a number of mobility management programs:

- Input measures.
  - Number of staff required to successfully manage the mobility management program.
  - Number of volunteer drivers required to serve the current population.
  - Number of vehicles needed to operate demand-response/fixed/flexible routes.
- Process measures.
  - Number of workshops held in the region.
  - Percent of population using available transit services.
  - Number of community events where mobility management outreach was conducted.
- Output measures.
  - Number of front-line employees trained in available transportation modes.
  - Percent of population receiving travel training.
  - Use/awareness of the single-source call center.
- Outcome measures.
  - Number of trip denials reduced through the implementation of the demand-response program.
  - Service gaps decreased (the percent of the population in unserved areas decreased).
  - Lower percentage of vehicle miles traveled for region/county/city.
- Impact measures. Impact measures for mobility management are somewhat difficult to assess; however, the ability to measure impact of programs is critical. Mobility management programs need to validate the program purpose for future funding and regional support, yet the programs have difficulty designing performance measures that depict what the regional needs would be without the mobility management program. The following are conceptual ideas for impact measures:
  - Implementation of better land use regulations to provide better access to transit.
  - Increase in transit-oriented development.
  - Reduced cost in providing ADA-complementary paratransit.
  - Overall reduction in regional traffic.

This list is in no way representative of the myriad of performance measures that can be designed for mobility management programs. The example measures above are only reflective of the types of measures. Performance measures can vary from general to specific, and mobility managers must evaluate the variables going into their programs to create a rational set of performance measures for their programs. No single set of performance measures can be applied to mobility management programs, but rather a range of measures can be applied based on program size and type. For example, measures that work well for urban programs may not work as well for rural programs.

Lastly, mobility managers must develop performance measures when the plan for the region is being developed. For performance measures to be valuable, they need to be linked to a plan with goals and objectives for the region. In many instances, performance measures for mobility management have become an afterthought. Ironically, many national programs rely on performance measurement of some sort to prove their usefulness and effectiveness for future funding. If mobility management programs do not have adequate performance measures, future funding for program sustainability may be in jeopardy.

CHAPTER 6. RECOMMENDED PERFORMANCE MEASURES FOR PUBLIC TRANSIT MOBILITY MANAGEMENT

MOBILITY MANAGEMENT CONCEPT

According to TxDOT, mobility management is an approach for managing and delivering coordinated public transportation services particularly for individuals with special needs such as older adults, individuals with disabilities, children and youth, and individuals with lower incomes. Mobility management focuses on meeting the needs of the individual using a range of transportation options and service providers.

At the national level, mobility management encompasses much more than public transportation services. Additionally, mobility management, by definition, does not serve a single target population, but rather the population as a whole. Mobility management is about moving individuals and getting individuals where they need to go. Appendix F includes a list of definitions for mobility management from advocacy groups and national agencies. For purposes of this report, the research team suggests the following definition comprised of components from the national scan of projects and literature review:

> Mobility management is an innovative approach for managing and delivering coordinated transportation services that embraces the full family of transportation services. Mobility management emphasizes the movement of individuals through a wide range of transportation options and service providers, in order to achieve a more cost effective and efficient transportation system.

While the above is a sufficient definition, the concept of mobility management is so broad, it is important to provide additional guidance on what mobility management is:

- Mobility management promotes financially sustainable transportation through public support and funding resource support for mobility management concepts and programs.
- Mobility management focuses on meeting individual needs including that of older adults, individuals with disabilities, children and youth, and individuals with language barriers and lower incomes.
- Mobility management seeks to change individuals' attitudes and behavior toward transportation options.
- Mobility management utilizes technology to improve current transportation services by making them more efficient and cost effective, as well as safer and more secure.
- The look and feel of mobility management varies depending on where the concepts are applied. Mobility management programs may differ greatly in a major metropolitan city versus a rural area (*1*).

To paint a picture of where mobility management has been put into practice, in a city or region:

- Marketing campaigns present local public transportation options as well as alternative forms of transportation (e.g., walking, bicycling).
- Transportation providers offer personalized travel assistance as well as travel training on alternate modes of transportation.
- Employers purchase bus passes to encourage employees to take transit to work.
- Carsharing is available in local neighborhoods, and vanpool matching services are available.
- Agencies work together on programs such as Safe Routes to School to offer children safe ways to walk and bike to school, and schools encourage youth to ride public transit to school.
- Building and development permits require accessibility to a nearby transit line, and safe walking and bicycling routes.

Where programs are implemented, the above mobility management practices are not isolated services. In an area where mobility management has been implemented, users would see any combination of the above offerings.

If mobility management is about moving individuals, how do transit providers, who typically look at moving vehicles, make the so-called paradigm shift into becoming mobility managers (*47*)? How does a transit provider that is committed to mobility management goals look, operate, communicate, and measure performance differently than a transit provider that is not looking at mobility management?

As with many other transportation agencies nationwide, transit providers in Texas are not exempt from the challenges of limited funding and resources. This is especially true of rural transit providers, where operators must often travel long distances in order to provide much-needed services for individuals accessing medical and human services and essential shopping. Mobility management offers a means by which transit providers may work with other regional agencies and providers in order to better coordinate resources. In some cases, transit providers are already offering mobility management types of services, but may not necessarily have a means to measure the outcome, or success, of the current services provided. Other agencies may need incentives to work together in order to provide mobility management services. In both scenarios, clear goals, outcomes, and performance measures should be provided so that agencies may not only preserve current services offered, but may continue to receive the necessary funding in order to expand and grow services in the regions.

GOALS FOR MOBILITY MANAGEMENT

Transit providers have much to contribute to the practice of mobility management. In many regions, transit providers may be the only agencies offering transportation services. Transit providers can work with other agencies with shared mobility management goals by leveraging concrete resources such as vehicles and maintenance facilities, or in-kind resources, such as planning and operations management, dispatch, and customer service. While the overall concept of mobility management encompasses many different agencies and modes of transportation, transit providers are critical to achieving the goals of mobility management as a

whole. For transit providers wanting to make the jump from traditional transit provision to mobility management, it is important to look at goals specifically designed to attain success in mobility management.

Goals and objectives are statements that describe what mobility management will accomplish as well as the overall value mobility management contributes to transportation Goals are a critical component to any mobility management program, providing an overall context for what mobility management is trying to accomplish. Appendix E presents the goals of the case studies researched during the national scan of mobility management projects. The goals from national mobility management programs demonstrate that program goals differ greatly. Variations in goals are a product of the program typology as much as they are a product of agency resources (limited or otherwise). Additionally, the goals vary based on accessibility, customer service, and sustainability. Some of the goals are similar to those used to measure transit performance, which demonstrates the challenge in ensuring that managers are using appropriate goals and measures for mobility management programs. Without adequate goals, mobility managers cannot design an effective performance measurement program. As such, the research team has developed a series of overarching goals for mobility management that may be applied for agencies seeking to become mobility managers. The goals are presented based on the themes of policy, safety, accessibility, sustainability, equity, coordination, and livability.

OBJECTIVES OF MOBILITY MANAGEMENT

Objectives are a vital component in the development phase of any mobility management program. Objectives are concrete statements that describe what the program is seeking to achieve, and should be written in such a way that mobility managers may evaluate whether or not the objective was achieved. For an objective to be effective, it must be specific, measureable, attainable, and realistic. The program outcomes are reached through the creation and attainment of specific objectives. Table 10 outlines the overarching goals of mobility management, which have been adapted from the USDOT goals for public transportation. Additionally, numbered objectives are tied to each goal, each mirroring a more specific focus for mobility management programs.

Table 10. Mobility Management Goals and Objectives Adapted from USDOT.

Goals	Objectives
Focus on the Individual	1. Provide customer-driven transportation services. 2. Develop and offer services to meet individuals' needs. 3. Focus on the quality of customer service.
Improve Coordination	1. Establish partnerships to coordinate transportation projects, planning, service, and expertise. 2. Coordinate service delivery to eliminate overlaps. 3. Close transportation gaps by offering service in areas that may not be currently served by a local transit provider.
Promote Accessibility and Livability	1. Offer transportation services that are accessible, lead to livable communities and improve quality of life. 2. Use universal design concepts to integrate transit-oriented and pedestrian-oriented design in community development. 3. Consider the effect of land use design and development on the provision of transportation mobility and accessibility.
Ensure Diversity in Products and Services	1. Ensure meaningful access to transportation service for older adults, people with disabilities, children and youth, and individuals with lower incomes. 2. Offer materials for those with language barriers. 3. When possible, use universal symbols for transportation services.
Foster Education and Awareness	1. Change individuals' attitudes and behavior toward alternative transportation choices through education and marketing. 2. Build a strong foundation for mobility management programs through funding and resource support. 3. Provide public information on transportation service options. 4. Educate transit agency staff: health, human service, and workforce case workers; board members and policymakers.
Promote Financial Sustainability	1. Improve service efficiency and effectiveness. 2. Leverage limited funding and resources through partnerships. 3. Utilize advanced technologies to manage and monitor transportation systems.
Ensure Safety and Security	1. Ensure safe and secure transportation services for the customer.

Source: U.S. Department of Transportation (*48*)

EXPECTED OUTCOMES

Program outcomes reflect changes in service experienced by the program participants and progress toward mobility management goals. Outcomes describe the impacts of program activities. Performance measures are data that can be used to determine whether program objectives have been achieved. A measure is a specific piece of information that provides evidence of the program outcomes and helps mobility managers in assessing progress toward the program's goals. Measures are data that demonstrate what is occurring, not what caused the occurrence.

Measuring outcomes is fundamental to program evaluation. At the most basic level, measuring outcomes allows mobility managers to determine whether or not the program is developing and offering the activities that meet the goals of the program. Table 11 presents an example of how to think about the relationship between outcomes and measures.

Table 11. Examples of Outcomes and Measures.

Example of Outcomes and Measures		
Outcome	What change are you measuring?	Increased use of transit by seniors in rural areas.
Measure	What specific piece of data shows the change made by your program?	• Number of seniors completing travel training (to understand how to use transit) • Number of transit rides by individuals who completed travel training • Increase in senior and other demographic groups riding transit services

The Impact of Mobility Management

The practice of mobility management involves the overarching theme of achieving outcomes for the good of the community. This mindset involves looking differently at previous ways of doing things, including any reliance on separate modes, funding silos, and protected use of assets. Mobility management is far-reaching, where the impacts of program implementation have the potential to affect a community on a much broader scale than traditional public transportation. For example, one impact of the implementation of mobility management could be increased participation in county senior programs as a result of an increased number of seniors using transit.

Public Transit Mobility Management Program Typologies

On a national scale, the research team found that mobility management programs and implementation vary greatly based on the type and level of program implemented. In general, the goals for mobility management are universally the same. The objectives, outcomes, and measures for mobility management, however, may vary based on the scope of the program and the operating environment. The following narrative describes varying types of mobility management programs that the research team encountered during the national scan. The researchers note that there are many different types and scales of mobility management, so this is by no means a complete list. Rather, this is simply a reference point by which performance measures may be developed and potentially applied for mobility management programs.

Large Metropolitan — Mobility management programs in large metropolitan areas offer services within a combined statistical area that has a population of 2,000,000 or greater.

Large Regional — Services offered in the large metropolitan area as well as throughout the region. Large regional typologies typically have one or more large cities and include the surrounding counties, which may be urban or rural.

Metropolitan — Services offered in a city with a population over 1,000,000 as well as surrounding counties.

Small Regional	Services offered in small metropolitan areas, or regions. Small regional typologies typically have one or more small- to medium-sized cities and include the surrounding counties, which may be urban or rural.
County	Service offered on a county level. County population is typically less than 500,000, and county geography may be urban or rural.
Tribal	Covers a large area, which may include multiple counties and may or may not cross state boundaries. This typology is primarily rural, and typically run by tribal government.
Rural	Typically covers multiple cities and counties. Population is typically less than 50,000 for cities in the region.
Downtown/Urban Center	Focuses solely on mobility management in downtown areas, and is similar to a Transportation Management Association in operation. One of the main features of this typology is the need to limit the number of single occupancy vehicles in a downtown area.
University Centric	University centric mobility management programs are typically located in cities where the university(ies) play a significant role in the local economy as well as the need for transportation provision, as opposed to a major metropolitan area that would be economically viable without a university.

While there are many different types of mobility management programs on a national scale, Texas does not have as many different typologies. For the purposes of designing performance measures based on program typology, the research team suggests the following types of mobility management programs be recognized and applied in Texas (Table 12).

The Texas examples for these typologies in Table 12 are based on the regional transportation coordination efforts established in 2006 as a result of Chapter 461 in the Transportation Code. To provide a better picture of population and its effect on operating environment, Figure 5 outlines these areas by population density. Rural is considered any location that is part of the non-urbanized area, with a population of less than 50,000. Urbanized areas (UA) are more densely populated areas with a population 50,000 or more.

Table 12. Recommended Mobility Management Program Typologies for Texas.

Typology	Operating Environment	National Example	Texas Example by Regional Service Planning Lead Agency
Metropolitan	Services offered in a city with a population over 1,000,000 as well as surrounding counties.	Paratransit, Inc. Sacramento, CA	North Central Texas Council of Governments Houston–Galveston Area Council Capital Area Regional Transit Coordination Committee Alamo Area Council of Governments
Small Regional	Services offered in small metropolitan areas or small cities as well as surrounding counties, which may be urban or rural.	Paducah Area Transit System, Paducah, KY	Heart of Texas Council of Governments Brazos Valley Council of Governments Permian Basin (Midland-Odessa Transportation Organization) Concho Valley Transit District
Rural	Typically covers multiple cities and counties. Population is typically less than 50,000 for cities in the region.	Transit Reservation Information Program Coles County, IL	Deep East Texas Council of Governments West Central Texas Council of Governments Middle Rio Grande (Community Council of Southwest Texas, Inc.)

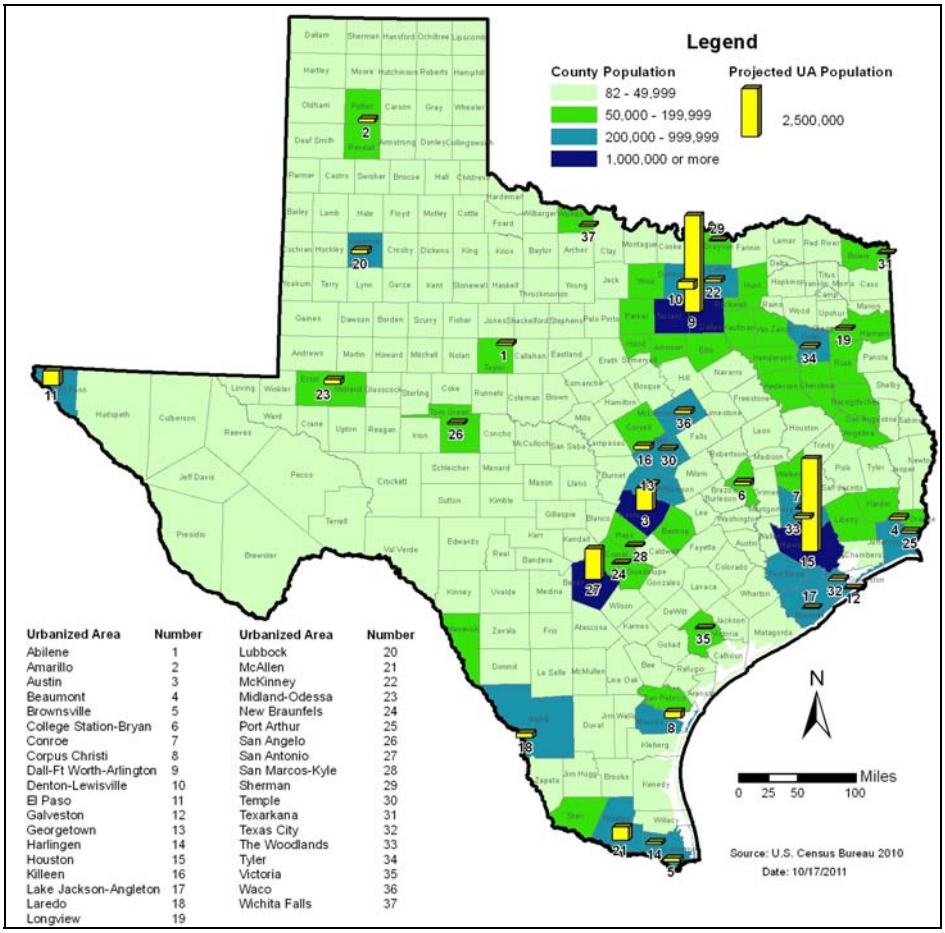


Figure 5. Population of Counties and Urbanized Areas in Texas.

PERFORMANCE MEASURES CONSISTENT WITH EXPECTED OUTCOMES

Considering the varying program typologies as well as the varying regional outcomes, the research team developed a matrix depicting the goals and objectives for mobility management programs that may be applied by typology. Additionally, the objectives are tied to performance measures so that mobility managers may measure the success of the various program implementations in their respective area(s) of implementation. Table 13 presents the matrix of performance measures.

Evaluating Quantitative and Qualitative Measures

Chapter 5 discussed the difference in quantitative and qualitative measures. Quantitative measures are typically easier to evaluate, as they are mainly fact-based hard measures that can be quantified exactly. Qualitative measures are more difficult to measure because these types of measures are not as concrete. However, mobility management programs depend on qualitative measures because the concept of mobility management is broad, and the impact of implementing such a program is broad, affecting communities in a way that cannot be necessarily assessed with hard measures. Thus, the impact of a mobility management program could be considered as qualitative achievements. Though qualitative measures may not be as concrete as the quantitative measures, qualitative measures are critical to adequately capturing customer satisfaction and the overall effects of mobility management implementation on a community.

STATE DOT USE OF PERFORMANCE MEASURES FOR MOBILITY MANAGEMENT

Of equal importance is a set of performance measures that the state departments of transportation use to better monitor the success of programs once they have been implemented. For example, when funding is awarded to a program, states need to use consistent performance metrics to measure program success. Additionally, the use of uniform performance measures emphasizes the importance of mobility-centric activities. The use of performance measures is central to the success of the program. When grant funding is available, extra consideration may be given to those agencies applying for funding through Job Access Reverse Commute or New Freedom programs if the agency is actively participating in a regionally coordinated planning process. Important considerations for state departments of transportation when evaluating successful programs include the following:

- Has the agency hired a mobility manager, or is coordinating a project with an agency that has a mobility manager?
- Does the agency actively participate in regional coordination?
- Is there a plan representing the program/agency that identifies transportation gaps and is updated on a regular basis?
- Has the program/agency modified existing services or developed new services to address gaps?

The above lists only some of the considerations given to agencies that are taking on a mobility management program, and there are certainly more to be added. There are many faces of mobility management, so it is important not to limit new considerations and program ideas.

Table 13. Goals, Objectives, and Menu of Example Performance Measures for Mobility Management.

Goals	Objectives	Examples of Performance Measures	Outcomes	How Measured?	Who Measures?	Where Used?		
						Rural	Small Regional	Metro
A. FOCUS ON THE INDIVIDUAL	1. Provide customer-driven transportation services.	Examples of qualitative measures • Increase in the range of transportation options and service providers available (to current and new customers). • Expanded transit service area to include destinations where individuals need to go (retail, health services). • Options for same day service for demand response. • Options for subscription trips for demand response. Examples of quantitative measures • Expanded span of service (provide transit service earlier or later). • Increased service days per week (provide transit service more days of the week). • Expanded transit service days to include weekends. • Increased frequency of service on fixed or flexible routes. • Increase in total passenger boardings.	• More service options in the regional service area. • Fewer passenger trip refusals. • Greater dependability of service and decrease in wait time. • Greater access to jobs. • Greater opportunities for social and recreational trips. • Increase in transit ridership.	• Number of transportation options available. • Number of transit providers participating. • Expanded service area. • Transit service statistics to document expanded service hours, days, frequency. • Additional options for scheduling demand response trips. • Passenger counts on specific days or dates of events.	• Transit providers. • Lead agency for regional coordination.	X	X	X
	2. Develop and offer services to meet individuals' needs.	Examples of qualitative measures • Assessment of individuals' needs based on research and community outreach. • Approved service plans that are responsive to individual needs identified in the assessment. • Conduct focus groups and/or establish customer advisory committees. Examples of quantitative measures • Revenue miles or hours of transit service operated in an area not previously served. • Passenger boardings (passenger trips) for transit service originating in an area not previously served. • Increase in total passenger boardings.	• Expanded service area. • Better responsiveness to all customers. • Available transit services for essential trips. • Increase in transit ridership.	• Expanded service area. • Transit service statistics to document expanded service in areas not previously served. • Passenger counts in newly expanded areas of service and overall increase in passenger boardings.	• Transit providers. • Stakeholders involved in regional coordination. • Council of governments (COG). • Rural planning organization (RPO). • Metropolitan planning organization (MPO).	X	X	X
	3. Focus on the quality of customer service.	Examples of qualitative measures • Available one-stop shop call center. • Information in a range of formats for individuals with disabilities. • Information in other languages for individuals with limited English proficiency. • Services offered are convenient and easily accessible. Examples of quantitative measures • Report minutes early/late for demand response trips. • Report on minutes early/late for fixed route timepoints. • Decrease in service failures (increase miles between road calls). • Number of employees and volunteers who have completed training to focus on the individual and improve customer service. • Increase in calls to one-stop call center. • Increase in total passenger boardings.	• On-time transit service. • Reliable transit service. • Better/more availability of information available to potential customers. • Improved customer service. • Increase in transit ridership.	• Daily performance reports for on-time service and miles between road calls. • Number of calls to call center. • Number of employees and volunteers completing training. • Counts in increased client activities for agencies served by transit. • Customer surveys. • Passenger counts to monitor ridership on particular services or specific origins, destinations, use of limited English proficiency materials.	• Transit providers. • COG. • Workforce, social and health service agencies. • Stakeholders involved in regional coordination.	X	X	X

Table 13. Goals, Objectives, and Menu of Example Performance Measures for Mobility Management (continued).

Goals	Objectives	Examples of Performance Measures	Outcomes	How Measured?	Who Measures?	Where Used?		
						Rural	Small Regional	Metro
B. IMPROVE COORDINATION	1. Establish partnerships to coordinate transportation projects, planning, service, and expertise.	Examples of qualitative measures • Active participation in regional coordination planning. • Logo or service branding for coordinated transit services to provide seamless service. • Universal passenger access for the services of all transit providers. • Joint fare programs to provide seamless customer service. • Regional driver training programs. Examples of quantitative measures • Increase in number of connections either between routes, modes, or service providers that maximize the trip-making options available to individuals. • Increase in number of purchase of service agreements. • Increase in passenger boardings (passenger trips) on coordinated transit services. • Increase in total regional passenger boardings.	• Better coordination of transit services. • More transportation options. • Opportunities to share resources and reduce overall costs. • Improved customer service. • Increase in transit ridership.	• Active participation of stakeholders in regional coordination. • Updated regional coordination plan. • Number of transportation options available. • Number of transit providers participating. • Customer surveys. • Passenger counts.	• Transit providers. • Lead agency for regional coordination. • Stakeholders involved in regional coordination. • Workforce, social, and health service agencies.	X	X	X
	2. Coordinate service delivery to eliminate overlaps.	Examples of qualitative measures • Integrated service agreements to minimize duplication of service. • Shared access transit center/intermodal terminals. Examples of quantitative measures • Increase in number of connections between transit service boundaries to minimize duplication of services. • Increase in number of shared passenger facilities. • Number of new intermodal facilities.	• Operations cost savings. • Improved customer service. • Increase in transit ridership.	• Number of transit providers participating. • Number of agreements. • Number of shared facilities. • Documented cost/benefit analyses by transit providers. • Transportation improvement plan projects to increase or expand shared facilities.	• Transit providers. • Lead agency for regional coordination. • Stakeholders involved in regional coordination. • COG. • RPO. • MPO.	X	X	X
	3. Agencies work together to close transportation gaps by offering service in areas that may not be currently served by a local transit provider.	Examples of qualitative measures • Interlined service between intercity bus and local transit providers. • Available connections between transit modes, routes, and services that maximize the trip-making options available to individuals. • Shared passenger facilities increase (transit centers, park-and-ride lots, intermodal terminals). • Joint powers agreements to establish shared governance for new services. • Alternative transportation is offered, including employer shuttles, carpools, vanpools, and/or volunteer driver programs. Examples of quantitative measures • Increase in number of passenger transfers between transit service providers. • Increase in total regional passenger boardings.	• Expanded service area. • More service options in the regional service area. • Better responsiveness to all individual needs. • Increase in transit ridership. • Operations cost savings.	• Number of transit providers participating. • Documented cost/benefit analyses by transit providers. • Counts in increased client activities for agencies served by transit. • Customer surveys. • Passenger counts.	• Transit providers. • COG. • Workforce, social and health service agencies. • Stakeholders involved in regional coordination.	X	X	X

Table 13. Goals, Objectives, and Menu of Example Performance Measures for Mobility Management (continued).

Goals	Objectives	Examples of Performance Measures	Outcomes	How Measured?	Who Measures?	Where Used?		
						Rural	Small Regional	Metro
C. PROMOTE ACCESSIBILITY AND LIVABILITY	1. Offer transportation services that are accessible, lead to livable communities, and improve quality of life.	Examples of qualitative measures • Increase in the range of transportation options and service providers available (to current and new customers) including Americans with Disabilities (ADA) complementary paratransit. • Expanded transit service area to include destinations where individuals need to go (retail, health services). • Options for same day service for demand response transit. • Options for safe walking and bicycling routes. • Programs for carsharing matching and vanpools. • Programs for bikes on transit. Examples of quantitative measures • Percent of households within ¾ mile of fixed route or flexible route transit. • Number of transit trips on fixed route or flexible transit by passengers eligible for ADA paratransit. • Demand response transit service level (miles, hours) per capita in rural areas. • Number of buses with bike racks; number of transit stops (transit centers) with bike storage facility. • Increase in transit trips for employment, education, non-emergency health services. • Increased participation in senior programs.	• More transportation options. • Fewer trips by auto. • Reduction in congestion and carbon emissions leading to improved air quality and energy conservation. • Greater mobility for seniors and individuals with disabilities; also, access to jobs, essential shopping, health and human services, and recreational activities are provided. • Improved quality of life for individuals with limited mobility options without transit. • Operations cost savings. • Increase in transit ridership.	• Counts in increased client activities for agencies served by transit. • Customer surveys. • Passenger counts. • Vehicle miles traveled locally.	• Transit providers. • COG. • Workforce, social and health service. agencies. • Stakeholders involved in regional coordination.	X	X	X
	2. Use universal design concepts to integrate transit-oriented and pedestrian-oriented design in community development.	Example of qualitative measure • Partnerships with city planners and developers to integrate transit-oriented and pedestrian-oriented design in community development. Examples of quantitative measures • Increase in number of transit stops with passenger amenities (shelters/benches). • Linear feet of new sidewalks linking residential communities to transit passenger facilities.	• Transit services are more accessible. • Increase in transit ridership.	• Number of partnerships between city planners and transit providers. • Number of transit stops with passenger amenities and sidewalk access.	• Transit providers. • City planners. • Local developers.		X	X
	3. Consider the effect of land use design and development on the provision of transportation mobility and accessibility.	Examples of qualitative measures • Cooperative planning that includes transit providers in the location of health and human service facilities. • New residential or commercial/retail developments built within ¾ mile of existing transit services. • Adopted city ordinances setting standards to provide sidewalks for pedestrians to access transit stops. • Safe Routes to Schools program to encourage children to walk/bike to school. Examples of quantitative measures • Number of Memorandums of Understanding between providers and cities for land use design.	• More transportation options. • Fewer trips by auto. • Transit services are more accessible. • Promote accessibility from door to door. • Increase in children walking or bicycling to school. • Increase in transit ridership.	• City ordinances and planning guidelines. • Review of geographical information system maps and aerial photographs. • Data provided by schools on walking/biking programs for students.	• Transit providers. • City planners. • Local developers. • Workforce, social and health service agencies. • School districts.	X	X	X

Table 13. Goals, Objectives, and Menu of Example Performance Measures for Mobility Management (continued).

Goals	Objectives	Examples of Performance Measures	Outcomes	How Measured?	Who Measures?	Where Used?		
						Rural	Small Regional	Metro
D. ENSURE DIVERSITY IN PRODUCTS AND SERVICES	1. Ensure meaningful access to transportation service for older adults, individuals with disabilities, children and youth, and individuals with lower incomes.	Examples of qualitative measures • Assessment of individual needs for specific target markets based on research and community outreach. • Approved service plans that are responsive to individual needs identified in the assessment. • Increase in the range of transportation options and service providers available (to current and new customers). • Provide transit in service areas to ensure access for specific target markets. • Expanded transit service area to include destinations where individuals need to go (retail, health services). Examples of quantitative measures • Percent of households within ¾ mile of fixed route or flexible route transit in census blocks reflecting concentrations of target markets. • Demand response transit service level (miles, hours) per capita in census blocks (not served by fixed route or flexible route transit) reflecting concentrations of target markets. • Increase in number of transit passenger boardings on transit services in target market areas. • Increase in number of transit passenger boardings on fixed route or flexible transit by passengers eligible for ADA paratransit. • Increase in transit trips for employment, education, non-emergency health services.	• Transit services focused on meeting individual needs for older adults, individuals with disabilities, children and youth, and individuals with lower incomes. • Equitable distribution of and access to transportation services. • Improved customer service. • Increase in transit ridership.	• Analysis of demographic data by census block or transportation analysis zones. • Customer surveys. • Passenger counts.	• Transit providers. • Lead agency for regional coordination. • Stakeholders involved in regional coordination. • COG. • RPO. • MPO.	X	X	X
	2. Offer materials for those with language barriers.	Example of qualitative measure • Public information and transit customer information published in other languages relevant to the service area based on demographic analysis (Title VI Plans). Example of quantitative measure • Increase in number of transit passenger boardings on transit services in target market areas for individuals with limited English proficiency or other language barriers	• Improved customer service. • Increase in transit ridership including those with limited English proficiency or other language barriers.	• Title VI reviews. • Count of information distributed to communities, agencies and media outlets. • Count of hits on alternative language web pages. • Customer surveys. • Passenger counts.	• Transit providers. • Workforce, social and health service agencies. • School districts.	X	X	X
	3. Use universal symbols for transportation services.	Example of qualitative measure • Universal symbols for bus stops, walking paths, and bicycle lanes are used by transit provider. Example of quantitative measure • Percent of bus stops utilizing standardized symbols.	• Increased comprehension of service routes, schedules, and fares by all population groups.	• Use of universal signs at bus stops and transit centers. • Use of universal symbols on public information and transit customer information publications.	• Transit providers. • City planners.	X	X	X

Table 13. Goals, Objectives, and Menu of Example Performance Measures for Mobility Management (continued).

Goals	Objectives	Examples of Performance Measures	Outcomes	How Measured?	Who Measures?	Where Used?		
						Rural	Small Regional	Metro
E. FOSTER EDUCATION AND AWARENESS	1. Change individuals' attitudes and behavior toward alternative transportation choices through education and marketing.	<u>Examples of qualitative measures</u> • Transit providers share branding and marketing campaigns. • Travel training programs for older adults, individuals with disabilities, children, and youth. • Active speakers' bureau. • Options for safe walking and bicycling; programs for bikes on transit. • Programs for carsharing matching and vanpools. • Targeted marketing campaigns to promote transit benefits to specific audiences. • Education program in elementary schools. <u>Examples of quantitative measures</u> • Support for transit based on public attitude surveys. • Increase in total regional passenger boardings.	• Greater awareness of availability and value of transit services in the community. • Public support for sustainable transportation and mobility management concepts. • Fewer trips by auto. • Increase in transit ridership.	• Frequency of in-person presentations, webinars, fliers distributed, and live stream videos. • Public attitude surveys. • Customer surveys. • Passenger counts.	• Transit providers. • Lead agency for regional coordination. • Stakeholders involved in regional coordination.	X	X	X
	2. Build a strong foundation for mobility management programs through funding and resource support.	<u>Examples of qualitative measures</u> • Encourage broad stakeholder involvement in regional coordination planning. • Joint fare programs. • Employer transit pass programs to encourage employees to take transit to work. • Purchase of service agreements. • Initiatives to encourage local government investment in transit programs. <u>Examples of quantitative measures</u> • Number of employers sponsoring employer transit pass program. • Increase in number of purchase of service agreements. • Increase in farebox revenues. • Increase in transit-generated revenues through service contracts. • Increase in local government investment in transit programs. • Increase in total passenger boardings.	• Services offered to individuals are seamless. • Sustainable funding support. • Increase in commute trips by transit. • Operations cost savings. • Increase in transit ridership.	• Financial reports for revenues. • Customer surveys. • Passenger counts. • Employers participating in transit pass programs. • New purchase of service agreements.	• Transit providers. • Lead agency for regional coordination. • Stakeholders involved in regional coordination. • Local governments. • Employers.	X	X	X
	3. Provide public information on transportation service options.	<u>Examples of qualitative measures</u> • One-stop shop call center. • Effective web pages to provide access to information. • Use of social media. • Public information published in other languages relevant to the service area based on demographic analysis. • Education programs provided to stakeholders, including elected officials, community organizations, health and human service agencies, and workforce programs. <u>Examples of quantitative measures</u> • Number of speakers' bureau presentations provided to local organizations.	• Improved customer service. • Increase in transit ridership.	• Increased call volume and web page hits. • Increased activity on social media. • Hits on limited English proficiency websites. • Frequency of in-person presentations, webinars, fliers distributed, and views of live stream videos.	• Transit providers. • Lead agency for regional coordination. • Stakeholders involved in regional coordination.	X	X	X

Table 13. Goals, Objectives, and Menu of Example Performance Measures for Mobility Management (continued).

Goals	Objectives	Examples of Performance Measures	Outcomes	How Measured?	Who Measures?	Where Used?		
						Rural	Small Regional	Metro
F. DEVELOP FINANCIAL SUSTAINABILITY	1. Improve service efficiency and effectiveness.	Examples of qualitative measures • Integrated service agreements to minimize duplication of service. • Expanded transit services to capture new ridership. Examples of quantitative measures • Increase in total passenger boardings (year-to-date or this month) as compared to (last year at the same time or the same month last year). o By type of service. o By service jurisdiction. • Increase in passengers per revenue hour (mile) of service. • Lower cost per passenger boarding. • Lower cost per revenue hour (mile) of service. • Higher miles per operating expense. • Increase in farebox recovery (fares as a percent of operating expense) for year-to-date as compared to previous year(s). • Number of purchase of service agreements to improve cost efficiency and cost effectiveness.	• Improvement in service effectiveness. • Expansion of service area and new transit riders. • Increase in transit ridership.	• Monthly operating expenses, revenues. • Monthly miles and hours of revenue transit service. • Monthly passenger boardings by type of service, by route, by service jurisdiction. • Resource allocation of costs and revenues to compare cost efficiency and cost effectiveness. • Number of agreements.	• Transit providers.	X	X	X
	2. Leverage limited funding and resources through partnerships.	Examples of qualitative measures • Employer transit pass programs to encourage employees to take transit to work. • Purchase of service agreements. • Initiatives to encourage local government investment in transit programs. • Shared funding amongst agencies and/or stakeholders for new service implementation. • Applications for new sources of funding. Examples of quantitative measures • Number of employer sponsored shuttles; number of daily riders on each shuttle; percent of operating expense funded by employer. • Increase in revenues (year-to-date or this month) as compared to last year at the same time or the same month last year. o Increase in farebox revenues. o Increase in revenues other than federal and state formula funds. o Increase in revenues other than federal and state grant funds.	• Financial sustainability. • Local investment in transit services.	• Monthly passenger boardings by type of service, by route, by service jurisdiction. • Total funds collected for fares and fare equivalent revenue. • Applied funds other than federal and state formula funds. • Applied funds that are not from a federal or state grant source. • Number of participating employers. • Successful applications for new funding.	• Transit providers.	X	X	X
	3. Utilize advanced technologies to manage and monitor transportation systems.	Examples of qualitative measures • Advance vehicle location to provide vehicle location and operating profile. • Mobile data computers or other information technology devices for driver information and to improve service effectiveness. • Next bus arrival information for customers. • Information about regional traffic congestion. Examples of quantitative measures • Percent of fleet utilizing advance vehicle location or some form of intelligent transportation systems.	• Improved quality of service. • Greater efficiency. • Enhanced customer service. • Increase in transit ridership.	• Advanced information systems data.	• Transit providers.	X	X	X

Table 13. Goals, Objectives, and Menu of Example Performance Measures for Mobility Management (continued).

Goals	Objectives	Examples of Performance Measures	Outcomes	How Measured?	Who Measures?	Where Used?		
						Rural	Small Regional	Metro

G. ENSURE SAFETY AND SECURITY	Ensure safe and secure transportation services for the customer.	<u>Examples of qualitative measures</u>
		• Emergency preparedness plan in the event of a natural or man-made disaster.
		• Transit safety culture.
		• Transit on-board security plan.
		• Safety and security standards in place.
		• Adequate street lighting for access to stops and transit facilities at night.
		• Minimum driver training standards.
		• Security measures for coordinated transportation systems.
		• Background checks on drivers (paid and volunteer).
		• State of Good Repair.
		  o Five-year financial plan for vehicle replacement.
		<u>Examples of quantitative measures</u>
		• Accidents per 100,000 miles of service.
		• Number of accidents.
		• Number of passenger-related incidents.
		• Incidents per 1,000 passenger boardings.
		• Dollar value of claims.
		• Percent transit vehicles with cameras.
		• Percent of transit facilities with security lighting, emergency phones, and security cameras.
		• Percent of all transit stops with lights (provided by the transit agency, public street lights, nearby business lighting) for passenger security during hours transit service is provided.
		• Percent of transit stops evaluated as satisfactory or better, based on monthly inspection for cleanliness and safety.
		• State of Good Repair.
		  o Miles between in-service breakdowns.
		  o Percent of preventative maintenance inspections performed on schedule.
		  o Average age of revenue vehicle fleet.
		  o Average annual miles of service per revenue vehicle.
			• Vetted emergency preparedness plans.
			• Increased coordination among agencies.
			• Increased security among riders and lower incidences of crime.
			• Agency clients have transportation in emergency situations.
			• Transit driver training shared with other agencies.
			• Increase in transit ridership.
				• Availability of coordinated plan for emergency preparedness.
				• Demonstrations of preparedness.
				• Periodic review of transit stops and facilities.
				• Non-transit agency drivers trained.
					• Transit providers.
					• Local police.
					• County or city emergency officer.
					• Agencies that participate in demonstration exercises.
						X	X	X

The process for evaluating a newly implemented mobility management program ties directly back to the outcomes that the region the program is serving seeks to achieve. The goals for mobility management are universal; however, the objectives, performance measures, and tasks may vary greatly depending on the ultimate outcomes the program is working toward. There are some universal quantitative measures that TxDOT can use to evaluate the success of mobility management efforts:

- Increased transit ridership.
- Increased revenues (other than Federal or State formula funds).
- Increased number of transit riders by demographic (elderly, individuals with disabilities, youth or children, etc.).
- Increased number of transit riders on commute to work transit routes (JARC).

When evaluating the varying program typologies, it is important to keep in mind that increased transit ridership can be specific to a target market based on funding for mobility management. Although the above list is quantitative, mobility management programs will need to consider both quantitative and qualitative performance measures, since the measures tie directly into the outcomes for the specific area of implementation. Figure 6 depicts how this process is linked together.

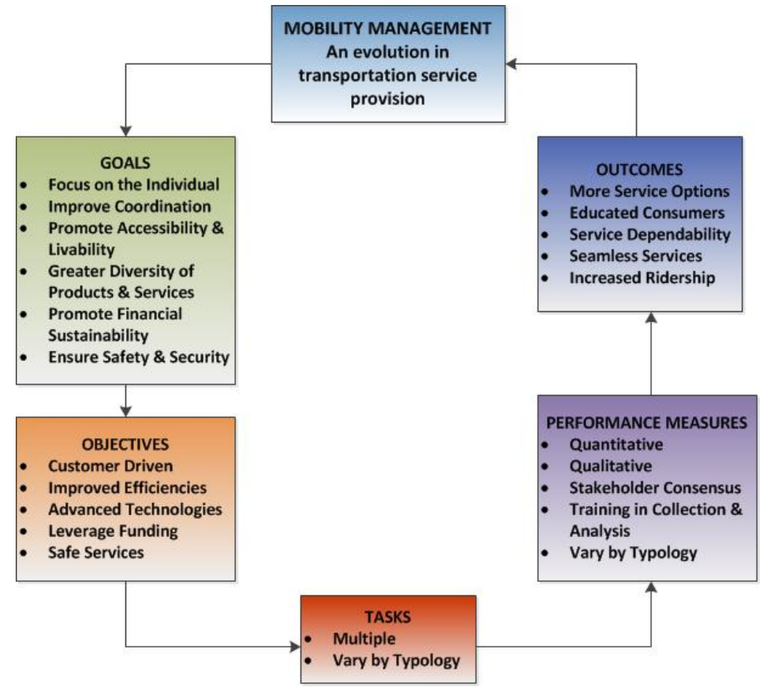


Figure 6. A Schematic Diagram Identifying the Value of Performance Measurement in a Mobility Management Program.

REVIEW OF MOBILITY MANAGEMENT PERFORMANCE MEASURES WITH COORDINATED EFFORTS

In August 2011, the research team met with representatives from Texas transit agencies and regionally coordinated efforts in order to vet the research conducted on mobility management as well as the use and effectiveness of the performance measures. The research team conducted meetings with the following agencies and coordinated efforts:

- Golden Crescent Regionally Coordinated Planning Group.
- North Central Texas Council of Governments.
- Waco Transit.
- Capital Area Regional Transit Coordination Committee.

Additionally, the research team conducted conference calls or solicited email feedback with the following entities:

- Connect Transit, Gulf Coast Center.
- Brazos Transit District.
- Fort Bend County Public Transportation.
- Houston–Galveston Area Council.
- Harris County Rides.

The meetings were highly productive, and allowed the research team to present the project purpose and overview, as well as definitions of mobility management. The research team captured valuable feedback, both specific comments and questions on the performance measure matrix as well as general comments on the implications of mobility management programs for varying agencies. Many of the questions were answered directly in the meetings, and the specific feedback on the performance measures is reflected through changes to the matrix. The research team passed on general feedback to TxDOT, as some of the information will be considered for incorporation into potential future research. The following narratives are summaries from each of the meetings with the providers and coordinated efforts on performance measurement for mobility management.

Golden Crescent had many good questions and thoughts regarding the research. One of the questions was about private providers, and how they might fit into this research. In some of the rural areas, trips are patchwork, and customers may make the last-mile trips with a private provider. Golden Crescent did not feel as though private providers were encompassed in the full family reference of the definition, which is confusing, since mobility management should encompass all providers. An additional question that came up was about transporting packages. If a transit provider is operating in a rural community and partnering with an agency like UPS, does that concept fit into mobility management? One concern of the Golden Crescent is where the state fits in (if at all) on regulating system performance. One good comment regarding mobility management is that in order to influence public providers to take on mobility management in practice, they must be incentivized, monetarily or otherwise. Although the notion of mobility management is worthy, it must in some way be "profitable" to the agency taking it on, especially since adding more performance measures creates more work for transit providers. In summary, Golden Crescent thought that the matrix was useful, and many of the objectives and performance measures were exactly what Golden Crescent had been looking at

for the coordinated plan. Additionally, participants all agreed that it is good the research is painting a clear picture of mobility management, since there has been no previous guidance.

North Central Texas Council of Governments (NCTCOG) had many good comments regarding the research to date. They felt it was reasonable to paint a picture of the difference between mobility management and what transit providers do. They liked the goals, and felt they were relatively straightforward. There was some general concern about how this will be used and supported at TxDOT, and that perhaps one of TxDOT's goals should be to enhance mobility across the state. Additionally, NCTCOG feels that the transit provider business model should be loosened to include mobility management. There is also a general sense that putting too many labels on mobility management could potentially reduce flexibility, which defeats the purpose of implementing it. For example, if TxDOT adopts the matrix of performance measures, and the regional efforts do not, then problems may arise over what projects are eligible for FTA formula funding. In general, NCTCOG believes the matrix would be a handy tool, but is afraid that there may be a mandate attached to it. NCTCOG feels that it is important to emphasize the menu of options and the flexibility to pick and choose measures that work for the individual effort. In addition, mobility management may need to be incentivized. For example, if a transit provider agrees to take on mobility management, NCTCOG suggests TxDOT could reduce requirements on other requirements, such as reporting. All in all, NCTCOG felt that the goals and objectives were good and believes the matrix to be a good idea.

Waco Transit provided helpful feedback from the perspective of a small urban provider. They liked the goals, especially that Focus on the Customer was listed first. Additionally, Waco Transit offers a lot of train the trainers in the Heart of Texas Region, so they also liked that education and awareness was listed as a goal of mobility management. There is a general concern about the implementation of mobility management programs in Texas, since there is not a lot of support in the public, legislative, and financial arenas for alternative transportation. Waco Transit believes that there are good notions behind mobility management and that there may be agencies willing to put it into practice; however, there may not be adequate support for providers implementing mobility management. There is also the concern that mobility managers should have the holistic knowledge of all the transportation alternatives in a region, and should not report to a transit agency. Additionally, Waco Transit has concerns that mobility managers are being hired as a function of independent living agencies to focus on specific target populations, but there is a greater community need for mobility management. Waco Transit strongly believes in mobility management, but also has concerns that providers may be too busy to implement it because of limited resources focusing on other needs, such as reporting requirements.

Capital Area Regional Transit Coordination Committee liked the matrix and the detail. There was a lot of discussion amongst the group about how to benchmark the performance measures when a new mobility management program is started, and also when a program begins to grow, or when additional service providers are added into the mix. The general sense from the group is that the measures were detailed and seemed relatively easy to measure. Additionally, the group liked the detail of the objectives and outcomes. There is some concern from the group about the potential for mobility management to create another layer of bureaucracy, depending

on where the mobility manager position is housed. All in all, the group appreciated the matrix, and is interested in seeing the final project.

Connect Transit felt that the definitions of mobility management were comprehensive and fit with the agency definition. While discussing about meeting the transportation needs of the special population, it was suggested that the category of veterans should be included. The Gulf Coast center receives funding from the U.S. Department of Veteran Affairs, which has made it possible to provide medical transportation services to veterans, mainly to the Texas Medical Center in Houston. Connect Transit felt that the goals and objectives section is very well done. With reference to the goal of coordination, more coordination between counties and providers should be aspired for. Coordination has always been a problematic issue; and with better coordination, duplication of services can be avoided and waste reduced. The goal of accessibility and the corresponding objectives will prove helpful to the agency. As far as diversity issues are concerned, the agency has hired more bilingual staff to address the needs of the diverse population in the service area. To create public awareness of transit services offered in the region, different approaches have been adopted. The agency markets through websites, and print media. Additionally, a rural-urban transportation district has been formed in Galveston County. An expected outcome is better coordination between different transit providers along with an increase in local matching funds. Further, with reference to safety and security goals, Connect Transit is working on acquiring on-board cameras. Connect Transit has safety officers who provide training to drivers; the buses are global positioning system enabled, which makes tracking possible. From the discussion, researchers ascertained that the performance measures designed are reasonably attainable.

Brazos Transit District's (The District's) definition of mobility management is similar to the CTAA definition: An innovative methodology that embraces the full family of transportation services, utilizes cutting-edge technology and still maintains its focus on individuals and community. The District believes the matrix looks good. Specific comments include that training should not be restricted to drivers, and that all staff should be involved in training. Additionally, The District emphasized the importance of incentivizing transit operators in order to better coordinate and share resources. The concern is that funding is a major issue, especially for rural providers. From the rural perspective, a major obstacle is lack of Internet access and computer literacy, so it is important to keep this in mind. The performance measures look good, but should include active participation by various stakeholders in the development of feasible comprehensive plans.

Fort Bend Public Transportation uses the same mobility management definition as United We Ride: An innovative approach for managing and delivering coordinated transportation services to customers, including older adults, individuals with disabilities, and individuals with lower incomes. Mobility management focuses on meeting individual needs through a wide range of transportation options and service providers. It also focuses on coordinating these services and providers in order to achieve a more efficient transportation service delivery system for public policy makers and taxpayers who underwrite the cost of service delivery.

Fort Bend considers mobility management as a holistic approach where different modes of transportation are used to meet the transportation needs of the special populations. Fort Bend felt

the report is comprehensive, but there are certain aspects that may need additional improvement. For example, the report should focus on customer type within the region. For the goal of coordination, Fort Bend suggested that an additional performance measure should be "establish and/or participate in coordination efforts." Fort Bend feels that "promote" is the key word in provision of accessibility as a goal. The concept of livable communities should be restricted to metropolitan areas. When considering financial sustainability, Fort Bend does not agree with "improve service efficiency and effectiveness" as an objective, since this is a function of operations, and a mobility manager should not have to deal with efficiency and effectiveness. Fort Bend feels that the job of the mobility manager is to secure more grants, advocate for referendums, and garner partnerships with public and private officials. Fort Bend also suggested the following additions under safety and security:

- Develop and promote minimum driver training standards.
- Develop security measures in a coordinated transit system.
- Run background checks on drivers.

Fort Bend made several specific suggestions regarding additions to the performance measures, including improved on-time service, condition of bus stop/shelter, bus fleet condition, and call response times. Additionally, Fort Bend suggested the team add the number of existing joint projects to serve transportation needs of a service area and performance reporting. Fort Bend emphasized the importance of both traditional and new approaches to public involvement, as well as the need to consider passenger perspectives on safety and security.

Houston-Galveston Area Council felt that the matrix is somewhat cumbersome and that a more simplified approach would be more straightforward. Additionally, the development of a benefit/cost ratio related to coordination should also include some consideration of the societal benefits of improved access to jobs and non-emergency medical trips. H-GAC mentioned that there should be a threshold in the definition of rural, and emphasized the importance of ensuring measures adequately match up to typologies. H-GAC also brought up the importance of including the general public and elected officials, as well as community-based organizations and Health and Human Services agency staff in the education and awareness section. Lastly, the discussion of safety and security should stress the importance of adequate street lighting around bus stops and bus shelters, safety/security by environmental design (per Metropolitan Transit Authority of Harris County guidelines), roving security patrols, surveillance cameras at key facilities as well as on board the transit vehicles.

Harris County Rides pointed out that the definitions of mobility management presented in the report seem to be in line with other existing definitions on mobility management and encompass the broad definitions of mobility management, as well as the varied meanings among many different groups. The agency agreed with the report's management goals and objectives and menu of performance measures. The representative for Rides pointed out that the element that needs more attention is funding and resources, especially funding of future services. Harris County Rides recommended the consideration of a funding section under goals. The Rides program is a perfect example of the ability to develop programs around leveraging of resources and partnerships; however, funding sustainability needs to be emphasized with any mobility management program. Harris County Rides wants to ensure that the menu of performance measures remains as a menu as opposed to mandates on performance measurement.

APPLIED MOBILITY MANAGEMENT

According to the American Public Transportation Association, many transit agencies are embracing the concept of mobility management. When implemented, mobility management will move transit agencies away from their roles as fixed-route service operators and toward collaboration with other transportation providers (*49*). The idea behind this approach is to create a full range of well-synchronized mobility services within a community (*50*). However, this is easier said than done. How do transit providers, especially those with limited resources, make the conversion from simply providing transit to becoming mobility managers? Further, how do transit managers articulate mobility management activities into daily practice? In the national scan of mobility management projects, researchers found that the most successful mobility management campaigns were those that had the support, involvement, and coordination of several agencies. Further, programs that successfully responded to individual needs developed a basis for diversification of services, as seen in several of the case study examples. For example, Marin Access is working to establish a dynamic ridesharing pilot targeted at active seniors in Marin County, allowing them the independence of coordinating their own trips. In addition, those programs with support from higher levels (state and federal government) proved to be more sustainable (*51*).

There is a fine line between program support and too much involvement at the state and federal levels. Since each mobility management program is unique, it is difficult for state agencies, specifically state departments of transportation, to dictate how the program should be run or what the goals and objectives of the programs should be. However, a uniform set of performance measures that state agencies could provide might prove to be useful in the development of any new mobility management program. According to the European Platform on Mobility Management (EPOMM), there are important stages to the actual implementation of a mobility management program. The research team recommends the following stages based on the EPOMM model:

- Exploration Stage: the implementing agency begins identifying the project at hand, describing goals through a broad mission statement, and conducting a feasibility study for implementing a mobility management program.
- Formation Stage: this stage involves the program formation, including local coordination and partner selection, firming up a mission statement, looking at program funding, and the organizational structure of the program.
- Empowerment Stage: preparing agencies to become mobility managers. Empowerment is an important step that is sometimes overlooked in the implementation process. It is important for mobility managers to be empowered to design a program that best works for the target operating area and audience.
- Operation Stage: the lead agency will develop an action plan based on the community needs such as gaps in service, overlap of service, target population, etc. This stage includes the implementation of mobility management services in practice.
- Evaluation Stage: this stage occurs throughout the life of the mobility management program. The lead agency should continuously monitor the progress of the program through the use of performance metrics and be ready to adapt the program in order to meet changing community needs.

EPOMM makes a point in noting that these stages are not necessarily sequential and that building an effective mobility management program is very much an iterative process. Agencies should consider all of the above stages when beginning a new mobility management program.

There are several steps that must take place within the exploration and evaluation stages of a mobility management program. TCRP Report 21: "Strategies to Assist Local Transportation Agencies in Becoming Mobility Managers," actions for any agency looking to create an organizational culture of mobility management (*52*). The following actions are recommended from TCRP Report 21 (*52*):

1. Develop a cohesive internal mission and vision.
2. Ensure staff has an understanding of mobility management techniques and why mobility management is important.
3. Attract and support good personnel through management training and teamwork, and provide opportunities for creativity and leadership in the industry.
4. Redefine roles and responsibilities based on customers' needs instead of modes of operation.
5. Establish marketing, planning, and service review processes that are market-driven.
6. Encourage staff to actively look for opportunities rather than be reactive to problem situations.

All programs must have a strong mission statement. Goals are developed through the mission of any program; through goals, performance measures are developed in order to measure program success. Future funding and program sustainability depend on solid program goals and performance measures.

Helping Transit Managers Articulate Mobility Management Activities into Real-Time Activities

Transit providers need to bear in mind that regardless of where the mobility management program resides, the organization implementing mobility management will need to undergo changes to organizational structure and day-to-day business practices. These changes could include a shift in the mission, a change to an individual focus, additional coordination and integration, the use of information technology, and internal organizational change. While no process can happen overnight, agencies considering the implementation of mobility management should be prepared to address major changes in order to better facilitate the program.

There are some essential provisions for a successful mobility management program that need to be considered in the beginning. The provisions include addressing/vetting issues, forging partnerships, training or hiring qualified staff, funding considerations, and program marketing.

VETTING ISSUES

Some of the issues that may need to be addressed at the creation of any mobility management program include the program's organization, and whether or not it is structured in such a way to create stability and longevity. Many mobility management programs have strong starts, but may fizzle when there is no stability. There must be an agency willing to lead the effort, and the program's organization must have a strong foundation of support through partner agencies.

Additionally, mobility management programs must be continuously monitored to ensure that the program's scope is still focused on the proper activities to meet the needs of the community.

Partnerships

Creating partnerships is central to ensuring a successful mobility management program. Agency partners can bring varying strengths to the table as well as an additional network of support, both public and private. Regional partners could include other transportation providers, health and human service agencies, workforce centers, cities, planning organizations, elected officials, schools and universities, and faith-based organizations. Regional partners can bring different perspectives to mobility management, and can offer financing, in-kind services, and potential infrastructure opportunities to the program.

Key Staff Considerations

Qualified personnel are essential to a solid mobility management program. When agencies are in the development stages of the program, existing agency staff may be selected to become mobility managers. The staff may receive special training on mobility management, and program managers must keep in mind that as the program grows, new staff with more qualifications may be necessary. At the most fundamental levels of mobility management, three basic types of staff qualifications are needed:

1. Policy level—staff with background in policy and strategy that have the competence to make decisions independent of a program manager.
2. Management level—staff capable of program management that have a broad base of knowledge on mobility management in practice.
3. User level—staff with good communication, organizational, and social skills. Must also have experience in customer service.

Not all mobility management programs will have one staff member to meet each level of qualification. Further, some mobility management programs may begin with only one person serving as the mobility manager who may have only one or two areas of expertise. This is why it is important to work with partner agencies that may have complementary levels of expertise in different areas. In a large mobility management program, equally important is the annual survey of employees. The information collected will help to understand employees' level of job satisfaction, other work-related needs, and to reduce attrition in the workforce. Attention to such details has much potential to ensure stability and enhancement of efficiency among personnel in the program.

Funding

Funding is one of the biggest issues facing the implementation of mobility management programs. Resources are scarce, and agencies are being asked to do more with less. Mobility management has the ability to give agencies a great return on investment; however, it does come with start-up and implementation costs as well as costs associated with day-to-day operation. Start-up costs can include feasibility studies and capital costs associated with necessary infrastructure. These costs can be lowered significantly, however, if they are shared across multiple agencies, or if partners offer in-kind facilities. Additionally, the program costs are also tied to the level of implementation. For example, a simple web-based marketing campaign will

not be as costly as the operation of a full-scale downtown mobility center. Funding for all levels of mobility management could potentially be derived from a number of sources, including state, federal, and local grant programs, private contributions, in-kind donations, or perhaps sales and fare revenues. Long-term financing may be made possible for mobility management programs; however, legislation may be necessary to achieve this type of financing. For example, Marin Access in California is funded through vehicle registration fees. In California's 2010 general state election, a law passed enabling counties to call a local election on vehicle registration fees to fund transportation services. Marin County passed a $10 fee, called Measure B, which offers continuous funding for subsidized rides for seniors and individuals with disabilities.

Marketing

Marketing is also a crucial component to any mobility management program. How an agency promotes mobility management has a direct effect on the success of the program. There are two types of marketing and education for the consideration of the mobility manager: internal and external communication. Internal communication deals with the education of the mobility management staff and frontline workers that will be dealing directly with the community. It is important to educate the partners, staff, and customer service representatives of the program so that they may provide the public with up-to-date and adequate information on the services offered. Likewise, external communication has three major target audiences: the existing user, the potential user, and the potential partner. Each of these audiences has different informational needs, namely:

- Existing users typically require specific information related to current and new services, and potential service change proposals. The marketing plan must make provisions for those individuals with Limited English Proficiency (*53*).
- Potential users need to be made aware of the service offerings as well as the benefits of using alternate forms of transportation. This audience may or may not contain choice riders who need to understand the advantages of leaving the car at home.
- Prospective partners should always be within the target marketing audience of any mobility management program. Partners create new networks and funding avenues for mobility managers, and can assist in spreading the message of the importance of mobility management.

Mobility managers should consider program branding. One of the best ways to communicate and educate the community is through consistent branding. Additionally, mobility managers should have a public involvement plan that lays out the branding, the channels through which the program will be marketed, and the timing, or roll-out of the marketing plan. For example, in a rural transit district in the northeast, a mobility manager has also assumed the role of a spokesperson for a local and popular basketball team. The mobility manager visits schools with basketball team members and provides information on transportation to games using transit buses. Such information serves the dual purpose of education and popularizing the use of transit buses among school children of various age groups and their family members (*1*).

Public Involvement

Since the main focus of mobility management is on the transportation needs of individuals, public involvement is essential for several reasons.

- Helps to meet greater responsiveness to public demand.
- Enhances the effectiveness of the program along with its quality and acceptance.
- Helps to build trust in the agency.
- Assures cost-effective decision making.
- Fulfills the legal requirements of several transportation acts (*54*). The latter includes the 1999 Federal Highway Administration and Federal Transit Administration issued joint interim policy on public involvement, Section 6002 of the 2005 SAFETEA-LU, Title VI of the Civil Rights Act, and Executive Order 12898 for environmental justice.

Public input in the early stages of planning can help in the design and delivery of new transportation services and also in making adjustments to existing services (*55*). Public involvement can be made possible by involving participation of citizen advisory committees and through the use of customer surveys. Citizen advisory committees usually include various stakeholder groups that meet regularly to discuss common issues of concern (*56*) in making important transit-related decisions. A survey of customers by mail (electronic and by United States mail) can help to gauge customers' level of satisfaction with the services offered. Further, information collected from stakeholders and individuals can help develop strategies and concurrent processes to meet these strategies and determine their share of contributions to maintain and further develop transportation services (*57*).

Involving Regional Partners in Collecting Performance Measures

In a paper entitled *Performance Measures for Mobility Management Programs*, authors Burkhardt and Yum (*28*) discuss a system of performance measures that must be established and tracked for successful mobility management programs. The paper also discusses performance measures that need to be collected for the community as a whole, which can assist mobility managers in measuring the progress of programs in the broader community context. For a mobility management program to be truly successful, agencies throughout the region must be involved in the effort. To that end, Table 14, adapted from the Burkhardt paper (*28*), outlines how regional agencies can get involved in tracking performance measures for community mobility management. The typologies and performance measures listed in the table are not all encompassing, but an example of how to work with agencies in the collection of data.

Table 14. Sources of Community Performance Measures.

Performance Measure	Collection Source	Comments
Number of rides provided	Transportation providers, NTD, other sources	Typical transit info; easy to track
Increased participation in senior activities	Senior centers, transportation providers	May include use of surveys
Annual mobility management expenses	Mobility manager, transportation providers	Should be easy to track using existing data sources
Inclusion in regional transportation coordination plan	Metropolitan Planning Organization, transportation providers	Included in annual list of projects
Number of vehicles operated	NTD, transportation providers	Typical transit info; easy to track
Number of volunteer hours used per month for mobility management	Mobility manager, lead agencies, transportation providers	Should be possible to track using existing data sources
List of transportation services provided by the lead agency	Lead agency, transportation providers	May require new data collection effort

The joint collection of data and information for performance measurement will add value and ownership to any type of mobility management program.

CHAPTER 7. CONCLUSION

There is much to be learned from the different mobility management programs that have been implemented throughout the United States. Programs vary greatly, based on differing individual needs and depending on the typology of the area being served. There is certainly no one size fits all for mobility management programs, and this is especially true when it comes to performance measures.

Performance measurement is crucial to determining the success of any mobility management program. For the successful adoption of performance measures, the purpose of measurement must be clarified and documented. The purpose should be followed by establishing clear and simple goals and related objectives as a part of the development process, and the latter should be aligned with the expected outcomes that a community aims at achieving through program implementation. Additionally, the goals, objectives, and outcomes should be formed with stakeholders' input. Once the objectives of a program have been established in congruence with the program typology, performance measurement goals should be communicated to various stakeholders. In selecting relevant performance measures that are both qualitative and quantitative, mobility managers should keep in mind that performance measures should be of high quality and meaningful to agency officials, stakeholders (including legislators), and the public. Many performance measures can also be integrated as part of a strategic planning and management process and used in benchmarking with peer programs. As with any process, however, it is important to consider the outcomes, objectives, and performance measures as part of an overall iterative process that is subject to change as programs grow and develop.

Measuring performance of a mobility management program can be both complex and challenging because of multiple goals and values. Efforts should be made to select measures that convey a sense of efficiency, effectiveness, and, where possible, a sense of fairness or equity. Performance metrics that reflect measurable and achievable goals will enable state departments of transportation to measure the success of programs and provide the necessary support and guidance to sustain programs in an effort to meet the transportation needs of individuals in rural and urban regions. Through fostering agencies in the creation and development of performance measures as an evaluation tool to improve efficiency and effectiveness, both the agency and state departments of transportation can benefit in many ways.

While vetting the project findings with representatives from transit providers and regional coordination efforts (including TxDOT, MPOs, and COGs), the research team found that there is opportunity for further research, specifically related to the societal benefits of mobility management. There are most definitely qualitative benefits through the development of mobility management programs, including improved access to employment and access to non-emergency medical trips, especially in rural areas. However, there is a need to further quantify the measures related to the societal benefits. For example, it would be useful to produce a cost/benefit ratio of the advantages of not prematurely institutionalizing older clients in rural areas due to lack of transportation access.

The purpose of this research was to recommend performance measures for public transit mobility management. The menu of performance measures presented in the research is intended to provide transit providers with a sense of direction when navigating the variety of activities that may be reflected in a mobility management program. What makes the practice of mobility management unique is that the concept is adaptable and can be implemented in many different ways, with no single way being the best. Mobility management does not restrict ideas, concepts, or services that further the mobility needs of the public.

Mobility management is an innovative approach for managing and delivering coordinated transportation that embraces the full family of transportation services. In some cases, the needs of the individual may warrant diversification of transportation services currently available in a given area. Overall, mobility management emphasizes the movement of individuals through a wide range of transportation options and service providers, in order to achieve a more cost effective and efficient transportation system.

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APPENDIX A. SURVEY INSTRUMENT

Dear Sir:
You are receiving this email requesting your assistance to us as we gather information about TxDOT-funded Mobility Management programs. We believe that your agency is a recipient of funds for this purpose, or that you are involved in the coordination of public transportation services in one way or another. The definition of Mobility Management that we are pursuing includes managing and delivering coordinated public transportation services particularly for customers with special needs such as older adults, individuals with disabilities, children and youth, and individuals with lower incomes.

We ask that you please forward this email to the most appropriate person on your staff to complete, possibly an employee that is titled "Mobility Manager" or something similar, or complete it yourself if you are the most familiar with those activities at your organization.

Please complete the questionnaire on Mobility Management by going to this website link:
www.surveymonkey.com/s/MobilityManage

We would very much appreciate completion of the questionnaire by
Wednesday, November 17, 2010.

If you have any issues accessing the website link, please email me at c-weatherby@tamu.edu with a description of your experience.

We very much appreciate the time and effort that you will spend in completing this questionnaire and want to assure you that you will receive consolidated information gathered through this research project at the completion of the project. It is possible that preliminary information may be presented at a forum or webinar during the project.

This project is funded by the TxDOT Public Transportation Division research program, with the survey undertaken by the Texas Transportation Institute, in collaboration with Texas Southern University and Sam Houston State University.

Send to a Colleague

Regards,
Cynthia Ann (Cinde) Weatherby
Director, Strategic Solutions Center
Texas Transportation Institute

Texas Transportation Institute: Strategic Solutions Center
Texas A&M University System

Mobility Managers

Thank you for taking the time to complete our survey. This survey is meant to be completed by the “mobility manager” or the individual in your agency who is directly responsible for mobility management sorts of activities. If you need to forward the survey to someone else, please go back to the email invitation and use the “send to a Colleague” button to forward the email to the appropriate person.

Default Section

Please provide the following information:

Name:

Title:

Agency:

City/Town:

Email Address:

Phone Number:

If you have the title “Mobility Manager” or something similar, please send us a copy of your position description to c-weatherby@tamu.edu or fax to 512-467-8971.

Type of Agency

Please identify agency type: **(Check all that apply)**

- ☐ Lead agency for regional service coordination
- ☐ Metropolitan transit authority
- ☐ Rural transit district
- ☐ State-funded urban transit
- ☐ Rural/urban transit
- ☐ Intercity bus operator
- ☐ Specialized transportation provider (not a recipient of either §5311 or §5307 formula program funds, but does receive funds for one or more of the following: a) §5310 Transportation for Elderly Individuals and Individuals with Disabilities*, b) §5316 Job Access Reverse Commute Program (JARC)*, and/or c) §5317 New Freedom Program*

For SPECIALIZED TRANSPORTATION provider, please describe the service area for your program (please list counties and cities):

Mobility Management Funding

Does your agency receive funds that are specifically to be used for "Mobility Management"

- [ ] No
- [ ] Yes

Funding for Mobility manager

Yes, what is the source of funding for Mobility Management? (Check all that apply)

- [ ] Regional Service Planning Coordination (Section 5304)
- [ ] United We Ride
- [ ] Easter Seals Project Action
- [ ] RTAP (Rural Technical Assistance Program)
- [ ] Section 5311 Rural
- [ ] Section 5311 Intercity Bus
- [ ] Section 5310 Transportation for Elderly Individuals and Individuals with Disabilities
- [ ] Section 5316 Job Access Reverse Commute Program (JARC)
- [ ] Section 5317 New Freedom Program
- [ ] Section 5307 Federal Urban
- [ ] Section 5307 State Urban
- [ ] Section 5303 Planning - UPWP
- [ ] Do not know (D/K)

No Mobility Management Funding

Although your agency does not receive funding specifically to be used for Mobility Management, does your agency still provide services that you consider to be Mobility Management?

- [ ] No, but our agency would like to provide mobility management services in the future
- [ ] No, and our agency does not intend to provide mobility management services in the future
- [ ] Yes, we do provide services we consider to be mobility management

Mobility Management Funding 2

If yes, what source of funding does your agency use to provide Mobility Management?

- ☐ Regional Service Planning Coordination (Section 5304)
- ☐ United We Ride
- ☐ Easter Seals Project Action
- ☐ RTAP (Rural Technical Assistance Program)
- ☐ Section 5311 Rural
- ☐ Section 5311 Intercity Bus
- ☐ Section 5310 Transportation for Elderly Individuals and Individuals with Disabilities
- ☐ Section 5316 Job Access Reverse Commute Program (JARC)
- ☐ Section 5317 New Freedom Program
- ☐ Section 5307 Federal Urban
- ☐ Section 5307 State Urban
- ☐ Section 5303 Planning - UPWP
- ☐ Passenger Fares
- ☐ Local Contributions (government and non-government)
- ☐ Contributed Services (non-cash)
- ☐ Indirect Transit Funding (auxiliary transit revenues, other transportation revenues, and non-transit related revenues
- ☐ Contract Revenues
- ☐ Do not know (D/K)
- ☐ Other (please specify)

Request Money

Does your agency plan to request funding for a Mobility Management project in the TxDOT Coordinated Call for Projects due in January 2011?

- ☐ No
- ☐ Yes

Sources of Funding

If Yes, what source(s) of funding does your agency plan to use to implement Mobility Management? (Please check all that apply)

- ☐ Regional Service Planning Coordination (Section 5304)
- ☐ United We Ride
- ☐ Easter Seals Project Action
- ☐ RTAP (Rural Technical Assistance Program)
- ☐ Section 5311 State Rural
- ☐ Section 5311 Intercity Bus
- ☐ Section 5310 Transportation for Elderly Individuals and Individuals with Disabilities
- ☐ Section 5316 Job Access Reverse Commute Program (JARC)
- ☐ Section 5317 New Freedom Program
- ☐ Section 5307 Urbanized
- ☐ Section 5307 State Urban
- ☐ Section 5303 Planning - UPWP
- ☐ Passenger Fares
- ☐ Local Contributions (government and non-government)
- ☐ Contributed Services (non-cash)
- ☐ Indirect Transit Funding (auxiliary transit revenues, other transportation revenues, and non-transit related revenues
- ☐ Contract Revenues
- ☐ Do not know (D/K)
- ☐ Other (please specify)

Mobility Management Questions

The next few questions will discuss the type of activities your agency includes as "Mobility Management."

Employ agency staff

Employ agency staff to plan and manage activities to improve coordination among public transportation providers, other transportation service providers, and agencies that do not provide transportation but serve people who need transportation services.

- ☐ No
- ☐ Yes

For this Mobility Management activity, does your agency use or plan to use specific performance measures to monitor achievements?

- ☐ No
- ☐ Yes

If Yes, what are the performance measures? (Please be specific)

What data does or will your agency collect and report to monitor performance? (Please be specific)

Fund Transportation Services

Fund transportation services that coordinate public transportation and other transportation service providers or fill service gaps.

- ☐ No
- ☐ Yes

Pay for rides

Pay for rides (fares, vouchers or reimbursement) for seniors, people with disabilities or others who need transportation services on public transportation or another transportation service.

- [x] No
- [ ] Yes

For this Mobility Management activity, does your agency use or plan to use specific performance measures to monitor achievements?

- [ ] No
- [ ] Yes

If Yes, what are the performance measures? (Please be specific)

What data does or will your agency collect and report to monitor performance? (Please be specific)

Provide information

Provide agencies and individuals with information and training materials on how to use local transportation.

- [ ] No
- [ ] Yes

Provide transportation coaches

Provide transportation coaches (ambassadors, facilitators) to provide travel training or trip planning for individuals who are seniors, have disabilities, or others who need transportation.

- [ ] No
- [ ] Yes

Provide training for agency or advocates

Provide training for agencies or advocates that do not provide transportation but serve individuals who need transportation services to foster education and awareness on how to access available transportation services that exist.

- ☐ No
- ☐ Yes

Provide training for public transportation

Provide training for public transportation or other transportation service providers to foster education and awareness about the special needs of seniors, individuals with disabilities, or others who use transportation services.

- ☐ No
- ☐ Yes

Deploy advanced technology

Deploy advanced technology to enhance the ability to coordinate among public transportation and other transportation service providers.

- ☐ No
- ☐ Yes

For this Mobility Management activity, does your agency use or plan to use specific performance measures to monitor achievements?

- ☐ No
- ☐ Yes

If Yes, what are the performance measures? (Please be specific)

What data does or will your agency collect and report to monitor performance? (Please be specific)

Does you agency have any other activities that would be included in Mobility Management?

- ☐ No
- ☐ Yes

What other types of activities does your agency include as Mobility Management?

Please describe #1:

Please describe #2:

Please describe #3:

Please provide more information about performance measures for the activities mentioned above.

Other activity #1

For this Mobility Management activity, does your agency use or plan to use specific performance measures to monitor achievements?

- ☐ No
- ☐ Yes

If Yes, what are the performance measures? (Please be specific)

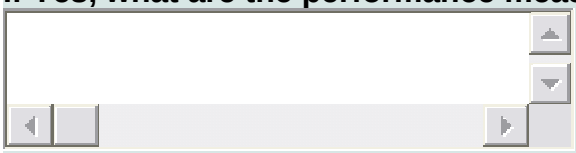
What data does or will your agency collect and report to monitor performance? (Please be specific)

Other activity #2

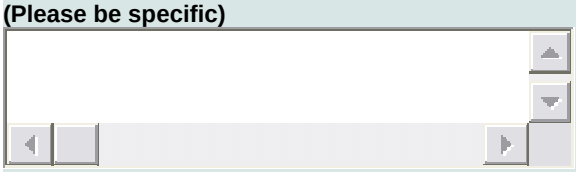
For this Mobility Management activity, does your agency use or plan to use specific performance measures to monitor achievements?

- ☐ No
- ☐ Yes

If Yes, what are the performance measures? (Please be specific)



What data does or will your agency collect and report to monitor performance? (Please be specific)

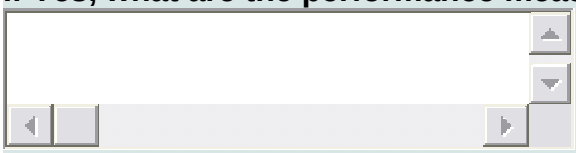


Other activity #3

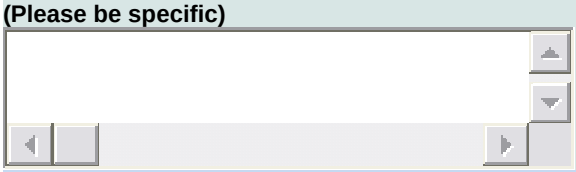
For this Mobility Management activity, does your agency use or plan to use specific performance measures to monitor achievements?

- ☐ No
- ☐ Yes

If Yes, what are the performance measures? (Please be specific)

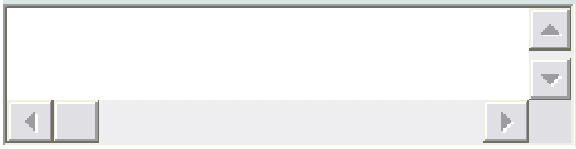


What data does or will your agency collect and report to monitor performance? (Please be specific)



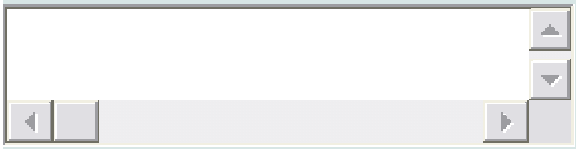
Evaluation

How does your agency or will your agency evaluate your achievements? (Please be specific)



Challenges

What are some of the challenges encountered by your agency in the implementation of Mobility Management?



Do you also partner with other organizations?

- ☐ No
- ☐ Yes

Collaboration

If Yes, with whom and how do you collaborate? Please briefly describe the type of collaboration related to mobility management for each partnership or collaboration.

Please list each partner and type of collaboration.

Partner Information

Partner name	
Type of collaboration	

Partner Information

Partner name	
Type of collaboration	

Partner Information

Partner name	
Type of collaboration	

Partner Information

Partner name	
Type of collaboration	

Partner Information

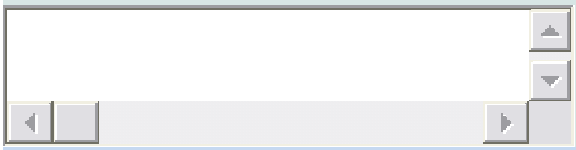
Partner name	
Type of collaboration	

Marketing Plan

Do you have a marketing plan or program for your Mobility Management program?

- ☐ No
- ☐ Yes

If yes, please briefly describe the plan or program.



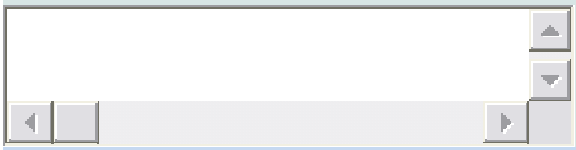
Accomplishment or innovation

Do you have an accomplishment or an innovation in Mobility Management that you would like to share with us?

- ☐ No
- ☐ Yes

Accomplishment

If Yes, tell us about your accomplishment. **(Please be specific)**



Follow up

How may we best follow-up with you if we need to clarify your answers or learn more about your Mobility Management activities?

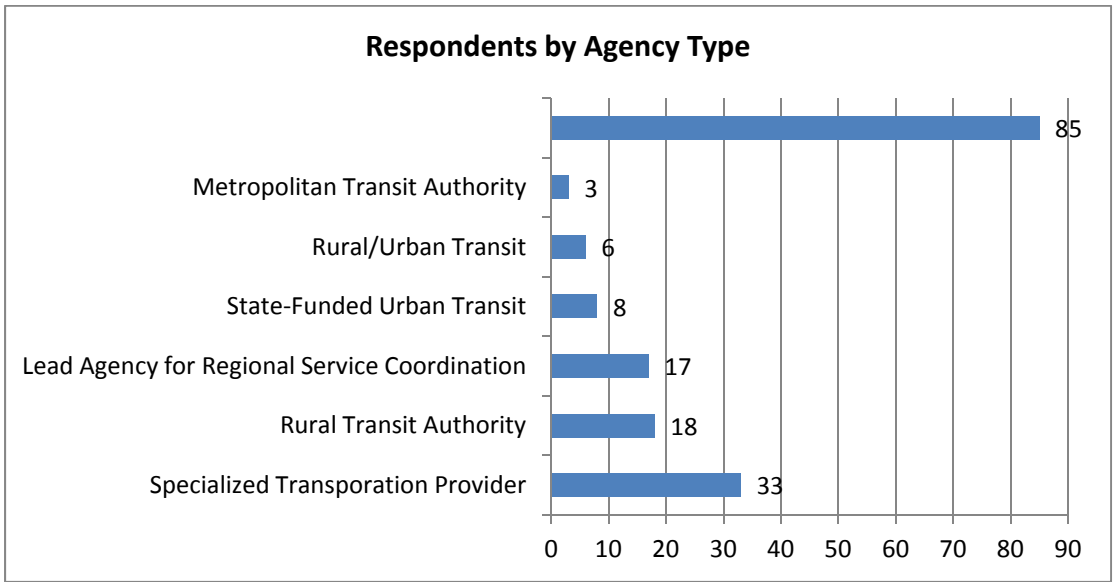
- ☐ Email
- ☐ Telephone (if so, please list preferred telephone number)

Telephone number:

Thank You!

Thank you for your time to answer our questions. Consolidated information gathered through this survey will be shared with you at the completion of the research project. Preliminary information may be presented at a forum or webinar during the project.

APPENDIX B. SURVEY RESPONSES



Agency Type	Total Surveys Sent	Response by Agency Type	Response Rate
Lead Agency for Regional Service Coordination*	23	17	74%
Metropolitan Transit Authority	8	3	38%
Rural Transit Authority	29	18	62%
Rural/Urban Transit	9	6	67%
Specialized Transportation Provider	115	33	29%
State-Funded Urban Transit	18	8	44%

*Lead Agencies represent more than one agency type.
Approximately 191 surveys were distributed to 202 agencies representing all agency types (11 Lead Agencies also classified as another type of agency).

Total 74 completed surveys returned (11 Lead Agencies also classified as another type of agency = 85 agencies).

Lead Agency for Regional Coordination		
	Agency Contact	**Agency**
Agencies Completing Survey 17	Roy Munoz*	Alamo Area Council of Governments**
	Lynda Woods-Pugh	Ark-Tex Council of Governments**
	Michael Parks	Brazos Valley Council of Governments
	Stevie Greathouse	Capital Area Metropolitan Planning Organization
	Sarah Hidalgo-Cook	Community Council of Southwest Texas, Inc.**
	Sean Scott	Concho Valley Transit District**
	Scott Lewis*	East Texas Council of Governments**
	Shawn Clark	Golden Crescent Regional Planning Commission**
	Sandra E. Webb*	Heart of Texas Council of Governments**
	Rodney Gomez*	Lower Rio Grande Valley Development Council**
	Serena M. Stevenson*	Lubbock, City of/Citibus**
	Edward Escamilla*	Midland-Odessa Transportation Organization
	Joe Gambill	Nortex Regional Planning Commission
	James Powell*	North Central Texas Council of Governments
	Jamie L. Allen*	Panhandle Regional Planning Commission
	Leanna Sheppard*	South East Texas Regional Planning Commission**
	David Trout	Texoma Council of Government
Non-Responding Agencies 6	Richard Bullock	Coastal Bend Council of Governments
	Rusty Phillips	Deep East Texas Council of Governments
	Bob Geyer	El Paso, County of**
	Kari Hackett	Houston-Galveston Area Council
	Juan Rodriguez	South Texas Development Council
	Alex Koons	West Central Texas Council of Governments

*Person responding to survey was not the initial agency contact.
**Lead agencies can respond to more than one agency type.

Transit Authority

	Agency Contact	Agency
Agencies Completing Survey 3	Marion Denney	Dallas Area Rapid Transit
	Carla Forman	Fort Worth Transportation Authority (The T)
	Michael O'Herrera	Mass Transit Department-El Paso, City of (Sun Metro)
Non-Responding Agencies 5	Meredith Highsmith	Capital Metropolitan Transportation Authority
	Dee Landry	Denton County Transportation Authority
	John Sedlak	Metropolitan Transit Authority of Harris County, Houston
	Sara Salvide	Transportation Coordination Network of the Coastal Bend***
	Jesse Balleza	Via Metropolitan Transit (San Antonio)

***Note survey was sent to Sara Salvide, as she is the Intercounty Mobility Director, Coastal Bend, and offices at Corpus RTA.

Rural/Urban Transit

	Agency Contact	Agency
Agencies Completing Survey 6	Sean Scott	Concho Valley Transit District**
	Joe Gardzina	Fort Bend County (Fort Bend Transit)
	Shawn Clark*	Golden Crescent Regional Planning Commission**
	James Hollis	Gulf Coast Center/Connect Transit
	Rodney Gomez*	Lower Rio Grande Valley Development Council**
	Brad Underwood	Texoma Area Paratransit System
Non-Responding Agencies 3	Kristine Box	Brazos Transit District (Bryan/College Station, The Woodlands)
	Rep Pledger	Collin County Committee on Aging and McKinney
	Carole Warlick*	Hill Country Transit District, The HOP (Temple, Killeen, Hill Country)

*Person responding to survey was not the initial contact.

**Lead agencies can respond to more than one agency type.

Rural Transit Districts		
	Agency Contact	**Agency**
Agencies Completing Survey 18	Roy Munoz*	Alamo Area Council of Governments**
	Lynda Woods-Pugh	Ark-Tex Council of Governments**
	Jacque Rosales*	Central Texas Rural Transit District
	Julie Floyd	Cleburne, City of
	Vastene Olier	Colorado Valley Transit
	Sarah Hidalgo-Cook	Community Council of Southwest Texas, Inc.**
	Charlotte Clower	Community Services, Inc.
	Scott Lewis*	East Texas Council of Governments**
	Bob Schwab*	El Paso, County of**
	Sandra E. Webb*	Heart of Texas Council of Governments/Rural Transit District**
	Gerald Payton	Panhandle Transit
	Gloria Ramos	REAL, Inc.
	Leanna Sheppard*	South East Texas Regional Planning Commission**
	Nicholas Gray	Special Programs for Aging Needs, Inc.
	Brian Baker	South Plains Community Action Association, SPARTAN Transportation
	Ashley Ando*	STAR Transit
	Robert Martinez	Webb County Community Action Agency
	Karen Faulkner	West Texas Opportunities, Inc.
Non-Responding Agencies 11	Dana Myers	Aspermont Small Business Development Center
	Anna Simo	Bee Community Action Agency
	Dave Marsh	Capital Area Rural Transportation System
	Noelia Ruiz	Community Action Council of South Texas
	John Burns	Del Rio, City of
	Paulette Shelton	Fort Bend County
	Margie Del Bosque	Kleberg County Human Services
	Reta Brooks	Public Transit Services
	Lezlie Carroll	Rolling Plains Management Corp.
	Jesse Arriaga	South Padre Island, Town of
	Barbara Perry	Transit System, Inc., The

*Person responding to survey was not the initial agency contact.
**Lead agencies can respond to more than one agency type.

State-Funded Urban Transit		
	Agency Contact	**Agency**
Agencies Completing Survey 8	Merle Wilkins*	Abilene, City of (CityLink)
	Bob Johnson	Arlington, City of (Handitran)
	Norma H. Zamora	Brownsville Urban System
	Michael Worthy	Galveston Island Transit
	Serena M. Stevenson*	Lubbock, City of (Citibus)**
	Daniel Swanson	Texarkana Urban Transit District
	Nanette Alfano*	Waco, City of
	Dennis Burket	Wichita Falls, City of (Falls Ride)
Non-Responding Agencies 10 (11 including McAllen)	Judy Phelps	Amarillo, City of
	Bill Munson	Beaumont, City of
	Anthony Flowers	Grand Prairie, City of
	Feliciano Garcia	Laredo, City of
	Rob Stephens	Longview, City of
	Elizabeth Suarez	*McAllen Express****
	Donald White	Mesquite, City of
	Chris Mandrell	Midland–Odessa, Cities of
	Jennipher Castellanos	North East Transportation Service
	Paul Brown	Port Arthur, City of
	Sue Barham	Tyler Transit System

*Person responding to survey was not the initial agency contact.
**Lead agencies can respond to more than one agency type.
***McAllen received survey although subcontractor to LRGVDC (rural/urban transit).

Special Transportation Agencies		
	Agency Contact	**Agency**
Agencies Completing Survey 33	Robert Goble	Adult Day Activity Center
	Leah Schumann	American Red Cross
	Angela Shaw*	Andrews Center
	Emma Vasquez	Big Bend Community Action Committee, Inc.
	Mary Spear	Big Bend Regional Medical Center
	Robert Ham	Brenham Supported Living (Formerly Brenham State School)
	Kent Shields	C.C. Young
	Elton McCune	Cherokee County Mental Retardation Association, Inc.
	Jessica Anchondo-Chapa	Christian Senior Services-Grace Place Northwest
	Judy Telge	Coastal Bend Center for Independent Living
	Martin Ornelas	Coastal Bend Rural Health Partnership
	Melody Walls	Eden Heights, Inc.
	Sandra Rose	Friends of Elder Citizens, Inc.
	Jay Higginson	Greater Randolph Area Services Program, Inc.
	Vernon Chambers	Harris County Transit–RIDES
	Yolanda Tatum*	Health Horizons of East Texas
	Sally Derr*	Hill Country Community Mental Health and Mental Retardation Center
	Larna Martin	Houston Kiddie Express Transit
	Susan Farris	James L. West Alzheimer Center
	Raquel R. Segovia	Jim Hogg County Transportation Department
	Vince Huerta	League of United Latin American Citizens Project Amistad
	Steven Lujan	Lutheran Social Services
	Sylvia T. Zubiate	Marfa Nutrition Center
	Dan Gadbury	Mental Health Mental Retardation of Tarrant County
	Jamal Moharer	NDMJ
	James Powell	North Central Texas Council of Governments
	Carl McMillen	Panhandle Independent Living Center
	Nick Flores*	Parks Methodist Retirement Village
	Michael Black	Permian Basin Community Center
	Donna Woodard	Senior Center
	Claudia Loofs	Senior Center of Walker County
	Laverne Surratt	Wilmer, City of Senior Center
	Jerri Corbin	Young County Senior Cub Center

*Person responding to survey was not the initial contact.

Special Transportation Agencies		
	Agency Contact	**Agency**
Non-Responding Agencies 80	Keva Weightnab	100 D.I.D. Memorial Nurse and Rehab Center (Dumas)
	Cindy Davis	Adult Day Activity and Health Center, Inc.
	Mary Garcia	Affectionate Arms Adult Day Health Care Center
	Lori Dewitt	Air Force Village Foundation
	Patrick Lopez	Aliviane NO-AD, Inc.
	Steve Atchison	American Red Cross–Greater Houston Area Chapter
	Ameer Mobarak	Austin Groups for the Elderly/Elderhaven Adult Day Care
	Martin Knipfer	Austin State Supported Living Center (Formerly Austin State School)
	David Evans, Rod Gibbs	Austin Travis Center Integral Care (Formerly Austin-Travis County Mental Health Mental Retardation Center}
	Tresha Silva	Bastrop County Emergency Food Pantry & Support Center
	Manny Escobedo	Bienvivir Senior Health Services
	Linda Henry	Bluebonnet Trails Community Mental Health Mental Retardation
	Berta Solis	Border Area Nutrition Council
	Doyle Antle, Paul Clark	Buckner Villas
	Mark Emery	Camp County Service Industries
	Carla Weiland	Camp Summit
	Jesus Quinonez	Centro De Salud Familiar La Fe, Inc.
	Karen Swenson	Community Action Nacogdoches
	Sue Simmons	Community Health Care (Formerly Sabine Valley Center)
	Jeanette Manzano	Dallas County Department of Health and Human Services
	Cora Brown	Dawson County Senior Citizens Center
	Kiki Landry	Diversicare, Inc.
	Abel Aragon	Duval County
	Lisa Jacobson	East Texas Support Services, Inc.
	Gayla Underwood	Ector County Northside Senior Center
	Sue Harmer	Eden Hill Communities (Formerly Eden Home for the Aged, Inc.)
	Lendola Reynolds	Electra Service Corporation
	Lucy Pantoja	Ella Austin Community Center
	Jeannie McCrae	Faith in Action Caregiving
	David Salee	Farwell Convalescent Center
	Susan Bond	Friendship Center of Montgomery County (Formerly Montgomery County Committee on Aging)

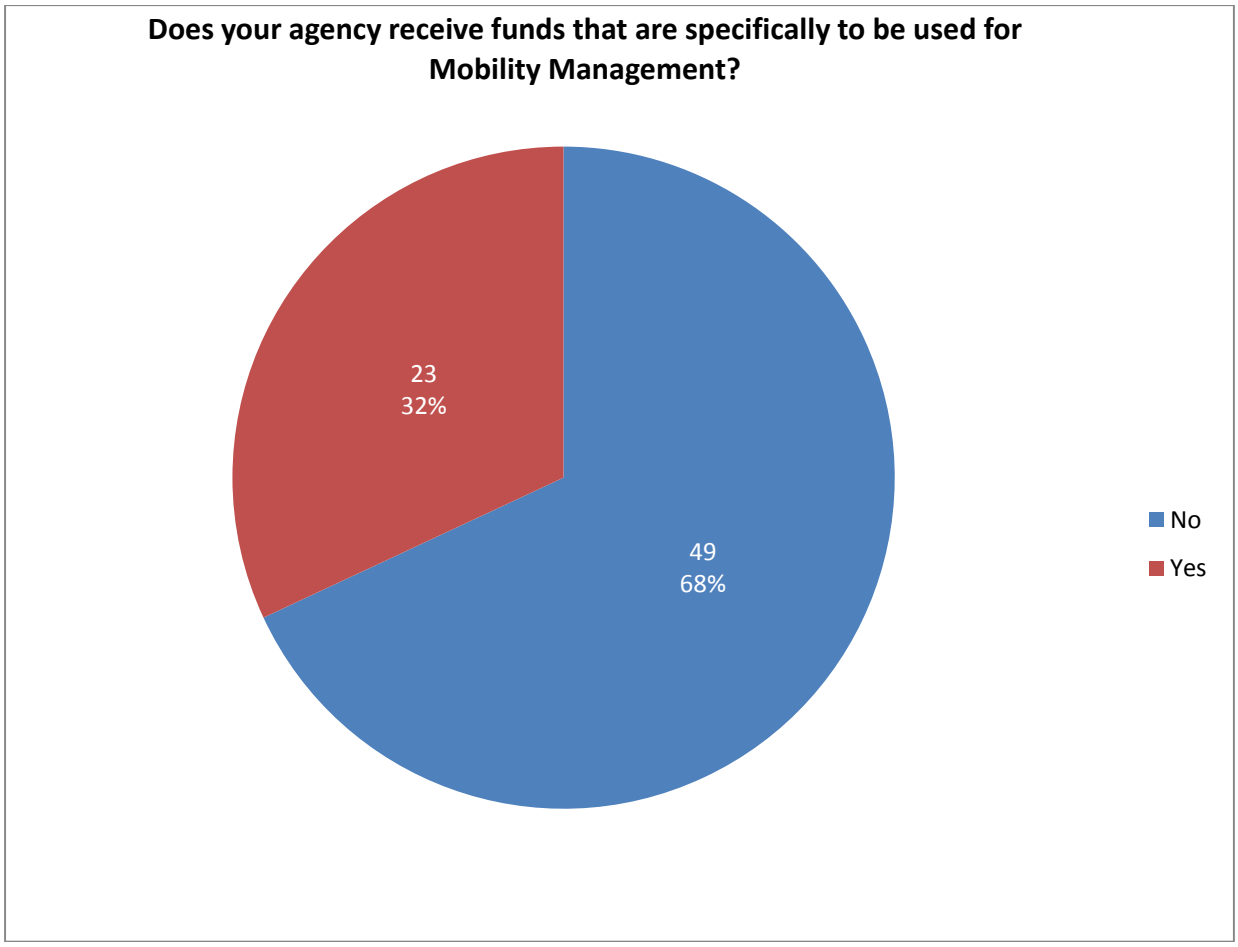
Special Transportation Agencies		
	Agency Contact	**Agency**
Non-Responding Agencies 80 (continued)	Viola Long	Golden Age Home
	Gary Dewey	Good Samaritan Society White Acres
	Diane Bennett	Goodwill Industries, Inc.
	Mike Mendoza	Hays County Veterans Administration
	Susan Sprowls	Hockley County Senior Citizens
	Debbie Warren	Independence Manor II
	Maria Ayala	Inman Christian Center
	Jim Chilcote	Jan Warner Adult Daycare (Formerly Amarillo Multi-service Center for the Aging, Inc.
	Joy McQueen	Kirby Senior Center
	Tammy Parker	Legacy Assisted Living (Formerly Coon Memorial Home)
	Paul Wheeler	Lubbock Independent School District Specialized Education
	Mike McDaniel	Marian Moss Enterprises, Inc.
	Janie Martinez	Mary Lee Foundation
	Richard Cordes	Menard, County of
	Sylvia de la Rosa	Mexican-American Unity Council/Palacio del Sol
	Lynn Rutland	Mental Health Mental Retardation Services for the Concho Valley
	Conrado Longoria	Middle Rio Grande Development Foundation
	David Rowley	Mission Road Developmental Center
	Joy Martinez	Nazareth Hall Nursing Center
	Rhoda Byers	Plano Community Home Sponsor
	Edward Meza	Port Isabel, City of
	Stephanie Smith	Presa Community Service Center
	Brad Newton	Presido, City of
	Lisa Wyse	Rio Concho West, Inc.
	Nan Prichard	Salvation Army-William Booth Garden Apartments
	David Ewell	San Antonio Aids Foundation
	Linda Fewell	San Antonio Lighthouse
	Fernando Medellin	San Antonio, City of–Supportive Services for the Elderly
	Guadalupe Olivarez	San Juan de los Lagos Church Senior Center
	Greg Gerendas	Senior Adult Service
	David Caldwell	Senior Center Resource and Public Transit, Inc.
	Teresa Janeaux	Senior Citizens Project of Chambers County

Special Transportation Agencies		
	Agency Contact	**Agency**
Non-Responding Agencies 80 (continued)	Marsha Cayton	Seven Acres Jewish Geriatric Center
	Isabel Rodriguez	Southwest Key Program
	Palmira Levrie	St. Anthony's Senior Center
	Mari Izaguirre	St. Gregory the Great Parish
	Colleen Smith	St. John's Episcopal Retirement Corp.
	Rudy Carrizales	St. Vincent de Paul Catholic Church
	Ron Alderton	Sterling, County of
	Leo Smith	Terrell County Senior Citizen's Transportation Program
	Myra Jones	Texarkana Special Education Center (Opportunities, Inc.)
	Bryan Martinez	Trinity Terrance Retirement Center
	Donnie Gray	Twin Oaks Manor
	Eduardo Romero	University Medical Center
	SanJuana Gamez	Van Horn, Town of
	Darla McAlister	Ward County Grandfalls Senior Citizens
	April Forest	Ward County Senior Citizens Center
	Anthony Billings	Workforce Solutions Heart of Texas (Heart of Texas Workforce Development Board)
	Carmen Reyes	Zapata County

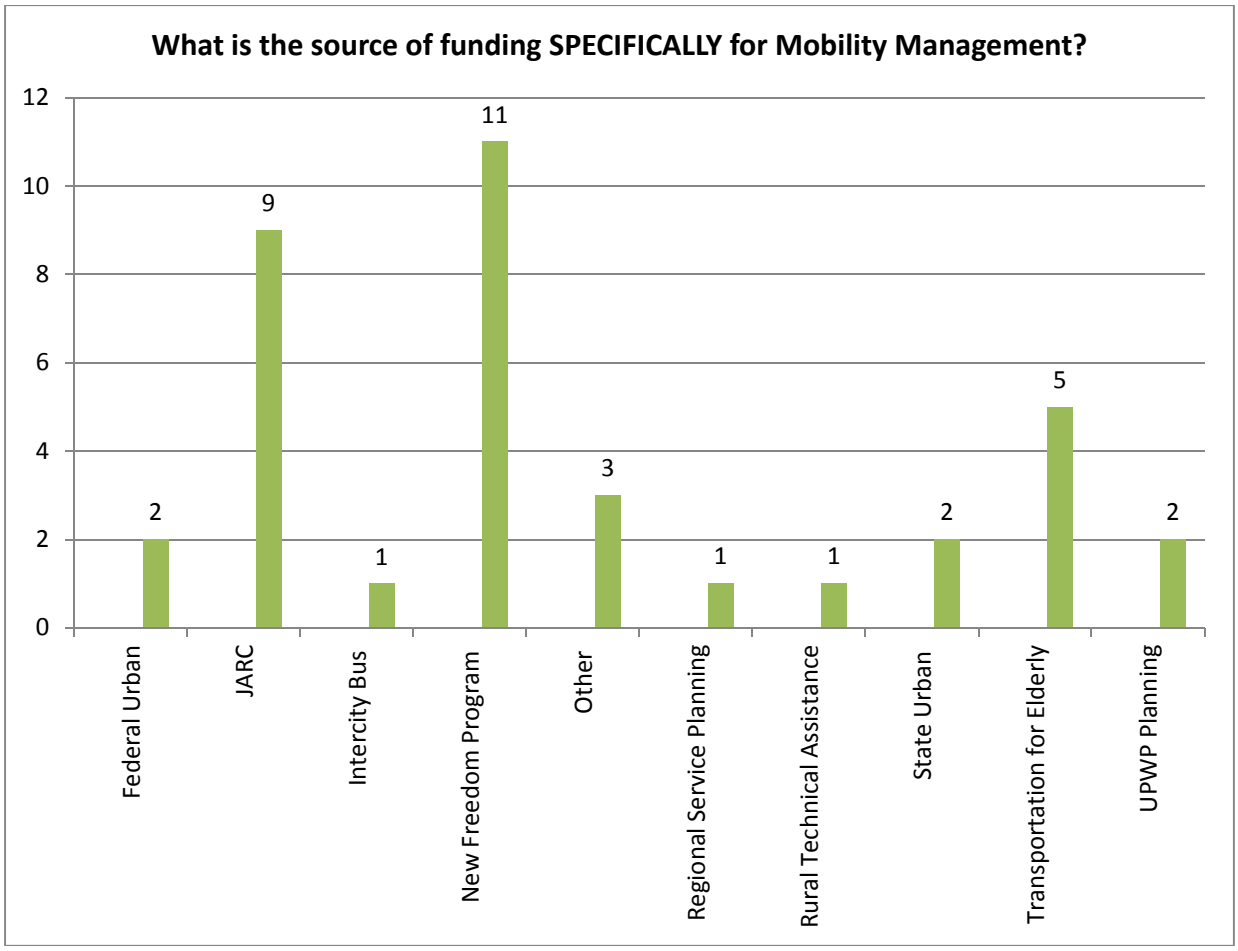
*Person responding to survey was not the initial contact.

Individuals Responding to the RMC 0-6633 Survey on Mobility Management in the State of Texas		
Contact information as of November 2010		
Agency Contact	**Agency**	**Contact Email**
Roy Munoz	Alamo Area Council of Governments	rmunoz@aacog.com
Merle Wilkins	Abilene, City of (CityLink)	merle.wilkins@abilenetx.com
Robert Goble	Adult Day Activity Center	robert@adahc.com
Leah Schumann	American Red Cross	schumannl@usa.redcross.org
Angela Shaw	Andrews Center	ashaw@andrewscenter.com
Lynda Woods-Pugh	Ark-Tex Council of Governments	lwoods@atcog.org
Bob Johnson	Arlington, City of (Handitran)	Bob.Johnson@arlingtontx.gov
Emma Vasquez	Big Bend Community Action Committee, Inc.	evbbcac@sbcglobal.net
Mary Spear	Big Bend Regional Medical Center	mary_clare_spear@chs.net
Michael Parks	Brazos Valley Council of Governments	mparks@bvcog.org
Robert Ham	Brenham Supported Living (Formerly Brenham State School)	robert.ham@dads.state.tx.us
Norma H. Zamora	Brownsville Urban System	normaz@cob.us
Kent Shields	C.C. Young	kshields@ccyoung.org
Stevie Greathouse	Capital Area Metropolitan Planning Organization	stevie.greathouse@campotexas.org
Jacque Rosales	Central Texas Rural Transit District	jacque@cityandruralrides.com
Elton McCune	Cherokee County Mental Retardation Association, Inc.	bemccune@aol.com
Jessica Anchondo-Chapa	Christian Senior Services-Grace Place Northwest	jessicaa@christianseniorservices.org
Julie Floyd	Cleburne, City of	julie.floyd@cleburne.net
Judy Telge	Coastal Bend Center for Independent Living	judyt@cbcil.org
Martin Ornelas	Coastal Bend Rural Health Partnership	martin.ornelas@cacost.org
Vastene Olier	Colorado Valley Transit	cvt@gotransit.org
Sarah Hidalgo-Cook	Community Council of Southwest Texas, Inc.	scook@ccswt.org
Charlotte Clower	Community Services, Inc.	ctsdirector@csicorsicana.org
Sean Scott	Concho Valley Transit District	sean@cvcog.org
Marion Denney	Dallas Area Rapid Tranist	mdenney@dart.org
Scott Lewis	East Texas Council of Governments	scott.lewis@etcog
Melody Walls	Eden Heights, Inc.	eheights@nbtx.com
Bob Schwab	El Paso, County of	bschwab@epcounty.com
Joe Gardzina	Fort Bend County (Fort Bend Transit)	joe.gardzina@co.fort-bend.tx.us
Carla Forman	Fort Worth Transportation Authority (The T)	cforman@the-t.com
Sandra Rose	Friends of Elder Citizens, Inc.	foec@warpspeed1.net
Michael Worthy	Galveston Island Transit	worthymic@cityofgalveston.org
Shawn Clark	Golden Crescent Regional Planning Commission	shawnc@gcrpc.org
Jay Higginson	Greater Randolph Area Services Program, Inc.	jhigginson@grasp211.org
James Hollis	Gulf Coast Center/Connect Transit	Jamesh@gcmhmr.com
Vernon Chambers	Harris County Transit–RIDES	vernon.chambers@csd.hctx.net
Yolanda Tatum	Health Horizons of East Texas	hhet@sbcglobal.net
Sandra E. Webb	Heart of Texas Council of Governments	sandra.webb@hot.cog.tx.us
Sally Derr	Hill Country Community Mental Health and Mental Retardation Center	sderr@hillcountry.org
Larna Martin	Houston Kiddie Express Transit	LLARNAMARTINEXPRESS@comcast.net
Susan Farris	James L West Alzheimer Center	sfarris@jameslwest.org
Raquel R. Segovia	Jim Hogg County Transportation Department	cotrans@sbcglobal.net
Rodney Gomez	Lower Rio Grande Valley Development Council	rgomez@lrgvdctransit.org
Serena M. Stevenson	Lubbock, City of/Citibus	sstevenson@citibus.com

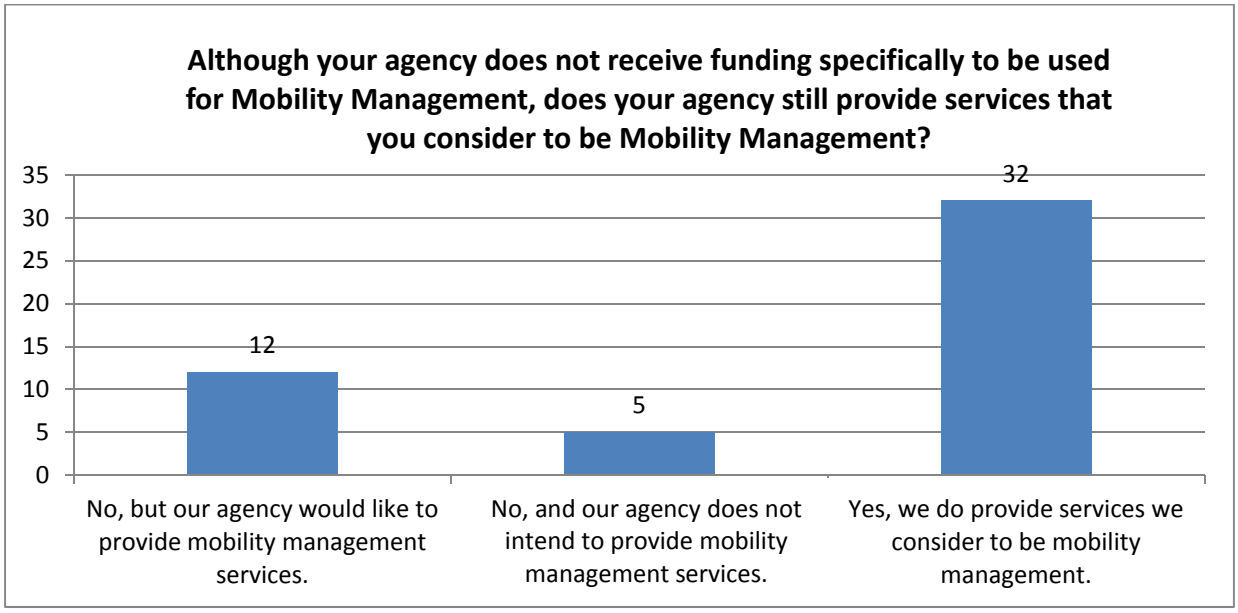
Vince Huerta	League of United Latin American Citizens Project Amistad	vhuerta@projectamistad.com
Steven Lujan	Lutheran Social Services	steven.lujan@lsss.org
Sylvia T. Zubiate	Marfa Nutrition Center	1nutrition@sbcglobal.net
Michael O'Herrera	Mass Transit Department-El Paso, City of (Sun Metro)	herreramo@elpasotexas.gov
Dan Gadbury	Mental Health Mental Retardation of Tarrant County	dan.gadbury@mhmrtc.org
Edward Escamilla	Midland-Odessa Transportation Organization	eescamilla@motormpo.com
Jamal Moharer	NDMJ	jamal@flyjet.org
Joe Gambill	Nortex Regional Planning Commission	jgambill@nortexrpc.org
James Powell	North Central Texas Council of Governments	jpowell@nctcog.org
Carl McMillen	Panhandle Independent Living Center	advocacy@nts-online.net
Jamie L. Allen	Panhandle Regional Planning Commission	jallen@theprpc.org
Gerald Payton	Panhandle Transit	g-payton@pcsvcs.org
Nick Flores	Parks Methodist Retirement Village	Ngflores@sears-methodist.com
Michael Black	Permian Basin Community Center	mblack@pbmhmr.com
Gloria Ramos	REAL, Inc.	realtran@bizstx.rr.com
Donna Woodard	Senior Center	donnawoodard@windstream.net
Claudia Loofs	Senior Center of Walker County	seniormeals60@att.net
Leanna Sheppard	South East Texas Regional Planning Commission	lsheppard@setrpc.org
Nicholas Gray	Special Programs for Aging Needs, Inc.	nicholasg@span-transit.org
Brian Baker	South Plains Community Action Association, SPARTAN Transportation	bbaker@spcaa.org
Ashley Ando	STAR Transit	ashleyando@terrelldepot.com
Brad Underwood	Texoma Area Paratransit System	bradunderwood@tapsbus.com
Daniel Swanson	Texarkana Urban Transit District	daniel.swanson@txkusa.org
David Trout	Texoma Council of Government	dtrout@texoma.cog.tx.us
Nanette Alfano	Waco, City of	nanettea@ci.waco.tx.us
Robert Martinez	Webb County Community Action Agency	romartinez@webbcountytx.gov
Karen Faulkner	West Texas Opportunities, Inc.	kfaulknerwto@windstream.net
Dennis Burket	Wichita Falls, City of (Falls Ride)	dennis.burket@cwftx.net
Laverne Surratt	Wilmer, City of Senior Center	lsurratt@cityofwilmer.com
Jerri Corbin	Young County Senior Cub Center	cubcenter@suddenlinkmail.com



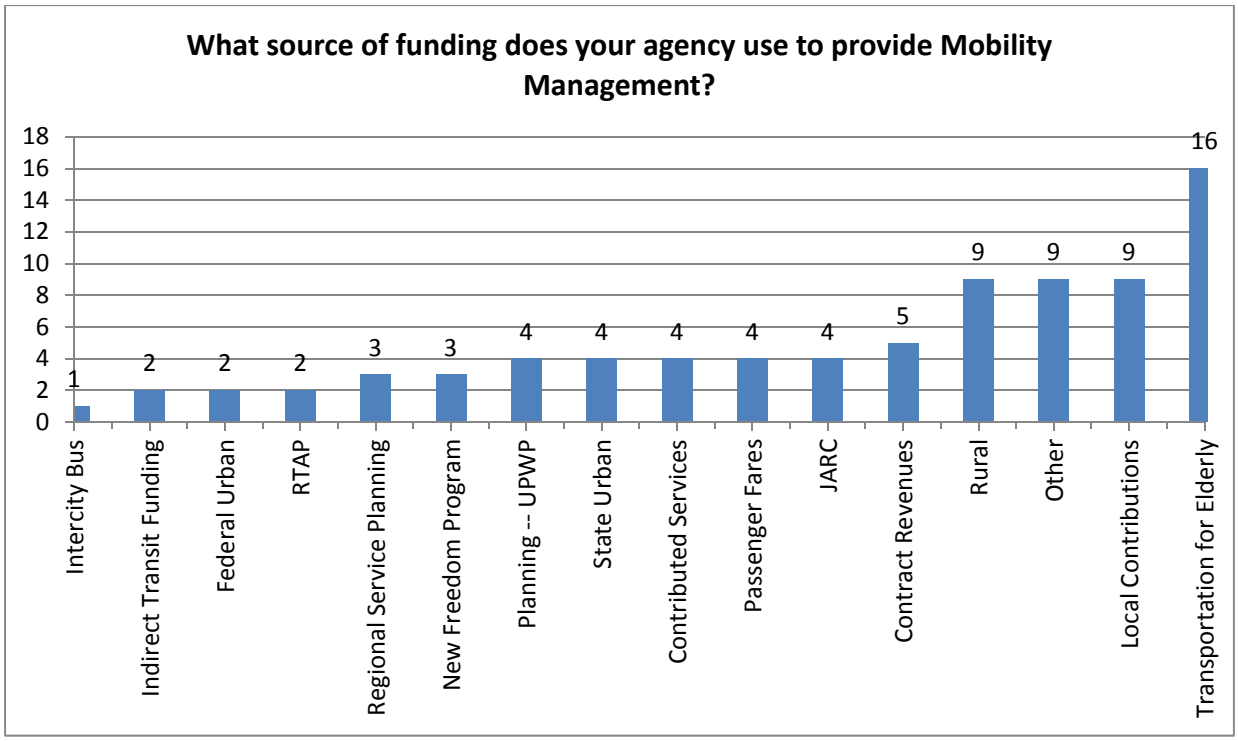
72 responses of 74 completed surveys returned



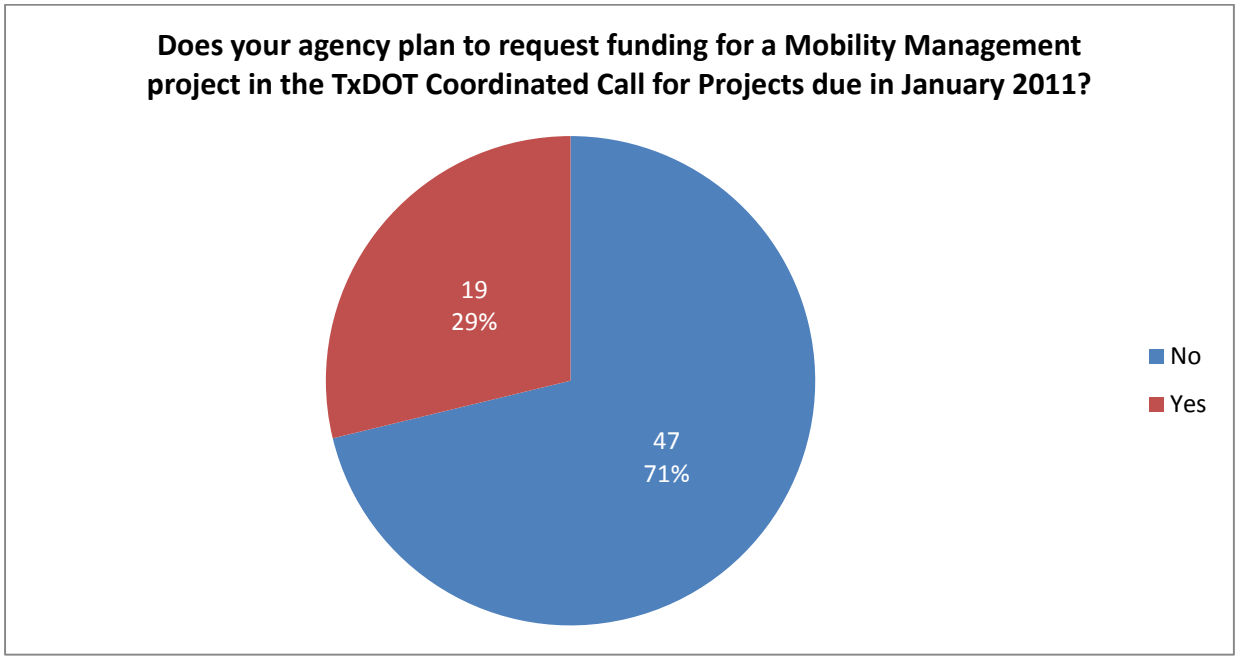
37 responses of 74 completed surveys returned; multiple responses accepted



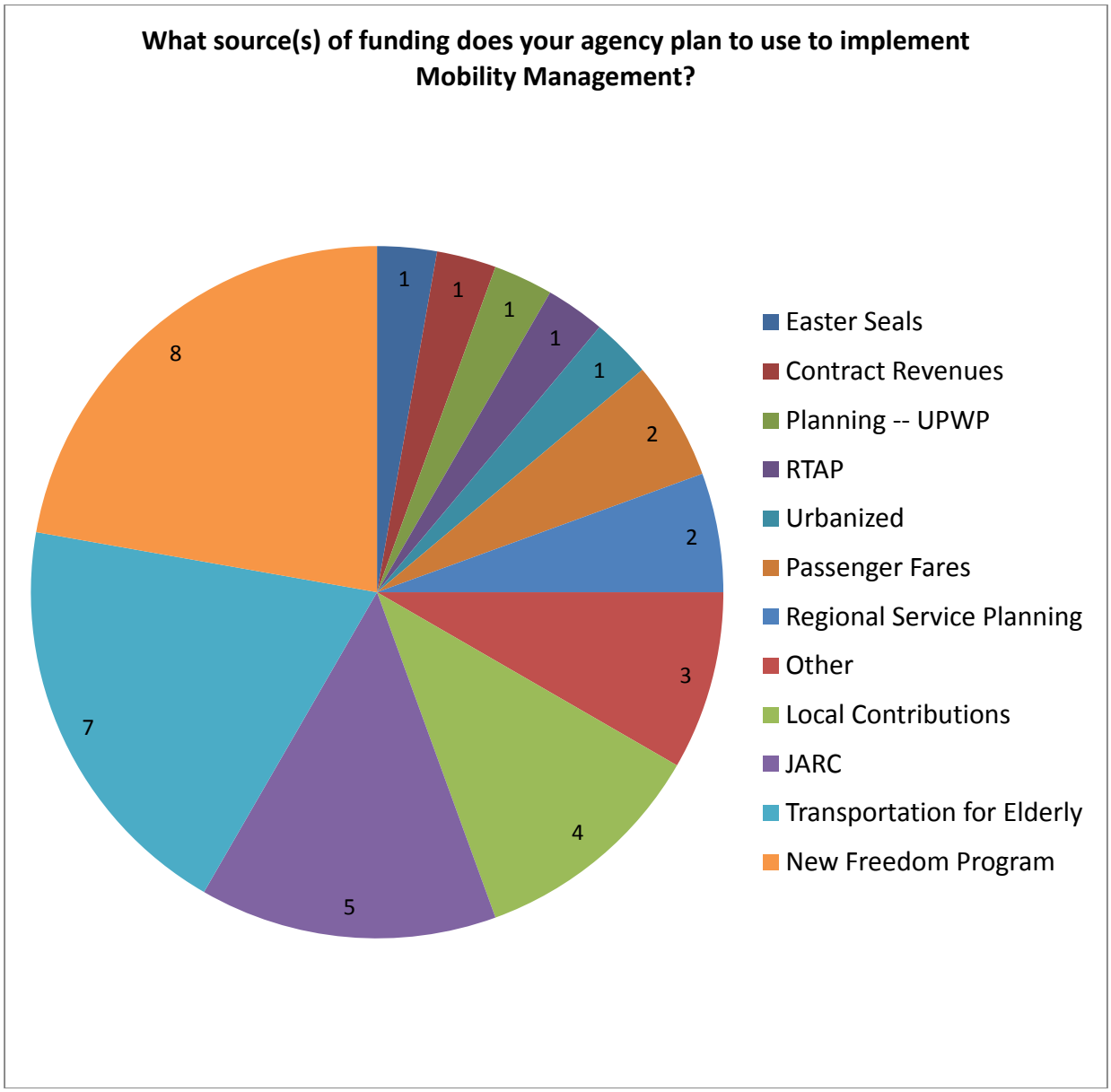
49 responses of 74 completed surveys returned



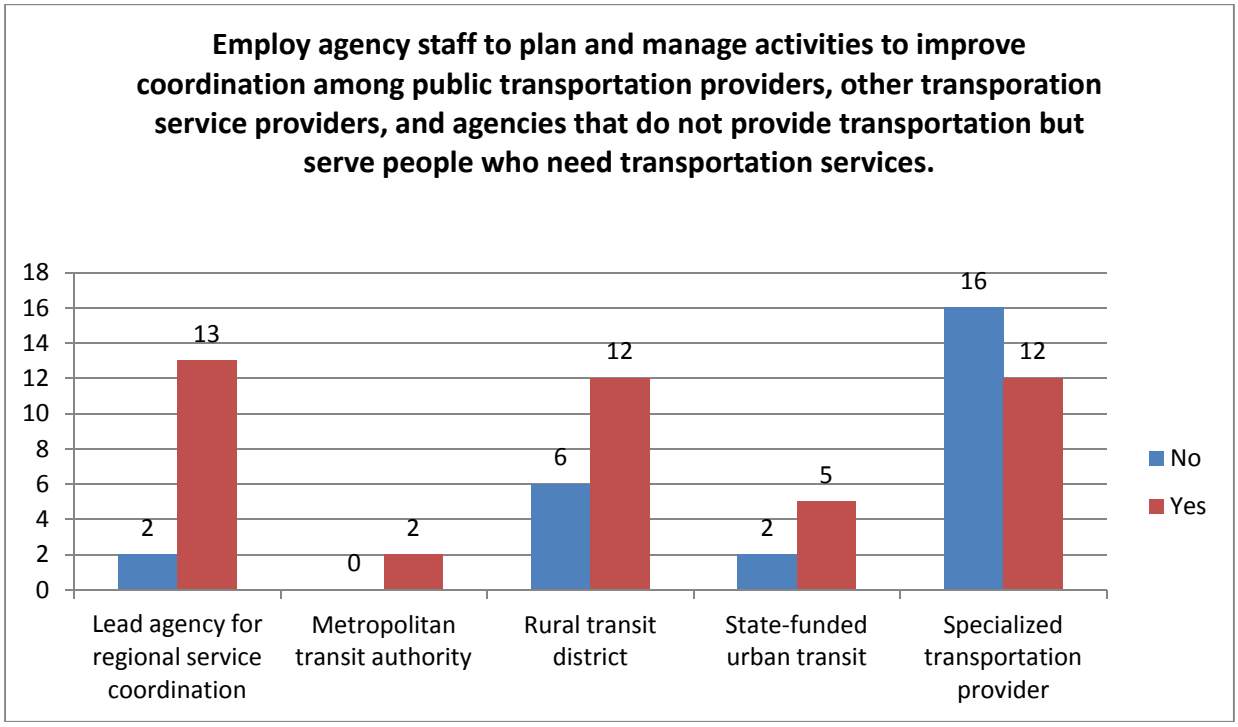
81 responses of 74 completed surveys returned; multiple responses accepted



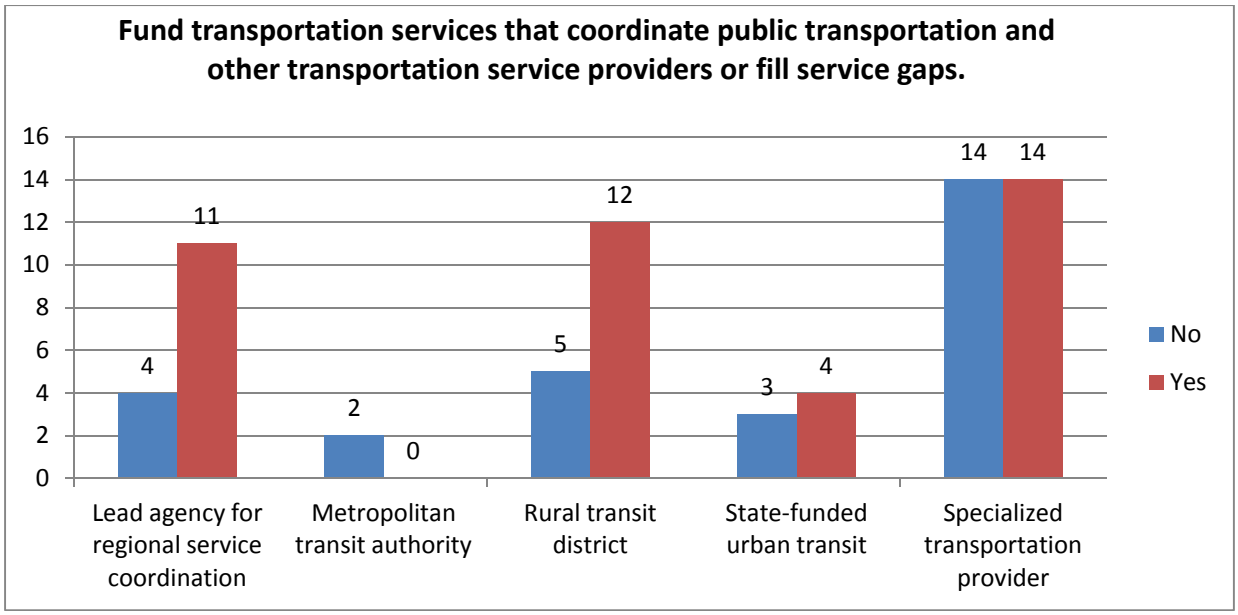
66 responses of 74 completed surveys returned


What source(s) of funding does your agency plan to use to implement Mobility Management?
1
1
1
1
1
2
2
3
4
5
7
8
Easter Seals
Contract Revenues
Planning -- UPWP
RTAP
Urbanized
Passenger Fares
Regional Service Planning
Other
Local Contributions
JARC
Transportation for Elderly
New Freedom Program

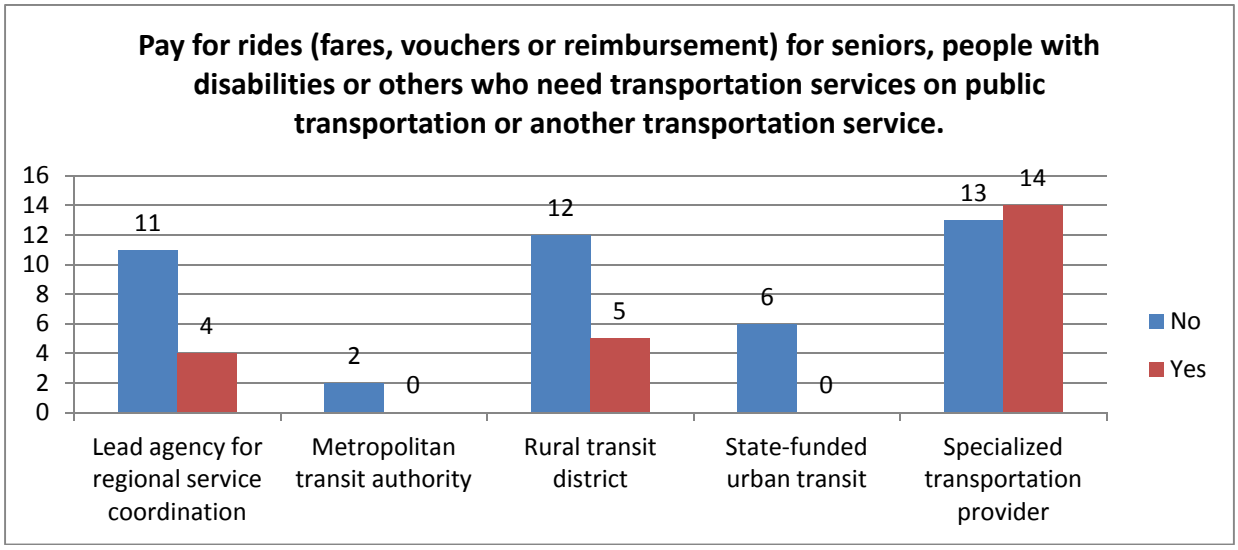
What Mobility Management Activities Does Your Agency Provide?



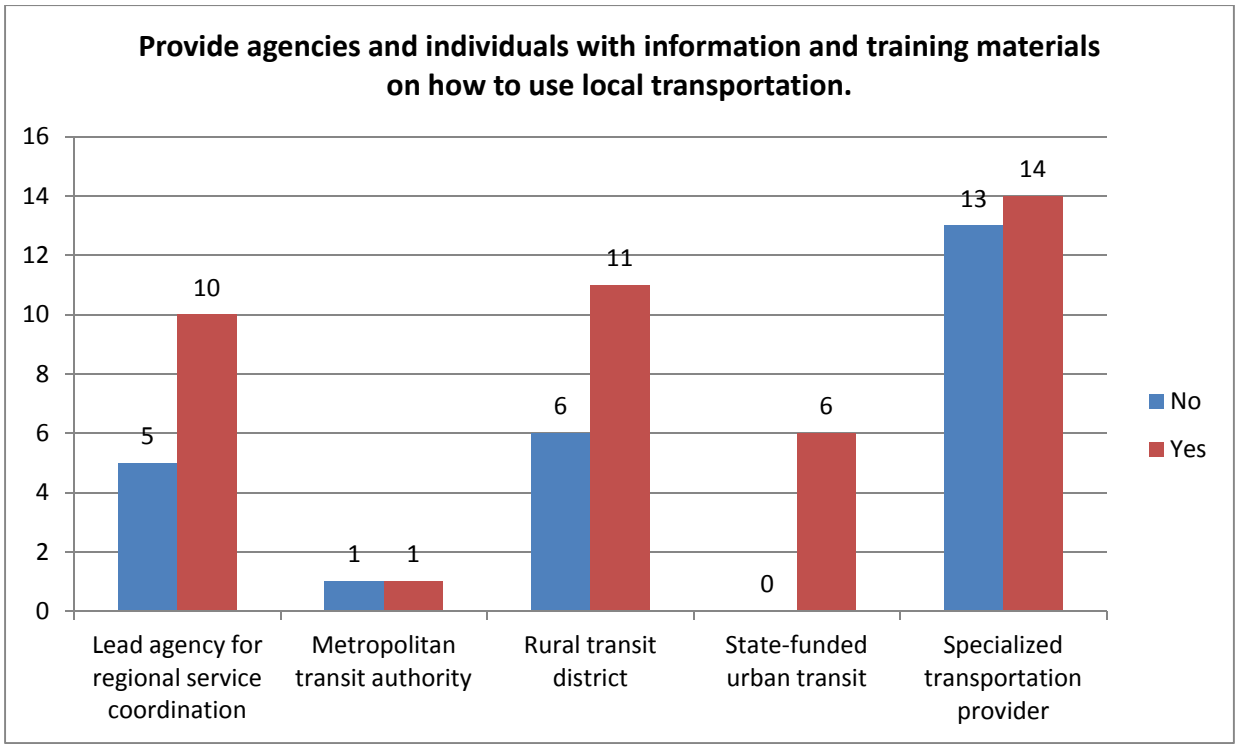
What Mobility Management Activities Does Your Agency Provide?



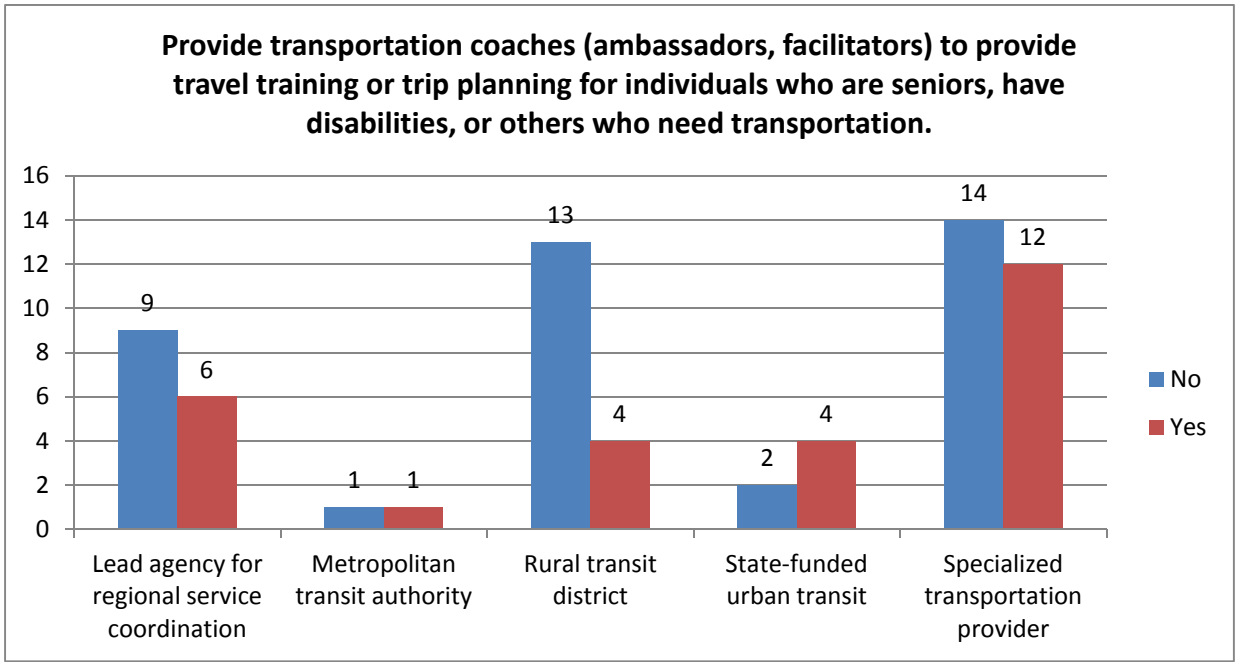
What Mobility Management Activities Does Your Agency Provide?



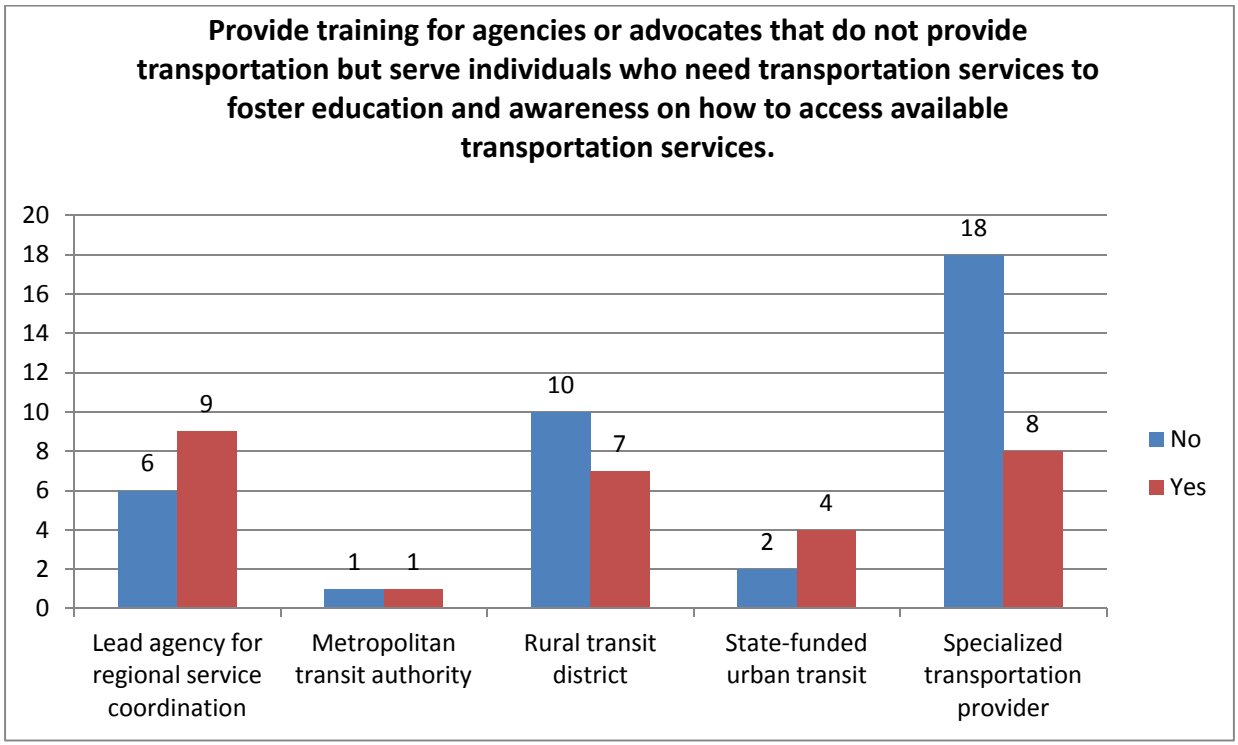
What Mobility Management Activities Does Your Agency Provide?



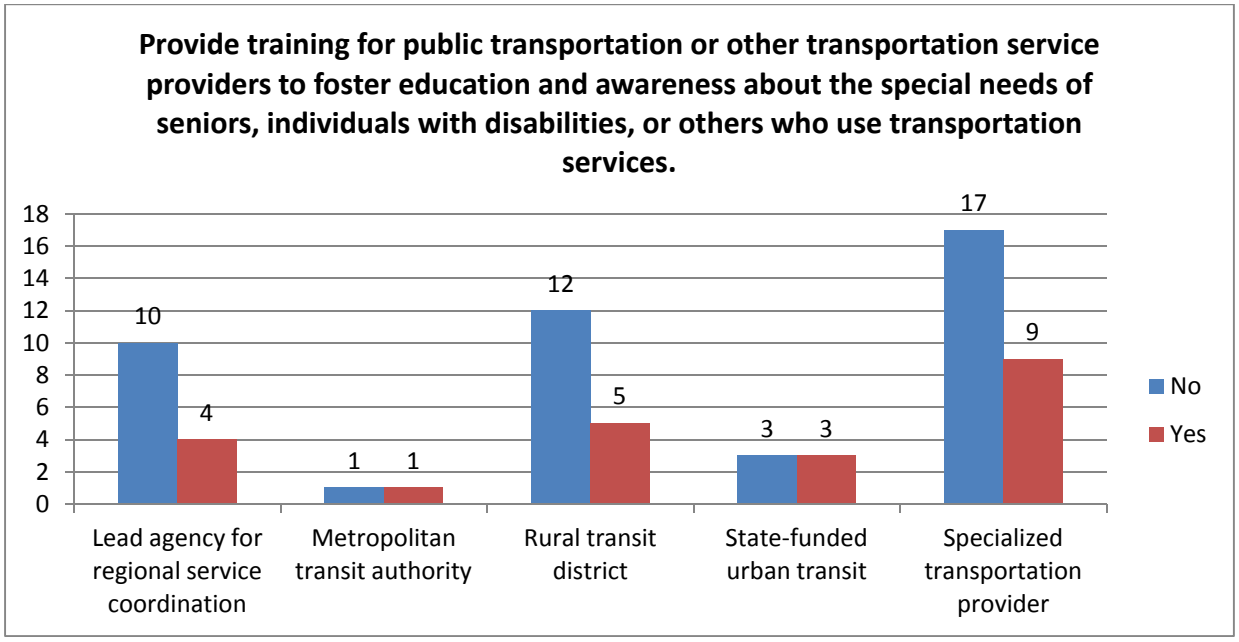
What Mobility Management Activities Does Your Agency Provide?



What Mobility Management Activities Does Your Agency Provide?



What Mobility Management Activities Does Your Agency Provide?



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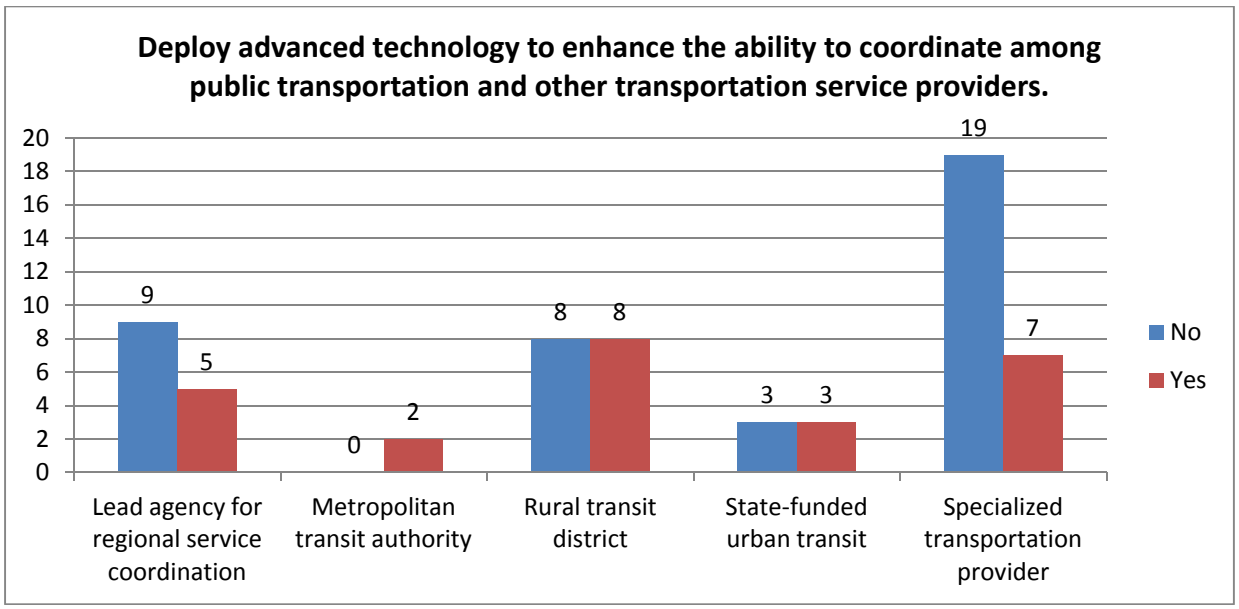


TEXAS MOBILITY MANAGEMENT PROGRAM PERFORMANCE MEASURES (March 21, 2011)

Details are provided for each of the types of mobility management activities of Texas agencies.

In the survey, there were more agencies not using performance measures than those who are using performance measures. Mobility management is new to many agencies, and quite a few new staff members are working in the mobility management programs. In the summary chart below, there are responses counted in the number providing performance measures that indicated an interest in establishing some measures, but did not use at the time of the survey.

Agency Activities	Number Responding To Question	Number Providing Performance Measures
Employ Agency Staff	38	18
Fund Transportation	35	14
Pay for Rides	22	11
Provide Information	38	20
Provide Transportation Coach	25	11
Provide Agency Training	25	14
Provide Public Training	20	11
Deploy Advanced Technology	20	10

Additional information was received on the types of measures used by the agencies by mobility management activity type. A summary of the measures types is on the following page.

The most frequently mentioned measures are listed below and detailed in the following table.

- Rides/trips completed.
- Client satisfaction feedback.
- Surveys.
- Monitoring funding.
- Tracking referrals.
- Coordination with agencies and non-traditional partners.
- Needs.
- Education and resources outreach.
- Tracking passenger transfers.

Agency Activities	Client Satisfaction Feedback	Conduct Surveys	Monitor Funding Costs	Rides/Trips Completed	Track Referrals	Coordinate with Agencies and Non-Traditional Partners	Needs	Education Resources Outreach	Track Passenger Transfers	Other	Not Specified
Employ Agency Staff	5	3	1	14	2	5	2	3	2	2	6
Fund Transportation	1	1	1	8	0	1	2	2	0	2	4
Pay for Rides	1	1	0	6	0	0	2	1	0	7	2
Provide Information	1	4	0	15	0	2	2	7	0	6	3
Provide Transportation Coach	1	1	0	9	0	1	1	3	0	2	2
Provide Agency Training	0	0	0	1	0	0	2	8	0	3	2
Provide Public Training	0	1	0	2	0	0	1	6	0	5	3
Deploy Advanced Technology	2	0	2	2	0	0	1	1	0	7	2
Total	11	11	4	57	2	9	13	31	2	34	24

The following pages document the listing of performance measures provided for each activity type. Non-answers, such as to be determined or under consideration, have been removed from the listing of replies.

Activity: Employ agency staff to plan and manage activities to improve coordination among public transportation providers, other transportation service providers, and agencies that do not provide transportation but serve people who need transportation services. Verbatim survey responses:

- Passenger counts.
- Ridership and coordination trips by other agencies.
- Increased education/outreach on transportation, more coordination between providers, knowledge gained.
- Increased referrals and participation from non-traditional partners.
- Built a resource database with resources and transportation options within the H-GAC eight-county area.
- Trips completed.
- Minimally, rides diverted from paratransit and customer satisfaction.
- Number of consumers receiving transportation.
- Increased access to center services.
- Rides per month.
- Client satisfaction; surveys; and increased ridership.
- Sign-in sheets to verify numbers.
- Timeline on project deliverables.
- Number of entities contacted about mobility management services.
- Number of entities that request mobility management services.
- Number of entities that enter into transportation service agreements.
- We employ performance measures, which depend upon the types of projects we are working on.
- Ridership.
- All trips, miles, vehicle hours, vehicle miles, contract dollars, federal and state funds, revenue hours and miles.
- All presentations, trainings, meetings attended/hosted, coordinated trip information, transportation resource guide completion.
- Tracking of 211 United Ways direct transfers to Program; tracking of referrals to agencies for resources and or other transportation providers.
- Client satisfaction surveys.
- Daily detailed ridership data, customer feedback.
- Transportation logs with consumer names.
- Daily service logs.
- Rides per month.
- Feedback from clients.
- Need assessments.
- In the Ark-Tex Regional Coordination Plan, our agency as a whole acts as the Mobility Manager for our nine-county region. At this time, we have not collected data or have any reports on the mobility management function.

- Ridership and number of calls regarding ride issues.
- Ridership data, eligibility, employment status, personal transportation needs analysis.

Activity: Fund transportation services that coordinate public transportation and other transportation service providers or fill service gaps. Verbatim survey responses:

- Same as other programs 5311, 5316, and 5310.
- Identifying new and current gaps in current services.
- Number of consumer's receiving transportation and increased access to center services.
- Rides per month.
- Increase/decrease in ridership.
- Sign in sheets to verify participants.
- All JARC and New Freedom and Senior Transportation services (e.g., trips, mileage... as reported on the PTN-128).
- Maintain regional transportation coordination committee and maintain regional coordination website.
- Daily transportation and service logs.
- Rides per month.
- We report the number of units or rides to Permian Basin Regional Planning Commission and to TxDOT.
- Need assessments.
- Acting as the mobility manager for the nine-county region, the Regional Coordination Committee expects the Ark-Tex Council of Governments Regional Planning effort to apply for grants and funding to coordinate Job Access, New Freedom and Senior Transportation programs, which we are doing in all nine counties.
- Ridership and number of calls pertaining to ride issues.
- Provides transportation for residents on our retirement campus. Performance is measured by timeliness and complaints.
- Number of meetings held/attendance and website hits.

Activity: Pay for rides (fares, vouchers or reimbursement) for seniors, people with disabilities or others who need transportation services on public transportation or another transportation service. Verbatim survey responses:

- Same as 5311, 5316, 5310, etc.
- Documentation providing profile generated information of services rendered.
- Number of rides provided.
- Client satisfaction surveys.
- Rides per month.
- We report our rides and average around 700 per month.
- Use cash log sheets.
- The quarterly PTN-128 form.
- PTN 128 factors, regional needs assessments, program goals and objectives met.
- Same as 5311, 5316, 5310, etc.
- The percentage of disabled to those who chose private transportation.
- Rides per month.
- Trips, mileage, and other data collected on the PTN-128 form.

Activity: Provide agencies and individuals with information and training materials on how to use local transportation. Verbatim survey responses:

- Number of newly certified passengers.
- Same as 5311, 5316, 5310, etc.
- Keep track of all contacts, trainings, presentations, etc.
- Monthly PTN reports to Golden Crescent Regional Planning Commission.
- Ridership, fares, operating costs.
- We document mileage, passengers, activities, cost of fuel and maintenance.
- Survey to monitor increased usage.
- Consumer service records that reflect demographics, goals and objectives.
- Rides per month.
- Rides, service, timelines, van maintenance, routing, transportation logs.
- Feedback forms.
- Ridership and number of calls regarding ride issues.
- Miles travel, destinations, gaps in service, one-way trips.
- Customer education question, how did they hear about service?
- Track 211 assistance calls direct transferred to RIDES.
- Specific increases in passenger certification.
- Same as 5311, 5316, 5310, etc.
- Making contacts, relationships with Health and Human Service agencies, other organizations, provide trainings/presentations along with resource documents.
- Ridership records. We are a small agency so it is not difficult during our monthly reporting of activity to determine the percentage of increase or decrease.
- Presentations and accessible opportunities for riders to access services.
- Track the number of agreements signed, number of mobility management rides whether they're ADA, moved to other agency, or others riding our services.
- We document activities, mileage, passengers, cost of passenger mile, fuel cost and maintenance.
- Newspapers, bulletins, mailers.
- Progress indicators include case documentation, surveys that gauge consumer satisfaction and the possibility that consumers (trainees) request on-going assistance in learning municipal transit systems.
- Increased training, ridership, new riders; site surveys.
- Rides per month.
- Safety officer.
- Sign in sheets.
- Measure the number of passengers that were enabled to use mass transit rather than individual trips.
- Client survey–on board.
- Maintain regional resource database.
- Coordinate with United Way 211.

Activity: Provide transportation coaches (ambassadors, facilitators) to provide travel training or trip planning for individuals who are seniors, have disabilities, or others who need transportation. Verbatim survey responses:

- Mobility manager can go out as needed to provide travel training.
- Measuring increases in provision of services to those that have not currently utilized system in past.
- Percentage of individuals coached for three months who then use transportation on their own.
- Consumer Service Records reflect individual achievements. Monthly reports to TxDOT reflect progress and goals achieved on the grant.
- We had instructors from Trax to give guidelines on safety, wheel chairs, loading and unloading; have taken CPR classes, defensive driving.
- Sign in sheets.
- Number of passengers and entities contacted to achieve the objectives.
- Weekly reporting tool.
- Keep documentation of each time training/assistance performed.
- Monitoring of service logs.
- Demographic information is collected and reported to grantors.
- We send out surveys, make phone calls, ride with our driver and monitor his logs and reports.
- Feedback forms on program.
- Ridership and number of calls regarding ride issues.
- Frequency of travel needs affected by the services provided.
- Number of boardings per ambassador and type of assistance provided by category.

Activity: Provide training for agencies or advocates that do not provide transportation but serve individuals who need transportation services to foster education and awareness on how to access available transportation services that exist. Verbatim survey responses:

- Same as 5311, 5316, 5310, etc.
- Under development, but likely to assess level of comfort providing information about transportation to clients before and after training.
- Case manager presentations and education for those that work with clients that require transportation services.
- Completion of training at community groups.
- We advertise on television station, radio, newsletter and leaflets offering our services.
- Customer outreach to promote ambassador service; brochures.
- Number of presentation made/attendance.
- Pre- and post-training assessment.
- Training in the community, speakers at services clubs and group meetings.
- Ridership and number of calls regarding ride issues.
- Track customer outreach visits and track 211 assistance calls.

Activity: Provide training for public transportation on other transportation service providers to foster education and awareness about the special needs of seniors, individuals with disabilities, or others who use transportation services. Verbatim survey responses:

- Same as 5311, 5316, 5310, etc.
- Completion of training at community groups.
- Any classes that are needed.
- Currently, we are hosting monthly regional public meetings on the bus, where the public actually get on one of our buses that is taken around to various areas of the region and given information and taught how to ride our services and what services we have available to all riders.
- Workshops, facilitators for consumers.
- Public training sessions, brochure handouts, community awareness, increased ridership.
- Sign-in sheets, brochures, and visitors contact information. We are also doing service needs surveys during the monthly bus meetings.

Activity: Deploy advanced technology to enhance the ability to coordinate among public transportation and other transportation service providers. Verbatim survey responses:

- We have recently installed new ITS however have not been able to increase ability to coordinate.
- Through Shaw and Grayhawk technology.
- We coordinate with Trax and other agencies for backup services.
- By training individuals in how to use our web-based trip planner.
- Cost savings and trip allocations per individual needs. Smartcards to track usage.
- Customized system to track performances of eight local transportation providers; Excel spreadsheet.
- Financial data.
- Requesting feedback.
- We are currently assessing the recent implementation of Smart Card technology and how it can be modified for regional application.
- Ridership and customer feedback of this practice.
- Number of trips provided, growth–year to year, cost of trips.

APPENDIX C. SCAN OF STATES WITH MOBILITY MANAGEMENT PROGRAMS

State Name	Population (2010 census estimates)	% Rural	% Urban	Population Density (persons/ sq miles)	State Spending on Public Transportation (in thousands of dollars, 2007)*
Arizona	6 million	32	68	1-109	10,142
California	37 million	15	85	148-346	3,110,691
Florida	19 million	22	78	148-346	174,807
Idaho	1.5 million	58	42	1-109	312
Illinois	13 million	30	70	148-346	498,900
Kentucky	4 million	70	30	1-109	3,709
Hawaii	1.3 million	35	65	148-346	0
Michigan	10 million	37	63	148-346	200,661
New Jersey	8.7 million	92	8	500 or more	1,008,130
New York	19.5 million	0	100	415-727	3,009,046
Oregon	4 million	34	66	1-109	74,093
Pennsylvania	13 million	23	77	148-346	860,963
South Carolina	4.6 million	58	42	148-346	6,400
South Dakota	< 1 million	73	27	1-109	750
Texas	25 million	35	65	1-109	28,741
Washington	6.7 million	37	63	1-109	42,439
Wisconsin	6.6 million	51	49	1-109	119,134

*http://www.bts.gov/publications/state_transportation_statistics/state_transportation_statistics_2009/pdf/entire.pdf
% Rural and % Urban is based on 2009 American fact finder; total population from summary data for 2010 census (www.census.gov)

APPENDIX D. CONTACT INFORMATION TO SELECTED NATIONAL MOBILITY MANAGEMENT PROGRAMS

Port Authority of Allegheny County Program (ACCESS)	Name: Steve Bland Telephone: 412-566-5311 Website: http://www.portauthority.org/PAAC/CompanyInfo/ChiefExecutive/CEOBio/tabid/76/Default.aspx
Innovative Paradigms' Parent Company, Paratransit, Inc. Program, Sacramento. California	Name: Phil McGuire Email: PhilM@paratransit.org Telephone: 707-558-9042 Website: http://www.innovativeparadigms.com
Regional Transit District accompanied with FasTracks Program, Denver, Colorado	Name: Bill Vanmeter, Assistant General Manager for Planning Telephone: 303-299-2448 Website: http://www.rtd-denver.com/index.shtml
Capital District Transportation Authority, Albany, New York	Name: Carm Basille, Chief Executive Officer Telephone: 518-437-8300 Website: http://www.cdta.org/about.php
Aging, Disability, and Transportation Resource Center, Aiken, South Carolina	Name: Lynnda Bassham, Director, Human Services, Lower Savannah Council of Governments Email: lbassham@lscog.org Telephone: 803-649-7981 Website: http://www.lscog.org/common/content.asp?PAGE=367; http://www.adtrc.org/
Camden County Travel Management Coordination Center Demonstration Project, New Jersey	Name: Jerome D. Phillips, Project Manager Website: http://www.ccwib.com/Transportation/pdf/Camden%20TMCC%20System%20Requirements%202-15-2008.pdf
Pace, Illinois	Name: Barbara Ladner, Manager, Business Development Email: barbara.ladner@pacebus.com Telephone: 847-228-2467 Name: Tom Groeninger, Regional Manager, Paratransit/Vanpool Email: Tom.Groeninger@Pacebus.com Telephone: 847-228-2477
SMART, Michigan	Name: John C. Hertel Email: postmaster@smartbus.org; smartbus.org/smart/home Telephone: 313-223-2100 CTAA: Name: Dan Dirks Telephone: 202-280 4904
Menominee Regional Public Transit, Wisconsin	Name: Shawn Klemens Email: sklemens@mitw.org Telephone: 715-799-3222 x1707

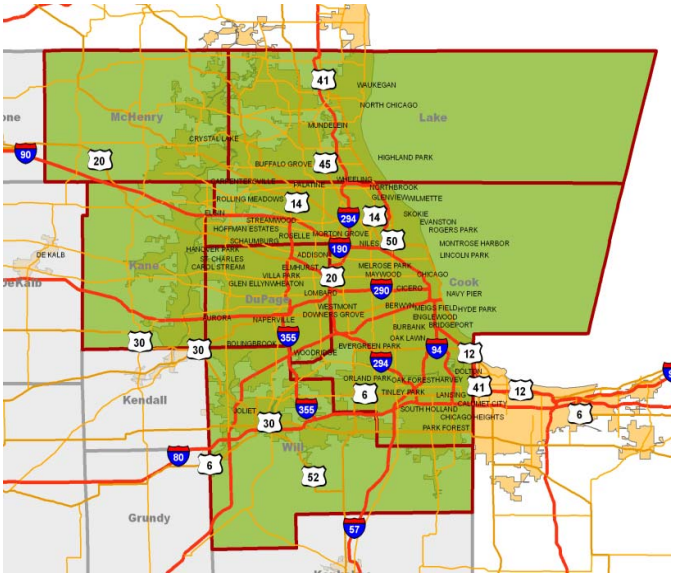
TriMet, Oregon	Name: Kathy Miller, Manager of LIFT Eligibility and Community Relations Email: millerk@TriMet.org Telephone: 503-962-8209
Ride Connection, Oregon	Name: Julie Wilcke, Chief Operating Officer Email: jwilcke@rideconnection.org Telephone: 503-528-1737 Name: Scott Gates, Operations Manager Email: sgates@rideconnection.org Telephone: 503-528-1733 Name: Dean Orr, Service Center Supervisor Email: dorr@rideconnection.org Telephone: 503-528-1744 Name: Leslie Garth, East Multnomah County Transportation Coordinator Email: lgarth@rideconnection.org Telephone: 503-988-3840 x29981 For Fund Development/Outreach/Advocacy: Name: James Uyeda, Development Manager Email: juyeda@rideconnection.org Telephone: 503-528-1734
Cape Cod Regional Transit Authority Program	Name: Paula George, Coordinator of Human Services Transportation and Deputy Administrator of the Cape Cod Regional Transit Authority Email: Telephone: 508-775-8504 x201
Broward County Transit, Florida	Name: Jim Udvardy, Project Director, South Florida Commuter Services, A Program of the Florida Department of Transportation Email: udvardy@pbworld.com Telephone: 954-731-0062
Utah Transit Authority, Utah	Name: Mike Allegra; John M. Inglish Telephone: 801-743-3882 UTA; 801-262-5626 Main Office Website: http://www.rideuta.com
Paducah Area Transit Systems, Kentucky	Name: Kim Adair; Zana Renfro Email: kadair@paducahtransit.com; zrenfro@paducahtransit.com Telephone: 270-444-8700 or 1-877-828-7287 Website: http://www.paducahtransit.com
Wisconsin Department of Transportation Mobility Management Program	Name: Ingrid Koch Email: ingrid.koch@dot.wi.gov Telephone: 608-266-1379 Website: Wisconsin Department of Transportation New Freedom program information http://www.dot.wisconsin.gov/localgov/transit/newfreedom.htm Transportation Coordination http://www.dot.wisconsin.gov/localgov/coordination/index.htm Wisconsin's Mobility Management information http://www.dot.wisconsin.gov/localgov/transit/newfreedom-mobility.htm

Regional Public Transportation Agency, Arizona	Name: Sheila Barberini Email: sbarberini@valleymetro.org Name: Gary Betz Email: gbretz@valleymetro.org Telephone: 480-287-5985 Website: http://www.valleymetro.org/
COAST Transportation (Council on Aging and Human Services Eastern), Washington and Western Idaho	Name: Karl M. Johanson Email: karlmjohanson@gmail.com; coast@qwestoffice.net Telephone: 509-334-5510 Address: 2010 S. Main St./P.O. Box 107, Colfax, WA 99111 Website: http://www.coa-hs.org/
King County, Washington	Name: De Ann Wright, Administrator Telephone: 206-263-5038
Tompkins County Department of Social Services, New York	Name: Dwight Mengel Email: dwight.mengel@dfa.state.ny.us Telephone: 607-274-5605
Transit Reservation Information Program, Coles County, Illinois	Name: Jennifer Mills Email: rtac@wiu.edu Telephone: 800-526-9943
Wasatch Rides, Salt Lake City, Utah	Name: Mary Guy-Sell Email: mguy-sell@wfrc.org Telephone: 801-363-4230 x1104
Marin Access, Marin County Transit District, California	Name: Amy Van Doren Email: avandoren@co.marin.ca.us Telephone: 415-226-0855
San Francisco Municipal Transportation Agency, California	Name: Tilly Chang Email: tilly.chang@sfcta.org Telephone: 415-522-4832
Community Transportation Association of Idaho, Idaho	Name: Heather Wheeler Email: hmwheeler@ctai.org Telephone: 208-344-2354
Lane Transit District, Oregon	Name: Terry Parker Email: terry.parker@ltd.org Telephone: 541-682-3245
Mason County Transit Authority, Olympia, Washington	Name: Barb Singleton Email: bsingleton@masontransit.org Telephone: 360-426-9434 x195

APPENDIX E. NATIONAL CASE STUDY SUMMARIES

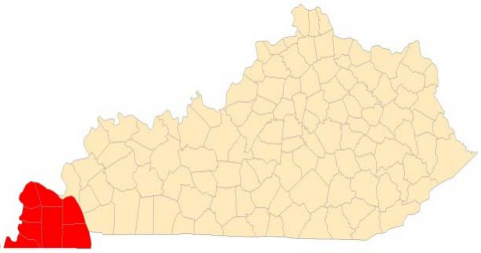
PACE
Chicago, Illinois

Service area:	Pace is the suburban bus division of the Regional Transit Authority (RTA). The mobility management program serves the City of Chicago, its suburbs, and has a six-county service area, including Cook, Lake, Will, Kane, McHenry, and DuPage counties. The area includes 210 communities with approximately 8.4 million residents.
Mission & Vision:	In 2002, Pace launched the largest transit initiative ever proposed for Chicago's suburbs, called Vision 2020: Blueprint for the Future. The mission of this innovative plan is to create a faster network that is more convenient and easier to understand.
Structure:	Pace is governed by a 13 member Board of Directors comprised of current and former suburban mayors and the Commissioner of the Mayor's Office for People with Disabilities for the City of Chicago. The board serves the suburban community and has responsibility for policy, the final budget, and hiring the Executive Director.
Partners:	Partners include workforce boards, employers, economic development groups, real estate firms, local businesses, taxi companies, and medical facilities.
Goals & Objectives:	The goals of Pace include better on-time performance, better customer communications using plain and simple language expedited resolution of customer complaints, upgrading the telephone reservation system as well as their paratransit vehicles.
Funding:	Funding for Pace services include the ADA and Pace funds, fares, sales tax, and funding from the RTA.
Services Provided:	Fixed route, vanpool, carpool, complementary ADA paratransit, Dial-A-Ride, mobility direct (taxi), Taxi Access Program, employer shuttles.
Services Promoted:	Fixed route, vanpool, carpool, complementary ADA paratransit, Dial-A-Ride, mobility direct (taxi), Taxi Access Program, employer shuttles.

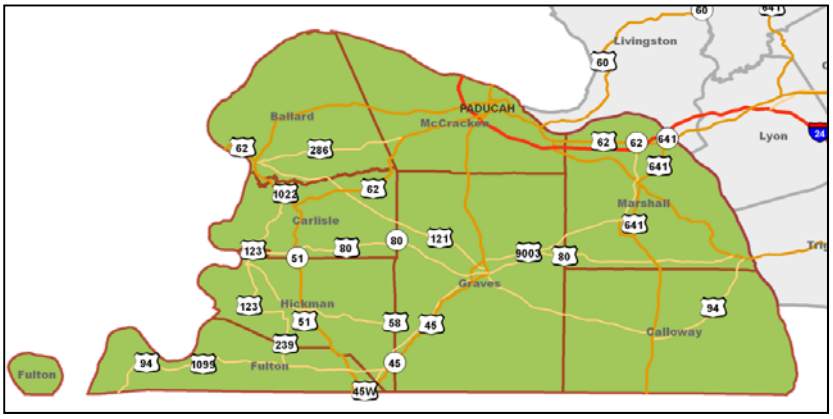


Mobility Management Activities	• Universal website for transportation information. • Shared ride program. • Full-time Mobility Manager on staff. • Market and promote transportation options countywide. • Personalized travel assistance (including online profiles). • Employer shuttles.
How did the program get started?	Pace's Mobility Management program began in the early 1990s when staff recognized that a family of services would be necessary to serve the Chicago suburban area. The program was framed out in 1993 with full implementation in 1996.
What are the challenges?	Pace has suffered financial hardships due to reduced sales tax returns, as well as loss of RTA discretionary funding in 2010. As a result, Pace adopted service reductions for lower productivity services.
Is the program being marketed?	Pace has a marketing and communications department that plans, develops, and administers its marketing program to promote the agency and its services to the public. In addition, the media relations department manages external communications with stakeholders. When marketing, Pace actively stresses the advantages of fixed-route service. Website: www.pacerideshare.com.
What are the performance measures?	Performance measures include on-time performance, ridership trends, trips per hour, OTP for appointments, trip length, dwell time, ride time, and passenger complaints per 1,000 miles.
What is their definition of Mobility Management?	A process aimed at promoting mobility through enhanced transit access and convenience. This calls for coordination between transit providers, municipalities, businesses, and the development community to address the transportation needs of community members, while in compliance with the mandates of ADA and the Clean Air Act Amendments of 1990.
Additional Comments	Pace follows the New Paradigm model, where the focus is on managing mobility and not managing assets. Innovation involves looking at the most cost-effective way to improve suburban mobility. In 2006, Pace had established itself as a leader in providing efficient, quality service to people with disabilities, and the Illinois legislature designated that Pace would assume responsibility for ADA paratransit in Chicago from the Chicago Transit Authority. The move made Pace the largest providers of paratransit service in the United States. Pace established one of the largest vanpool programs in the nation and became the regional ridesharing administrator for Northeastern Illinois in 2006, bringing coordination of carpools into the program. Pace RideShare offers commuters the ability to create a profile and gather information on others with similar travel patterns in order to form carpools or vanpools.

Paducah Area Transit Systems (PATS)
Paducah, Kentucky

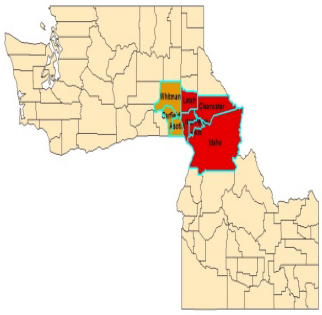


Service area:	PATS service area includes the city of Paducah and McCracken County. PATS also offers medical transportation, demand response, and Dial-A-Ride services in the eight-county Jackson Purchase Area of western Kentucky, including the cities of Mayfield, Benton, and Murray.
Mission & Vision:	Explore and implement transportation opportunities that enhance the social, economic, and environmental well-being of the greater Paducah community.
Structure:	PATS operates service contracts with Purchase Area Regional Transit and Kentucky Commonwealth providers.
Partners:	Purchase Area Regional Transit, Kentucky Public Transit Association, Kentucky Commonwealth Providers, human service agencies, Fulton County Transit Authority, Murray Calloway Transit Authority, Easter Seals, child care facilities, nursing homes/assisted living facilities, medical facilities, 911 and emergency shelters, elected officials, private sector.
Goals & Objectives:	The objective of PATS is to provide customers with a single point of access to receive affordable and accessible regional transportation, human services, and community information facilitating greater personal mobility for all individuals in the Purchase Area region.
Funding:	Funding includes appropriations and grants, tax dollars, grants from the United Way, Easter Seals, as well as federal dollars. PATS also receives funding from state and local governments as well as community service organizations.
Services Provided:	Fixed route targeted at commuters, complementary ADA paratransit, scheduled service (curb to curb), Dial-A-Ride (taxi service), medical transportation, special events, group outings, airport service.
Services Promoted:	Fixed route, complementary ADA paratransit, Dial-A-Ride, medical transportation.

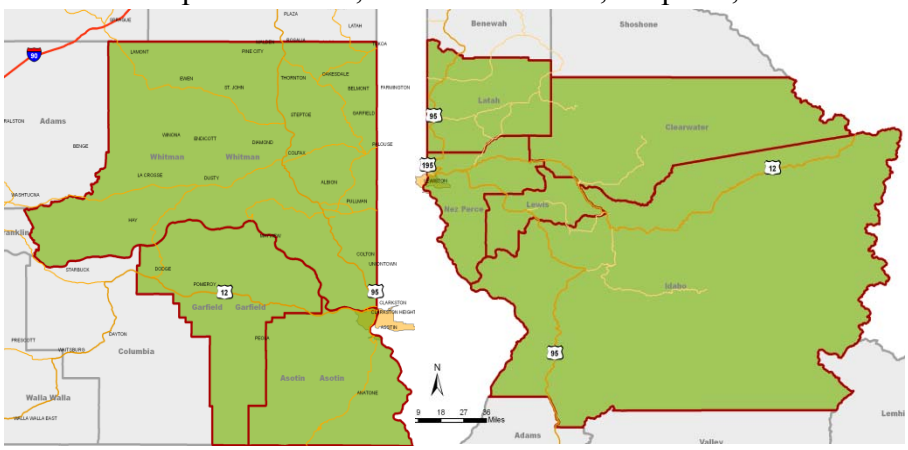


Mobility Management Activities	• Subsidized rides for seniors. • Universal operator training. • Dynamic ridesharing. • Travel management call center (24/7, Multilingual, Telecommunications Device for the Deaf/Teletypewriter). • Full time Mobility Manager on staff. • Market and promote transportation options countywide. • Personalized travel assistance.
How did the program get started?	PATS program began as the USDOT's demonstration of a Coordinated Human Transport model. In 2006, PATS received a $1.5m Mobility Services for All Americans grant to develop and implement a Travel Management Coordination Center.
What are the challenges?	• Medicaid—Provider and software coordination. • Territorial Boundaries—Providers and stakeholders. • Expand service coverage—Meet unmet needs. • Changing perception of public transportation. • Limited resources. • Education and training. • 211 applications to United Way. • Sustainability of Travel Management Coordination Centers.
Is the program being marketed?	The program is marketed through the adoption of a logo (consistent branding), website, an 800 number, e-newsletters, presentations to community members, stakeholder and community updates.
What are the performance measures?	Performance measures include ridership, number of trip requests, on-time performance, passengers per revenue mile/hour/trip, operating cost per passenger, revenue miles, stakeholder opinions, assets used by transit provider, number of funding agencies, staff at provider agencies, service hours, interviews with management, key staff, human services, and clients.
What is their definition of Mobility Management?	Mobility Management is a process of helping more people through the provision of accessible and affordable transportation through one simplified point of access, reducing duplication and fragmentation of services, and providing current community information.
Additional Comments	The program began as USDOT's and FTA's research initiative to develop a regional call center using Intelligent Transportation Systems. It aims at making transportation cost-efficient for providers and passengers, including those who are seniors, disabled, and live in rural areas.

Council on Aging and Human Services (COAST)
Washington and Idaho

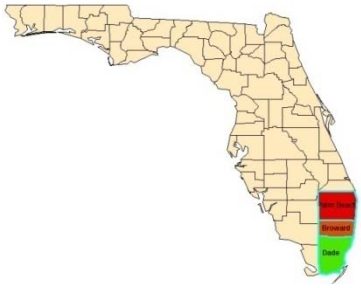


Service area:	COAST serves three counties in eastern Washington State (Asotin, Garfield, Whitman), and five counties in Western Idaho State, (Nez Perce, Idaho, Latah, Clearwater, and Lewis). COAST covers a 22,000 square mile service area.
Mission & Vision:	Mission is directed at mobility and customer orientation. Since 1984, COAST has been guided by the vision that mobility is a basic foundation of a democratic society: mobility should not depend on individual circumstances such as income, age, disability, or other personal characteristics.
Structure:	COAST is funded in part by Washington State Department of Transportation and operates vehicles, serves as a broker for transportation services, operated a vehicle insurance pool, acquires and loans vehicles, operates vanpools, supports carpools, provides training services, maintains vehicles, operates an eight-county Information and Referral service, and dispatches rides throughout the region.* (*This information was acquired from a November 2010 report before changes to Medicaid transportation in Washington took place.)
Partners:	Public transit operators, private for profit providers, area agencies on aging, schools, sheltered workshops, hospitals, and Head Start programs. Additionally, the volunteer drivers are critical in allowing COAST Transportation to meet the needs of clients in Washington and Idaho.
Goals & Objectives:	COAST's charge is to arrange transportation to help people get to doctors' appointments, shop for groceries, attend meal sites, and access many other destinations. The specialized Transportation Program, COAST, expands options for mobility by providing safe, affordable, accessible, and coordinated transportation and brokerage services.
Funding:	ADA, Section 5311, AAA, State funding from Washington State, and local funds in Idaho.
Services Provided:	Directly operates demand response service, serves as a broker, vanpools, and carpools.
Services Promoted:	Demand response, vanpools, carpools.

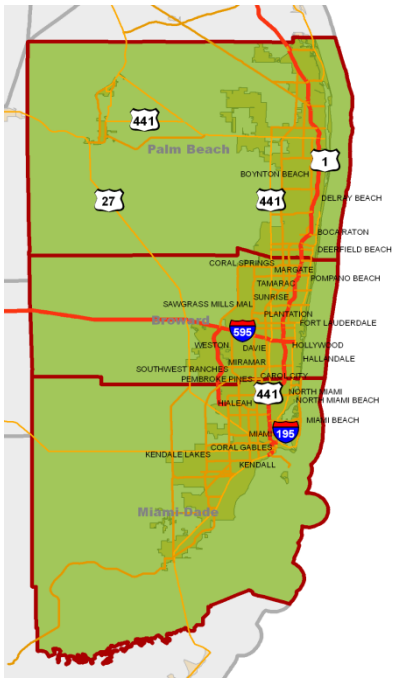


Mobility Management Activities	• Subsidized rides for seniors. • Volunteer driver programs. • Vehicle share pools. • Transportation brokerage. • Full-time Mobility Manager on staff. • Market and promote transportation options countywide. • Personalized travel assistance.
How did the program get started?	COAST was initially designed for the need to serve seniors in Whitman County. COAST began in 1983, and in 1984 received Section 18 funds for operation. Subsequently, COAST expanded and began to use 5311 funds for rural public transportation.
What are the challenges?	Any rural system with volunteers have data which are suspect as performance measures do not distinguish the type of vehicles used, trip purpose, or that the volunteer may wait to return a passenger to his/her home.
Is the program being marketed?	COAST's marketing program has three-tiered goals using many coalitions through social service activities and transportation funders, etc. (United Way, Area Agency on Aging, volunteer drivers, senior congregate meal programs).
What are the performance measures?	COAST submits ridership miles and documents to the National Transit Database through the state using the federal form. The following questions are answered: • How many volunteer drivers? • How many private vehicles do you operate? • How many trips done by taxi cabs? • How many trips/year? • How many one way trips? • How many miles travelled?
What is their definition of Mobility Management?	The key role of a mobility manager at COAST is to raise awareness and enhance the vision of mobility in every way possible. For example, mobility managers have been actively involved in legislative processes to change eligibility criteria and funding sources of transportation programs. COAST persuaded the State of Washington to implement a unique funding program for riders with special needs, and played a key role in the formation in 1998 of Washington's state-level Agency Council on Coordinated Transportation. The Council's mission is to coordinate affordable and accessible transportation choices for people with special needs; in collaboration with state and local agencies and organizations.
Additional Comments	As of January 2011, Medicaid transportation cannot not use COAST as their broker for transportation.

Broward County Transit/South Florida
Broward, Miami-Dade, Palm Beach Counties, Florida



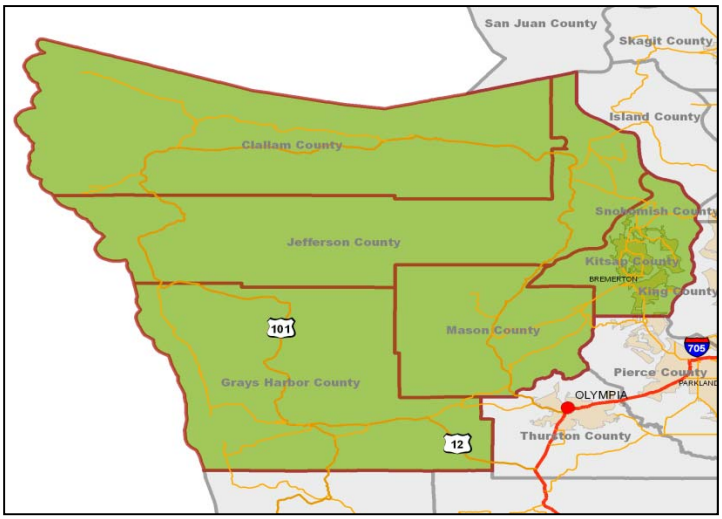
Service area:	Broward county mainly with transit links to Palm Beach and Miami-Dade counties. The service area is 410 square miles. The service area for South Florida includes Broward, Miami-Dade and Palm Beach Counties.
Mission & Vision:	The mission of Broward County Transit is to provide clean, safe, reliable and efficient transit service to the community by being responsive to changing needs and focusing on customer service as our highest priority.
Structure:	A 2001 state legislation required coordinated transportation (statutory chapter 427), which led to the development of the South Florida and Treasure Coast Transit system. Broward County Transit is a part of the Regional Transportation network.
Partners:	Broward County Transit's partners include regional transportation agencies, social and human service agencies, as well as bus contractors. Additional partners include the MPOs in Broward, Miami-Dade and Palm Beach Counties.
Goals & Objectives:	The goals of these programs include increased coordination with other agencies, better communication within the agencies, and the identification of new funding sources for sustainability.
Funding:	The program is run through federal grants from the FHWA, FTA, USDOT (TIGGER Grant), and grants from the U.S. Department of Health and Human Services, as well as 5316 and 5317. Other sources of funding include State of Florida Public Transit Block grants, the Broward County general fund (property tax), local option gas tax, operational revenue, and a miscellaneous fund.
Services Provided:	Fixed-route buses, community buses (wheelchair accessible, bike racks), emergency ride home, complementary paratransit service.
Services Promoted:	Fixed route, complementary ADA paratransit, community buses.



Mobility Management Activities	• 711 call center. • Market and promote transportation options countywide. • Personalized travel assistance. • Make their website accessible to disabled individuals through the Web Accessibility Initiative resources program.
How did the program get started?	To provide transportation services to customers with special needs and meet ADA requirements.
What are the challenges?	Challenges include limited funds, and assessment of demand in the area for future service planning.
Is the program being marketed?	Broward County has a Paratransit Services Professional Speaker's Bureau whose mission is to reach out to social service agencies, community organizations, and the general public and provide information on transit and paratransit options in the county. Speakers discuss travel rules, regulations, eligibility criteria, and travel training. Additionally, Broward County provides information on their website, as well as through social media outlets such as Facebook. Website: www.broward.org/bct/.
What are the performance measures?	**Required Measures:** • Number of commuters requesting assistance. • Number of commuters switching modes. • Number of vans in service. • Number of vehicle trips eliminated. • Vehicle miles eliminated. • Number of employer contacts made. • Parking spots saved/parking needs reduced. • Commuter costs saved. • Major accomplishments made—new transit service initiated, educational program initiative, transportation planning initiative, and emergency ride homes initiative. **Optional Measures:** • Gasoline saved. • Emissions reduced. • Information materials distributed. • Special events organized. • Media/community relations.
What is their definition of Mobility Management?	Mobility Management is a process of coordination of resources, avoiding duplication of services and getting the word about the types of services that are available to community members ranging from a medical trip to that for personal gratification including socialization, shopping, and others. Thereby, users can make the optimum utilization of travel resources and services.
Additional Comments	Transportation Options or TOPS, received the Community Transportation Association of America's Urban Community Transportation of the Year Award in 2008. TOPS was also named the best urban service in the State of Florida by the Commission for the Transportation Disadvantaged in 2008 for providing quality transportation services to disabled individuals in an efficient and cost-effective manner.

Mason County Transit Authority
Olympia, Washington

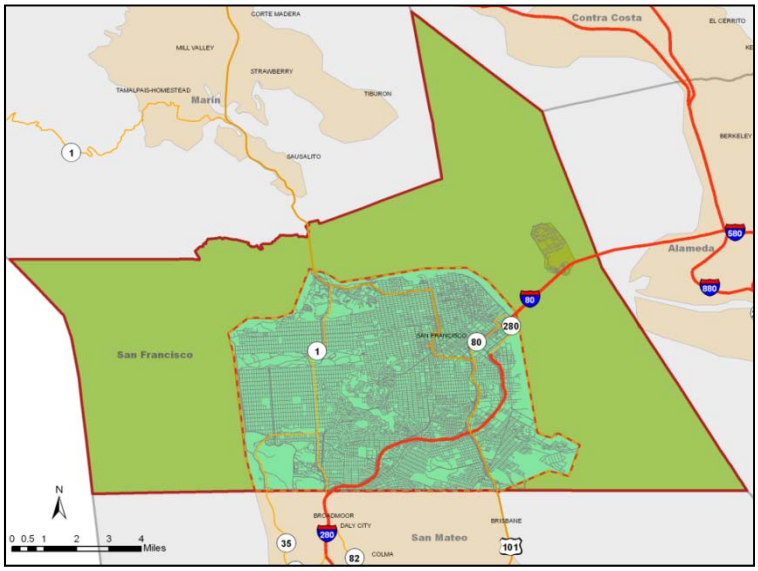
Service area:	The service area of Mason Transit's mobility management program encompasses the Olympic peninsula, to the city of Olympia, where the peninsula connects.
Mission & Vision:	Develop a coordinated system of affordable public transportation that operates within financial limits, maximizes the use of existing transportation resources including volunteers, and is available, to some extent, in most areas of Mason County.
Structure:	Mason Transit is governed by a nine-county board, made up of representatives from member cities, school districts, and representatives from local medical centers.
Partners:	Jefferson Transit, Mason County Work Source, local school districts, Olympia Transit, as well as other regional transit providers. The local Mobility Coalition also facilitates partnerships, including the area agency on aging, and the community action program, Louis-Mason volunteer center, and social agencies involved.
Goals & Objectives:	The goal of Mason Transit is to transport customers on a regional level, between counties and urbanized areas in order to reach their destinations without jurisdictional boundaries.
Funding:	Using regular sources, for the payment of the MManager, they are splitting it 60/40. There could be JARC dollars. Mason Transit applies for federal funding, but uses revenues to pay the local match. A major component of Mason Transit's regional coordination for mobility management is grant proposals and funding.
Services Provided:	Fixed routes, flex routes, Dial-A-Ride, paratransit, taxi, airporters, tribal bus service, vanpools, and regional connectors.
Services Promoted:	Fixed routes, flex routes, Dial-A-Ride, paratransit, taxi, airporters, tribal bus service, vanpools, and regional connectors.



Mobility Management Activities	• Volunteer driver program. • Call center. • Full-time Mobility Manager on staff. • Market and promote transportation options countywide. • Personalized travel assistance.
How did the program get started?	The mobility management program for Mason Transit began in March 2011. Several years ago, Mason Transit had a mobility manager that was provided through a funding mechanism the state had put in place. The funding rescinded, so the position was abolished. Mason Transit's neighboring program, Jefferson Transit, had a mobility manager, so Mason shared the management with Jefferson Transit until Mason was able to fund another mobility manager.
What are the challenges?	There are many challenges, including funding constraints, and connecting elderly/disabled passengers between transit systems. Mason Transit offers connections between providers, but some customers have difficulty making it work (too frail, sick). If the passengers are on Medicaid, they can be referred to the Medicaid broker, but those who are not on Medicaid have difficulty making transportation work for their needs.
Is the program being marketed?	Mason Transit is currently developing a brochure entitled *Need A Ride?*, which will outline available transit services in the region.
What are the performance measures?	Mason Transit has the same performance measures for both demand response and flexible route services, including: • Fares/Operating Cost. • Operating Cost/Passenger Trip. • Operating Cost/Revenue Vehicle Mile. • Operating Cost/Revenue Vehicle Hour. • Operating Cost/Total Vehicle Hour. • Revenue Vehicle Hours/Total Vehicle Hour. • Revenue Vehicle Hours/FTE. • Revenue Vehicle Miles/Revenue Vehicle Hour. • Passenger Trips/Revenue Vehicle Hour. • Passenger Trips/Revenue Vehicle Mile.
What is their definition of Mobility Management?	Mobility Management is a process that involves close contact between various partners in the community in order to improve mobility for the target population (seniors, disabled, low-income). Involvement from the community defines success, and helps improve the likelihood that there will be success.
Additional Comments	Mason Transit coordinates transportation with local school districts. Public school coordination includes weekday use of school buses under contract with Mason Transit for serving after-school programs while operating general public routes. The central, southern, and western part of the county has service 12 months of the year through this agreement.

San Francisco Municipal Transportation Agency (SFMTA)
San Francisco, California

Service area:	The San Francisco Bay region has a complex transportation network. There are officially nine counties acting as Congestion Management Agencies, and 28 transit operating agencies. SFMTA serves the entire city of San Francisco.
Mission & Vision:	Vision is to provide timely, convenient, safe, and environmentally friendly transportation alternatives to enhance the quality of life in San Francisco. SFMTA is responsible for all modes of transportation within the City and County of San Francisco including public transit, bicycling, pedestrian planning and accessibility, and traffic and parking management.
Structure:	SFMTA is governed by the seven-member SFMTA Board of Directors that the Mayor appointed and the Board of Supervisors confirmed. The City Council advised the SFMTA Board. The SFMTA's mobility management process is guided by the MPO process managed by the Metropolitan Transportation Commission.
Partners:	Metropolitan Transportation Commission, local governments, San Francisco Municipal Railway, Bay Area Rapid Transit District, Alameda-Contra Costa Transit District, San Mateo County Transit District, Golden Gate Bridge, Highway and Transportation District, Santa Clara Valley Transit Authority, Caltrain commuter rail, private sector entities such as Silicon Valley partners.
Goals & Objectives:	The goals of SFMTA are to improve safety, cleanliness, sustainability, service delivery, communication, financial sustainability, work environment and workforce, and information technology.
Funding:	SFMTA received $78 million from FHWA and USDOT grants as a part of the Urban Partnership Program.
Services Provided:	Fixed route, rail, streetcar, complementary ADA paratransit, taxi.
Services Promoted:	Fixed route, rail, streetcar, complementary ADA paratransit, taxi.



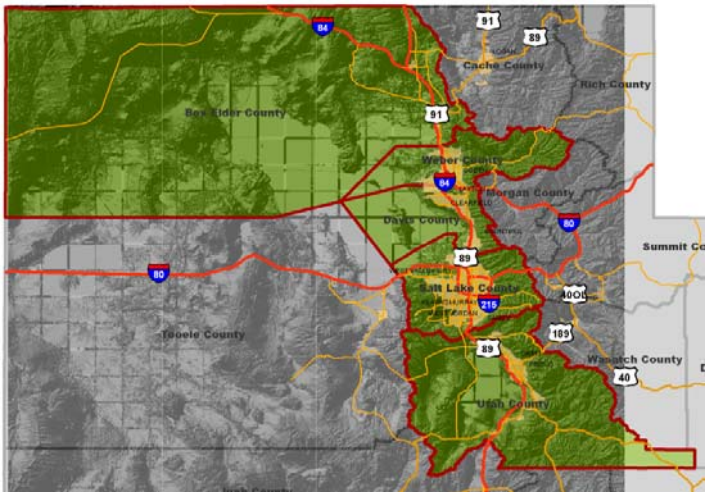
Mobility Management Activities	• Interactive mobility management through Wi-Fi, cell phones, and Internet. • State-of-the-art parking meters and an Integrated Transportation Management System. • Implementation of Smart cards for transit, parking, taxis, and bike/car sharing. • 511 Traveler Information System. • Full-time Mobility Manager on staff. • Market and promote transportation options countywide.
How did the program get started?	Proposition E, passed by the voters in November 1999, amended the City Charter, calling for the creation of the SFMTA through consolidation of the Municipal Railway and the Department of Parking and Traffic on July 1, 2002, to support the City's Transit First Policy. In November 2007, the voters approved Proposition A, which resulted in the SFMTA assuming responsibility for taxi regulation, which occurred on March 1, 2009. In the fall of 2009, the SFMTA was extensively transformed to place the emphasis not on any one mode, but on sustainable streets for the City of San Francisco under the assumption that all boats rise on the same tide.
What are the challenges?	Continuing challenges for SFMTA are those related to merging the very different corporate cultures evident among the formerly independent agencies that have been consolidated to form the SFMTA. Through development and implementation of more multimodal projects, however, formerly single-mode staff expertise is being broadened to think beyond traditional modal limits and project scope.
Is the program being marketed?	SFMTA has an extensive marketing campaign for all services offered in the Bay area as well as consistency in branding throughout.
What are the performance measures?	**Goal 1: Safe, accessible, reliable, clean, and environmentally sustainable service.** • Number of safety incidents per 100,000 vehicle miles. • Customer satisfaction scores for cleanliness. • Percentage of passing quality checks. • Cleaning per 100,000 vehicle miles. • Cleaning per station/terminal. • Percentage of vehicle miles of zero emission vehicles (as % of total fleet) per quarter. • Percentage operating lifts (total volume/total working). • Percentage of fleet with verbal Digital Voice Announcement System. • Number of complaints. • Percentage of single occupancy vehicle trips/total trips taken. • Percentage of bike, pedestrian, and transit trips. • Number of passengers/trip (by route). **Goal 2: To get customers where they want to go, when they want to be there.** • Schedule adherence and travel time. • Mean distance between failures by vehicle type (mode); rate of unscheduled absenteeism; extra-board availability. • Transit Effectiveness Project placeholder (e.g., transit ridership on transit priority network). • Number of miles of bike lanes as a percentage of total miles proposed in bicycle plan. • Reduced number of congested locations identified in the Congestion Management program. • Maintain 85 percent on street parking meter occupancy (annual measure via sample). • Maximize off-street parking occupancy.

	• Optimal balance of occupancy and revenue of garage operations. **Goal 3: Improve the customer experience, community value, and enhance the image of SFMTA.** • Develop baseline to reduce customer inquiries/complaints. • Increase percentage point ratings of SFMTA employee survey. • Develop baseline to increase percentage of SFMTA participation in community/civic events. **Goal 4: Ensure financial stability and effective resource utilization.** • Amount of annual budgeted new revenue sources per year. • Ratio of total revenue to total expense. • Vehicle miles per operating expense (annually). • Passenger miles per operating expense. • Customers per total labor and fringe expenses. **Goal 5: Provide a flexible, supportive work environment and develop a workforce that is capable of leading the agency into the ever-evolving, technology driven future.** • Volume of employee expectation meetings conducted, volume of assessments completed by directorate. • Employee satisfaction rate (communication, opportunities, etc.). • Retention rate percentage (by Division). • Percentage of external hires and new promoted managers. • Percentage participation of senior management. • Increased understanding of SFMTA priorities, expectations, culture, and competencies by management (survey results or annual focus groups). • Increased Awareness of and Participation in the following programs. o Measured quarterly Commuter check program (X%). o Corporate discounts available to staff (gym memberships, etc.). o Flexible scheduling for specified job categories. • Increase in Employee satisfaction survey (wellness, work environment, etc.). • Percentage completed (quarterly/annually) Project measures to be defined. • Efficiencies measured annually after completion (measures to be defined in collaboration with city of San Francisco). • Percentage completed (information available) (quarterly/annually). • Increased employee satisfaction from survey (communication). **Goal 6: Improve service and efficiency, the SFMTA must leverage technology.** • Improve the return on our technology investments (metrics individual to each project). • Number of successful intelligent technology initiatives deployed. • Percentage project completed on time > 80 percent. • Percentage project completed on budget for each phase > 80 percent. • Project Customer Satisfaction > 80 percent. • Improved information use and communication to our internal employees and external customers (KPI defined by survey).
What is their definition of Mobility Management?	Adapted from TCRP 97, mobility management is fundamental, transformative change in business and service organizations that commonly involves changes across six key dimensions, including mission shift, customer orientation, collaboration, integration, information technology, and organizational change. When these changes occur in transit organizations, they provide an operational definition of mobility management.

Additional Comments	The SFMTA Transit Effectiveness Project is currently under way in coordination with a regional effort by the Metropolitan Transportation Commission to more precisely define customer travel needs and motivations. It will include a hierarchy differentiating regional and community-level mobility needs and solutions as well as intercommunity mobility needs and solutions.

WasatchRides, Utah Transit District
Salt Lake City, Utah

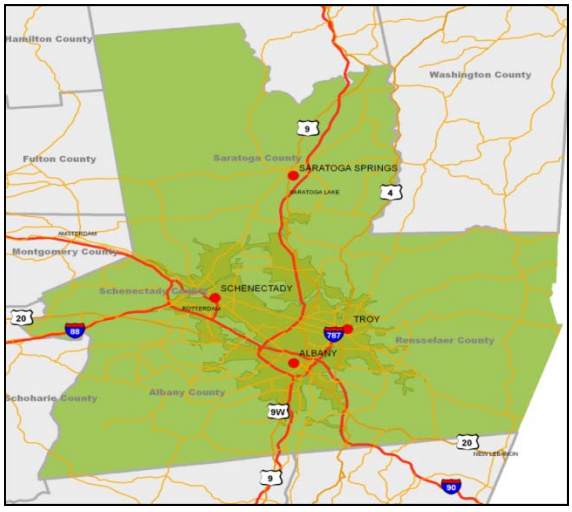
Service area:	WasatchRides is the Mobility Management agency of Utah Transit. The service area encompasses the Wasatch Front, and includes Davis, Salt Lake, Morgan, Tooele, and Weber Counties.
Mission & Vision:	Foster, guide, and coordinate local and regional efforts that directly and indirectly improve access and mobility for seniors, disabled, and lower-income individuals. The agency helps providers of transportation services to enhance their efficiency through coordination of support and transportation to improve mobility of community members.
Structure:	The agency is managed by the Wasatch Regional Coordination Council for Community Transportation, a council of agencies that was created in 2010. The agencies are both public and private and serve the needs of the disadvantaged.
Partners:	The major partners of the program include Utah Paratransit, the Division of Services for Persons with Disabilities, the Division of Health Care financing statewide transportation broker for PickMeUp, and countywide programs like Salt Lake County Aging Services, Utah Valley Transit and The Ride program of Weber and Morgan counties. Other partners include Hearts to Go, and Rise, a nonprofit organization.
Objective:	The objective of WasatchRides is to coordinate transportation resources to improve cost efficiency and mobility for older adults, persons with disabilities and low-income residents, along with others who cannot or choose not to drive in its service area.
Funding:	Since the program is relatively new, it has the potential to tap federal formula funding; however, access to the federal funding streams is yet to be determined based on state policies UDOT adopted. Other funding sources the program is examining include Medicaid, Temporary Assistance for Needy Families, Social Service, and Community Development Block grants.
Services Provided:	Volunteer driver, complementary ADA paratransit, ride matching, taxis, and human services transportation.
Services Promoted:	Volunteer driver, complementary ADA paratransit, ride matching, taxis, and human services transportation.



Mobility Management Activities	• Subsidized rides for seniors. • Driver training programs. • Plan exists for a call center. • Full-time Mobility Manager on staff. • Market and promote transportation options countywide. • Personalized travel assistance.
How did the program get started?	The development of the agency can be traced back to a 2009 project that ended in 2010, supervised by Nelson/Nygaard, and WCEC engineers under contract with the Wasatch Front Regional Office, Mountain Association of Governments, Utah Transit Authority and Utah Department of Transportation. Members of these organizations served as the steering committee. The project helped to develop an inventory of community transportation services and location of target population using bus and paratransit services.
What are the challenges?	Some of the challenges of the newly developed program include procuring funds for sustainability, coordination of service providers, training drivers with limited funds, and appointing community members or stakeholders to serve in the steering committee of the agency.
Is the program being marketed?	Outreach programs are undertaken by brokers, who reach out to target populations through the media, mainly local newspapers and newsletters. In addition, outreach is conducted at local community centers to keep people informed of the new and improved services.
What are the performance measures?	The program began in December 2010. As the new program has not generated many new trips, WasatchRides has yet to develop performance measures.
What is their definition of Mobility Management?	Mobility Management is a process of investigation of service needs and coordination of existing resources to better plan and design transportation services that are cost efficient and promote mobility of seniors, disabled, and low-income individuals. Involvement from the community defines success and helps improve the likelihood that there will be success.
Additional Comments	The program is expected to increase its geographic coverage in those counties where limited services and hours of operation restrict the mobility of the special population. The agency has hired Nelson/Nygaard as a consultant to input and analyze data collected from the Mobility Management Study, Utah Transit Authority, and other agencies in the valley to map transit, people, and places.

Capital District Transportation Authority (CDTA)
Albany, New York

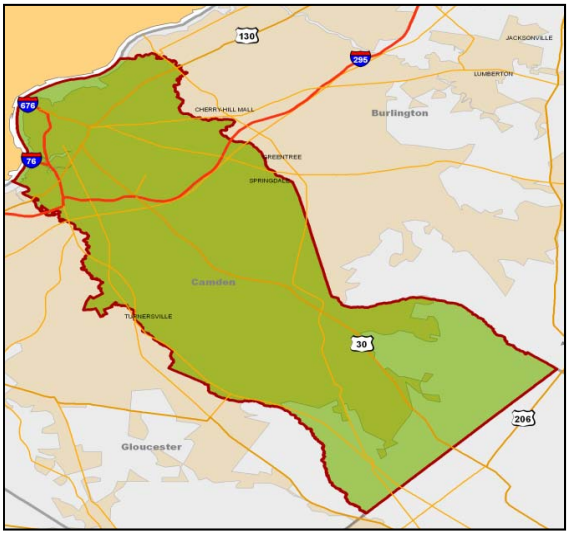
Service area:	The service area of CDTA includes the Capital region, covering Albany, Saratoga, Schenectady, and Troy.
Mission & Vision:	Mission: CDTA plans, finances, implements, and delivers transit services that take people where they want to go in the Capital Region safely, efficiently, and at a reasonable cost. Vision: CDTA is a growing and vibrant company that seeks to continually increase ridership and the use of its facilities by providing services that people want and need.
Structure:	The CDTA operates with a board of directors comprised of representatives from all four counties in the service area.
Partners:	CDTA's partners include state, regional, and local agencies, supermarkets, homeowners and neighborhood associations, and Catholic charities.
Goals & Objectives:	The objective of CDTA is to deliver comprehensive transit services and develop a transportation demand management to meet the environmental and transportation needs of cities and suburbs for all, including those of the special population comprising older adults, persons with disabilities, and low-income residents, along with others who cannot or choose not to drive.
Funding:	Funding includes Federal operating assistance (5317, ARRA, TIGER grants), state and local government funds, fares, mortgage, tax, capital contributions, rail transit, access transit, advertising, and investment income.
Services Provided:	Fixed route, special events shuttles, ADA complementary paratransit, access transit (Medicaid), taxis, and rail.
Services Promoted:	Fixed route, special events shuttles, ADA complementary paratransit, access transit (Medicaid), taxis, and rail.



Mobility Management Activities	• Subsidized rides for seniors. • Dynamic ridesharing. • 518 call center. • Full-time Mobility Management officials on staff. • Market and promote transportation options countywide. • Personalized travel assistance.
How did the program get started?	The CDTA was created in 1970 by the New York State Legislature, as a public benefit corporation, to provide regional transportation services by rail, bus, water, and air.
What are the challenges?	Limited funding is a continual challenge for CDTA.
Is the program being marketed?	CDTA managed the iRide Campaign where riders volunteer for video interviews and advertisements, including a YouTube video contest for customers. The website was redesigned with public input to make it more user-friendly, and free wireless Internet service offered to customers in the Northway Commuter express between Saratoga and Albany.
What are the performance measures?	Performance measures include customer surveys to gauge service levels as well as existing route evaluations, outlined below: • **Total Riders**: The easiest way to understand and evaluate transit service is to look at annual ridership. CDTA's Route Classification system establishes thresholds and ranges of ridership by route category. • **Riders per Revenue Hour**: The number of riders per revenue-hour measures a route's productivity and indicates whether resources are being used efficiently. A route may have high ridership, but due to an over allocation of resources, be unproductive. • **Ridership Trend over the Previous Three Years**: The percent ridership change over time is used to judge the effectiveness of past route changes and other factors. CDTA provides new and restructured services with a trial, or growth period to obtain ridership targets. • **Community Service Needs**: CDTA provides consideration for vital community services, such as medical facilities, convalescent centers, and locations that serve the elderly, disabled, and other special need populations.
What is their definition of Mobility Management?	Mobility Management refers to the commitment of transit providers to meet the needs of the transit dependent and choice rider by providing a wide range of alternative transportation options and ensuring that they are easy to identify, access, and pay for.
Additional Comments	Recipient of 2009 Federal Transit Administration Annual Award for Success in Enhancing Ridership. Also, CDTA was awarded the Capital Region Human Resource Association's Spectrum Award in 2009 as it demonstrates respect for diversity within the workplace and among the people it serves in the community. Under its Go Green initiatives, hybrid and biodiesel buses are used to improve energy efficiency, air quality, and reduce dependence on imported oil.

Travel Management Coordination Center (TMCC) Demonstration Project
Camden County, New Jersey

Service area:	The TMCC's service area is Camden County. This program serves as a Mobility Services for All Americans demonstration site.
Mission & Vision:	Provide sustainable transportation services to the underserved population in the rural county of Camden.
Structure:	The Camden County Workforce Investment Board is partnering with faith-based programs and transit agencies to provide transportation. TMCC's role is to serve as an intermediary between consumers, operators, and transit agencies.
Partners:	TMCC's partners include New Jersey Transit, medical agencies, faith-based organizations, and United We Ride.
Goals & Objectives:	Goal 1: Develop a TMCC for Camden County that creates opportunities for better and increased transportation service throughout the County. Goal 2: Increase access to existing human service and traditional public transportation for Camden County consumers. Goal 3: Implement a comprehensive, inclusive, ongoing, and responsive project planning process.
Funding:	The funding for TMCC's demonstration program comes from the FTA Mobility Services for All Americans grant, and USDOT, as well as state funds and other grants including the transportation assistance fund and private funding from churches. TMCC seeks sustainable funding from faith-based organizations.
Services Provided:	Fixed route, shuttles (flexible routes), rail, complementary ADA paratransit, demand response.
Services Promoted:	Fixed route, shuttles (flexible routes), rail, complementary ADA paratransit, demand response.



Mobility Management Activities	• Subsidized rides for seniors. • Ridesharing with program expansion. • A 211 call center. • Market and promote transportation options countywide. • Personalized travel assistance for seniors.
How did the program get started?	The TMCC program is still in the planning stages. Once established, TMCC will focus on effectively creating access for all transportation-disadvantaged consumers in Camden County for all local and regional modes of transportation, including fixed and flex routes, as well as local demand-response services across a multitude of providers including public transportation, county and municipal transportation providers, and local nongovernmental organizations, including faith-based organizations.
What are the challenges?	• Building capacity to meet unmet transportation demands of seniors. • Coordination of public, non-profit, and faith-based organizations in provision of transportation services. • Customer communications—provide travel information to customers to instill feelings of security and confidence in making the trip. • Extension of service area and hours. • Reduce duplicate service. • Integration of human services transportation with public transportation.
Is the program being marketed?	The marketing and communications department plans, develops, and administers marketing programs to promote the services, soon to be offered to the public. The media department manages all external communications with stakeholders and actively stresses the advantages of both fixed-route and demand-response services. Additionally, focus group meetings and meeting with local leaders and faith-based organizations are conducted to keep various stakeholders informed of the progress made in planning and development transportation services.
What are the performance measures?	As the program is in the planning stages, performance measures have not been developed.
What is their definition of Mobility Management?	Mobility management is a process of creating transportation access through the coordination of local and regional modes of transportation to better serve the transportation needs of all including seniors, disabled, and lower-income individuals in a rural county.
Additional Comments	The initial plan is to fill service gaps for those who need access to public transportation. As the program expands, services will be added/improved, including fixed route, ride sharing, and demand-response transit.

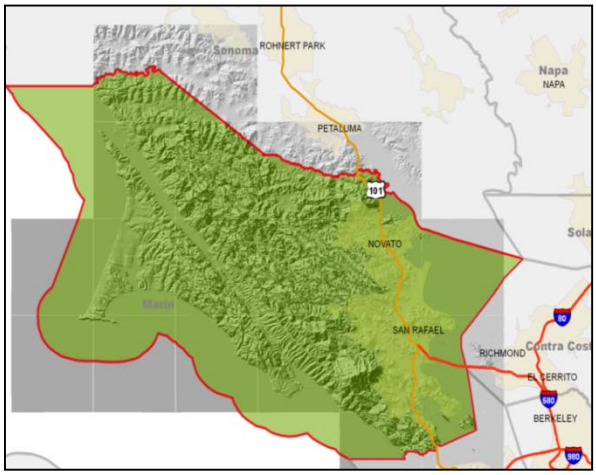
Lane Transit District (LTD)
Lane County, Oregon

Service area:	The whole of Lane County, including the rural and unincorporated areas. The total population of the area is 300,000, and LTD also operates Medicaid services countywide. Medicaid also requires that the services travel out of county as well.
Mission & Vision:	Create a meaningful interface and partnerships between public transit, human service agencies, providers, and riders; bring together divergent philosophies and segregated approaches to arranging, scheduling, and paying for transportation; combine and simplify rules and streamline procedures whenever possible; and, provide a local access point for transportation services that focuses on the needs of older adults, people with disabilities, and those with limited income.
Structure:	Senior and Disabled Services, LTD, and Alternative Work Concepts worked together to create the countywide mobility management team that uses a Transportation Case Management model.
Partners:	Volunteer drivers, the Senior Companion Program, DHS program, Senior Connections volunteer program, state DOT public transit division, and potential future relationships with the American Cancer Society and veterans transportation. In addition, LTD has a contract for developmental disabilities through county government, nursing homes, etc.
Goals & Objectives:	One major goal is to design functional assessments in a way that is customer-oriented and a way that helps the agency gather information on unmet needs, which is critical for rural transit as well as ADA. Once functional assessments are completed, it makes it easier for the agency to assign appropriate services to the client.
Funding:	5311, 5317, city contributions for local match, state and federal revenues, and a cigarette tax.
Services Provided:	Bus rapid transit, fixed routes, rural commuter routes, complementary ADA paratransit, driver program, human services agency-contracted service, preschool services for children of disabled parents.
Services Promoted:	Bus rapid transit, fixed routes, rural commuter routes, complementary ADA paratransit, volunteer driver program, human services agency-contracted service, preschool services for children of disabled parents.

Mobility Management Activities	• Subsidized rides for seniors. • Volunteer driver programs—mileage reimbursement program. • Coordinated call center. • Promote transportation options countywide. • Personalized travel assistance—functional assessments.
How did the program get started?	LTD has been providing mobility management services for almost 30 years. In the 1980s, Lane established the coordinated call center to direct customers to available transportation options in the area. Because the state of Oregon was hit so hard by the recession in the 1980s, the cities and counties began coordinating services long before the term mobility management was coined. LTD was also asked to take on medical transportation (Medicaid) through the statewide brokerage model. As a result, LTD needed a more sophisticated model and eligibility verification.
What are the challenges?	There are big challenges for LTD, including communication: linking communication streams, utilizing IT, developing IT projects to put into an eligibility system (so that call center staff can understand what the needs are for clients calling in). Another challenge Lane faced was changing the jobs of existing employees to become mobility managers, which has been a difficult transition.
Is the program being marketed?	To date, LTD has not conducted any focused public outreach or marketing campaigns; however, information is dispersed through the website and flyers, and LTD has created one for the one source call center. The LTD Brand Components are the basis of the program. The components are comprised of the Position, Personality, and Promise of LTD. The website is www.ltd.org.
What are the performance measures?	LTD is working with a research team from Portland State University to conduct a case study of the mobility management project through which performance measures may be developed from the data research. PSU will also be conducting focus groups with key stakeholders, and interviews of the case managers. Currently, LTD utilizes performance measures through a cost allocation methodology due to the program's funding through federal grants, which includes cost per ride, cost per hour, cost of decision-making process, cost of assessments.
What is their definition of Mobility Management?	Mobility management is combining multiple resources for transportation, and grouping multiple transportation trip requests in a variety of ways (financial and physical resources). Mobility management includes streamlining the system for consumers, and attempting to address consumer transportation needs in a more holistic way. It involves engaging multiple agencies, particularly human service and public transit, in order to use a variety of resources more efficiently.
Additional Comments	LTD uses the expertise of Senior and Disabled Services staff to provide transportation assessments that match individuals with available transportation services, there is the potential to combine and coordinate authorizations for Medicaid medical and non-medical, ADA paratransit, and other transportation service eligibility and authorizations.

Marin Access, Marin County Transit District (Marin Transit)
Marin County, California

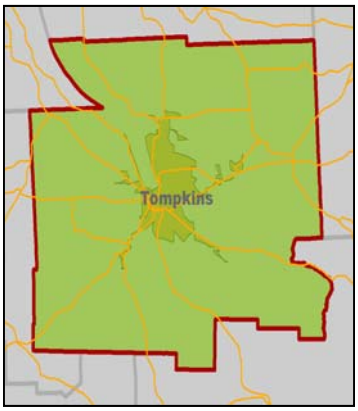
Service area:	Marin Access is the Mobility Management agency for Marin County. The urban core runs down the eastern side of the county along the San Francisco Bay. A mountain range divides urban core and west Marin (rural, low density).
Mission & Vision:	Plan and take action together as a consortium of agencies and advocates to improve and expand transportation options for Marin's senior, disabled, and low-income residents.
Structure:	Marin Transit contracts for service with other providers on behalf of Marin Access, including Golden Gate Transit, Marin Airporter, MV Transportation and Whistlestop Wheels, for local bus and paratransit services.
Partners:	Metropolitan Transportation Commission, senior centers, taxi companies, social service agencies, volunteer programs, non-profits, and the Marin Mobility Consortium.
Goals & Objectives:	• To develop effective solutions to the transportation/mobility challenges faced by Marin's senior, disabled, and low-income populations. • To develop a one-stop center for information and referral to transportation alternatives in Marin. • To develop a coordinated approach to obtaining and providing funding to meet the transportation needs of Marin's senior, disabled, and low-income populations.
Funding:	The program began with a 5317 grant. In the 2010 general state election, a statewide California law passed, enabling counties to call a local election on a county by county basis to approve a vehicle registration fee to fund transportation services. Marin County passed a $10 fee and 35 percent of the funds go to senior/disabled mobility. The funds, called Measure B, offer continuous funding for subsidized rides for seniors, as well as funding the volunteer driver programs.
Services Provided:	Volunteer driver, complementary ADA paratransit, taxi companies for overflow trips on ADA paratransit.
Services Promoted:	Fixed route, complementary ADA paratransit, Dial-A-Ride, volunteer drivers, dynamic ridesharing, medical transportation, taxis.



Mobility Management Activities	• Subsidized rides for seniors. • Volunteer driver programs. • Dynamic ridesharing. • 511 call center. • Full-time Mobility Manager on staff. • Market and promote transportation options countywide. • Personalized travel assistance.
How did the program get started?	Marin Transit staff wrote a grant application for New Freedom funding in 2007 for two purposes: to reduce the demand on the paratransit system, and provide new services for seniors. They then hired on a Mobility Manager with experience in senior mobility and workforce transportation.
What are the challenges?	Marin Transit awarded the new Mobility Management operations contract to the non-profit agency that was the previous ADA paratransit contractor. For the contractor, the new service represented a change in thinking, which has been a process. There is a mindset change for the operator, as a new method to providing service is introduced. Additionally, there are a few stakeholders that Marin Transit is trying to bring to the table.
Is the program being marketed?	The marketing program has been mostly word-of-mouth until recently, as Marin Access has been working on the completion of an interactive website. Additionally, Marin Access is working toward using the same name and branding for the website and vehicles: MarinAccess. Website: http://www.marinaccess.org/.
What are the performance measures?	The performance standard for passenger pick-ups shall be 90 percent of pick-ups on a monthly basis provided within a time window of 30 minutes (15 minutes before or 15 minutes after the scheduled time). The performance standard for passenger dwell time shall be that on 95 percent of paratransit trips, no one rider shall spend more time on the vehicle than twice the length of time that a comparable trip would take if made on a regular fixed-route bus. The performance standard for available operators shall be that an operator will always be available at all times to operate the number of vehicles necessary to maintain the agreed-upon service level. No trips shall be dropped/missed due to unavailability of drivers. For scheduling and dispatching, the telephone staffing shall be adequate to fulfill the following standards of promptness and quality: • 90 percent of calls per month shall be answered in less than 1.5 minutes. • The average wait time for incoming calls placed on hold shall be 1 minute or less for calls relating to service issues, and 1.5-2 minutes or less for calls from individuals wishing to make a trip reservation. • Blocked call rate (busy signal received) of 3 percent or less on an average monthly basis. • Call abandonment rate under 5 percent a month.
What is their definition of Mobility Management?	Mobility Management is a process that involves close contact between various partners in the community in order to improve mobility for the target population (seniors, disabled, low-income). Involvement from the community defines success, and helps improve the likelihood that there will be success.
Additional Comments	Marin Access is preparing to pilot dynamic ridesharing for seniors. The concept uses smart phones and computers to log in to a website where passengers are connected with drivers. The service also offers online payment options. The pilot will work with the senior center where seniors could log on at home or have a center staff member log them on, allowing seniors to procure rides between themselves.

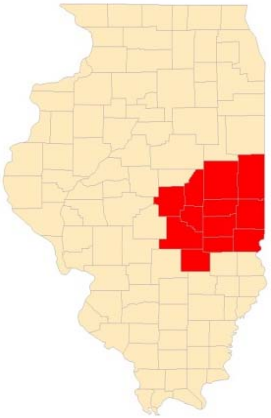
Tompkins County Department of Social Services
Tompkins County, New York

Service area:	Tompkins County (population 103,000). The Regional Mobility Plan for the area encompasses seven counties (total 300,000).
Mission & Vision:	The 2030 vision for the future of the Tompkins County transportation system embraces the concept of Sustainable Accessibility.
Structure:	The Ithaca-Tompkins County Transportation Council 2030 Long-Range Transportation Plan calls for mobility management strategies to reduce single-occupant auto trips to preserve capacity and efficiency of the existing road and highway network, to reduce greenhouse gas emissions, to conserve energy, and to enhance livability of neighborhoods.
Partners:	Ithaca-Tompkins County Transportation Council, Cornell University, Ithaca College, Tompkins Cortland Community College, MPO, social service agencies, Tompkins Consolidated Area Transit.
Goals & Objectives:	Goals include: • The Coordination goals include the target markets of the Federal-required Coordinated Plan process. • Equity includes comparing the distribution of mobility service availability to distribution of target populations in order to identify service gaps. Further, equity considers the distribution of costs and benefits of the use of Federal transportation funds. • Sustainability includes environmental, economic, energy conservation, and community and social objectives. • Access and mobility relates to community development patterns, livable communities, and the integration of transit-oriented and pedestrian-oriented design in community development. • Public policy implementation requires Federal and State funds be used to implement their respective requirements. • Multi-modal integration focuses on maximizing the customer's ease of use of all mobility services.
Funding:	The program operates on 5307, 5316, 5317, grants from the NY State Energy Research and Development Authority, and in-kind support from Cornell, Ithaca College, and Tompkins Cortland Community College.
Services Provided:	Fixed route, complementary ADA paratransit, volunteer drivers, non-profit car share, vanpool program, rideshare.
Services Promoted:	Fixed route, complementary ADA paratransit, volunteer drivers, taxis, bicycle.

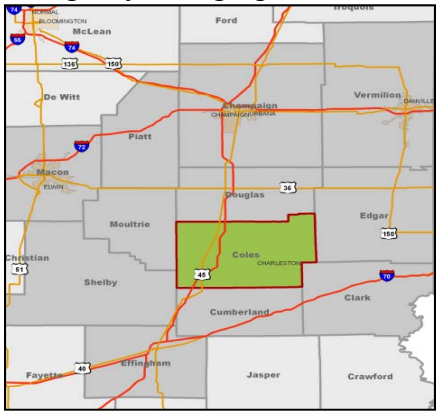


Mobility Management Activities	• Subsidized rides for seniors. • Volunteer driver programs. • Full-time Mobility Manager on staff. • Market and promote transportation options countywide. • Personalized travel assistance.
How did the program get started?	In 2006, Tompkins County hired a service development manager from the transit authority for county development and social services. County social services are the hub of a network of agencies that deliver services directly and/or consult with many members of the public. At the time, there were a number of transportation issues, including underserved populations in rural areas, as well as mode share.
What are the challenges?	The one principal challenge that Tompkins County has is getting all of the providers to the table and having respectful discussions about where they can collaborate and see results.
Is the program being marketed?	Way To Go is Tompkins County's consolidated community education program. Way To Go receives a lot of feedback from the public, which is then provided to the transportation operators. Website: http://ccetompkins.org/community/way2go.
What are the performance measures?	Three of Tompkins County's programs have individual performance measures, including the rideshare program, the Way To Go marketing campaign, and City Van. As a result, Tompkins County is working on assembling and streamlining the performance measures for the mobility management program.
What is their definition of Mobility Management?	Tompkins County's definition of Mobility Management incorporates four different foundations: • Traditional travel demand management. • The coordinated plan element—equity. • Using all available resources to move people efficiently. • Technology—Mobility Management is one of the beneficiaries of the IT revolution that allows for sharing of information and data for new services to be created.
Additional Comments	Tompkins County just signed an agreement with ITNAmerica, a national non-profit, organized around senior transportation. A pilot program, called ITNEverywhere, is aimed at small urban/rural populations, and to engage the community in a business development survey for the integration of services, which are designed at targeting underserved populations.

Transit Reservation Information Program (TRIP)
Coles County Council on Aging
Coles County, Illinois



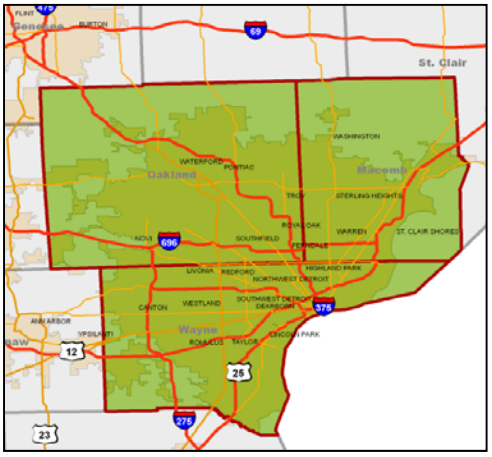
Service area:	TRIP's service area includes Coles County, as well as Cumberland, Clark, Macon, Champaign, Vermilion, Shelby, Douglas, Piatt, Effingham, Edgar, and Moultrie counties. Coles County is rural, and in FY 2010, Dial-A-Ride served 2,753 clients.
Mission & Vision:	Provide passengers with a single point of access to receive regional transportation, human services and community information facilitating greater personal mobility for all individuals in Champaign, Clark, Coles, Cumberland, Douglas, DeWitt, Edgar, Macon, Moultrie, Piatt, Shelby, and Vermilion Counties.
Structure:	TRIP operates in partnership with the surrounding transit providers as well as the Illinois Department of Transportation, who oversees funding as the fiduciary agent for 5317 funds.
Partners:	The transit providers for the 11 counties are strong partners with the TRIP, as the shared goal for the region is coordination. Other partners include the Illinois Department of Transportation and the Area Agency on Aging.
Goals & Objectives:	TRIP provides coordination of existing transportation services for trips not provided by your local transportation provider. TRIP uses existing transportation providers to get you where you need to go. While preference will be given to medical, work- and education-related excursions, TRIP can be used for any reason and by persons of any age.
Funding:	In 2008, with the assistance of the Illinois Public Transportation Association and a group of dedicated local state legislators, TRIP secured the Illinois Downstate Operating Assistance Program, which gave TRIP the investment needed to increase hours and expand services to fill gaps. In 2010, TRIP was awarded a 5317 grant, and received state toll revenue credits to match the program. As a result, TRIP did not have to find matching funds. Fares are also a source of revenue, but can be difficult to monitor because of the variety of providers. Additionally, TRIP did receive a grant from the Area Agency on Aging to offset the cost of fares for seniors.
Services Provided:	Dial-A-Ride service for the 11 counties.
Services Promoted:	Fixed route, complementary ADA paratransit, Dial-A-Ride, demand response.



Mobility Management Activities	• Subsidized rides for seniors. • 511 call center. • Full-time Mobility Manager on staff. • Market and promote transportation options throughout 11 counties. • Personalized travel assistance.
How did the program get started?	Nearly every county in Illinois receives public transportation funds from the Illinois Department of Transportation. Previously, it was difficult, if not impossible, to use public transportation to travel from county to county because of provider barriers. Federal transit districts did provide some county-to-county transportation, but it was inconsistent throughout the state.
What are the challenges?	Consistency in fare collection is a challenge, as there are many providers in the region. TRIP also has concerns about the potential for future sustainability, especially related to continuing 5317 funding. There are some unique challenges to TRIP's program as well. For example, if a passenger boards at point A, then transfers to a different point to further their journey and has issues with a different provider, the first provider wants to be made aware of the issue(s). The providers are protective of their passengers and want to make sure there are no issues. TRIP resolved the communication issue by filling out a report and returning it to the affected provider(s).
Is the program being marketed?	The majority of the marketing and outreach for TRIP is done by word of mouth; however, TRIP is working on agreements with its partners for marketing, which will include print and audio media advertising in the service area, as well as collateral (pens, magnets, notepads, etc.) Additionally, TRIP is working closely with its congressmen and representatives to spread the word about the services offered.
What are the performance measures?	TRIP has developed a survey that will be provided to the customers. The survey results will then be presented to the transportation providers to establish performance measures.
What is their definition of Mobility Management?	TRIP's definition of Mobility Management is broad, as mobility encompasses many modes and methods of getting from point A to point B. The program representatives feel that TRIP is successful because it is supported by many critical agencies in the region and is coordinating with all of the transportation providers.
Additional Comments	TRIP is going to start taking credit cards in order to charge for the rides up front. The purpose of this is to reduce no-shows, and the new system will allow a monthly pay-out to providers. A $0.50 per trip service fee will be charged per card used, which will help to offset the costs of the credit card machine.

SMART
Wayne, Oakland, and Macomb Counties, Michigan

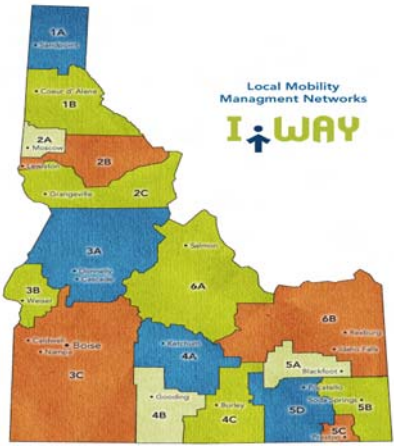
Service area:	Coverage area includes three counties—Macomb, Oakland, and Wayne Counties. There are 75 communities that partner with SMART that may opt in and out of the program, based on their ridership numbers.
Mission & Vision:	Provide safe, easy, and dependable transportation to people in southeast Michigan. Build partnerships with communities to help operate their community-based transit system efficiently, reduce costs and conserve resources.
Structure:	SMART has a board of directors representing the counties in the service area. The board selects the general manager for daily operations. Each community has an ombudsman who acts as a community manager. Individuals serving in this position have at least 15 years experience in the transit industry.
Partners:	Employers, local businesses, medical and social service agencies, communities, private transit operators, taxi cab companies, senior service programs, public school districts.
Goals & Objectives:	SMART's overarching goal is to expand transportation services for those who rely on them. The objective of SMART is to partner with local communities and share the responsibility of operating efficient transportation based on a community's specific needs, including those covered by ADA.
Funding:	5316, 5317. SMART provides $10-15 million per year to communities as operational assistance in transportation programs for the elderly and disabled individuals. Community credits program: a community within the SMART taxing district is guaranteed additional funding from money generated by tax to be spent on transit services. Municipal credits: a revenue-sharing program with communities in the service area that support local transportation services. The money comes mainly from Michigan Department of Transportation and disbursed among the counties based on their population.
Services Provided:	Fixed route, complementary ADA paratransit, employer shuttles, connector (curb to curb), express, flexible routes, Dial-A-Ride, neighborhood services provided by churches, youth groups, and senior citizen organizations.
Services Promoted:	Fixed route, complementary ADA paratransit, Dial-A-Ride, neighborhood services, employer shuttles, connector routes.



Mobility Management Activities	• Subsidized rides for seniors. • Volunteer driver programs. • Full-time Mobility Manager on staff. • Market and promote transportation options countywide. • Personalized travel assistance. • Employer-sponsored transit programs (subsidized transportation).
How did the program get started?	Developed as a grassroots program under the banner of SMART's Community Partnership Program right after the success of the 1995 millage. Comments and suggestions of individuals in the voting communities of the service area helped develop the program. SMART enables local communities or groups to partner and share the responsibility of operating efficient transportation based on a community's specific needs, including those covered by ADA. Hence, every participating community offers a unique service.
What are the challenges?	• Shortage of funds due to decline in federal funds, decrease in sales tax revenue and other sources. • Need to improve all levels of transit services. • Myths about what transit can and cannot do. • Lack of grassroots support.
Is the program being marketed?	SMART is marketed through advertising, including promotional gifts with the purchase of bus pass (pass holder or pen). Additionally, volunteer organizations provide travel planning service and information to people with disabilities. The Transitchek program encourages using public transportation. Employers can subsidize employees transportation cost by $115 per month per employee through the use of a fixed-route bus service. SMART has also implemented an employer program called Get a Job, Get a Ride, which helps to meet environmental goals. Employers must enroll in this program. Eligible participants hired within the last 30 days receive a complimentary 31-day pass ($66 value) to ride the fixed-route bus.
What are the performance measures?	SMART uses ridership numbers for performance measurement. Surveys are also developed and distributed to plan, forecast, and apply for federal grants, including the on-board transit survey, and stakeholder survey.
What is their definition of Mobility Management?	Mobility Management is the process of collaboration between a transit agency and local communities to provide need-based and efficient transportation services in a community, including that of special population comprising of seniors, disabled, and those with lower incomes.
Additional Comments	All SMART buses are fueled by biodiesel. In its evaluation of transportation services, SMART makes peer region comparison with Cleveland, Denver, Portland, Sacramento, and Salt Lake City. SMART's program has been nationally recognized by the Beverly Foundation.

Community Transportation Association of Idaho (CTAI), Idaho

Service area:	The entire state, which is broken into six transportation districts. Within each district are local networks. Each color on the map below represents a different network.
Mission & Vision:	Mission is to improve mobility for the people of Idaho by working with stakeholders and leaders while advocating for safe, cost-effective, accessible, integrated, and affordable mobility services and systems throughout the state. Vision is: • Citizens in communities throughout the state will have affordable access to transportation services in and connecting to their communities. • Communities will be revitalized through mobility networks that connect citizens and fuel economic development. • Communities will experience visible relief to air quality and congestion problems through comprehensive transportation networks. • Elected officials, business leaders, and community leaders will come together to support efforts that improve citizens' mobility and independence.
Structure:	CTAI was developed by the Idaho Transportation Department. CTAI is the statewide, nonprofit membership association dedicated to creating partnerships, improving efficiencies, and building a multi-modal system of connected travel in Idaho.
Partners:	Idaho Transportation Department, the regional MPOs, cities, Department of Health and Welfare, Area Agencies on Aging, economic development agencies, bike/ped agencies, chambers of commerce.
Goals & Objectives:	As the statewide transportation association, CTAI oversees a variety of programs and works closely with local citizens, transportation providers, community leaders and others to: • Identify communities unique mobility needs and strategies. • Build partnerships among transportation providers, advocacy groups, and stakeholders. • Improve efficiencies within existing services. • Advocate for improved transportation options to connect rural and urban communities in Idaho.
Funding:	ARRA funds, 5316, 5317.
Services Provided:	CTAI only coordinates.
Services Promoted:	Fixed route, complementary ADA paratransit, safe routes to school, bike/ped options, demand response, rideshare.

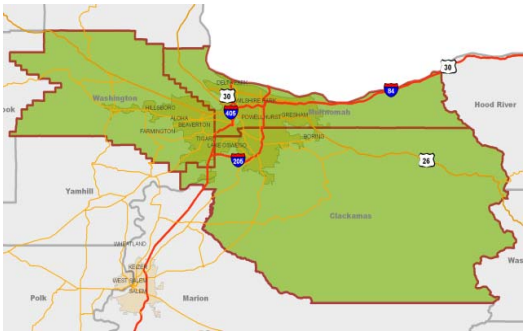


Mobility Management Activities	• Coordinates transportation planning at the inter-agency level. • 511 call center. • Single source of information. • Full-time Mobility Managers on staff. • Market and promote transportation options statewide. • Personalized travel assistance.
How did the program get started?	In 2008, the Public Transportation Division of Idaho's Transportation Department started a coordination effort throughout the state, where travel patterns were identified throughout each of six districts in Idaho. Local mobility networks were established, as each district had a different travel pattern. The mobility networks developed local mobility plans, which were hard to coordinate at the local level. The Idaho Transportation Department contracted with CTAI, as it was the only statewide transportation association that would be the best fit to implement and coordinate the mobility plans.
What are the challenges?	Resources are always a challenge. An additional challenge is working with the MPOs. CTAI is trying to help the MPOs see the value in coordination between what CTAI does and the role of the MPOs. CTAI wants to ensure that the MPOs feel valued. Another challenge is the transportation providers. Mobility management has been a paradigm shift for the transportation providers. In the past, the Idaho Transportation Department made a call for projects, and any provider could apply. With the implementation of CTAI, funding applications are determined based on customer need and gaps in service, as opposed to simple public transit service changes.
Is the program being marketed?	CTAI has yet to launch a marketing campaign, but has implemented branding (I Way), a website, and templates for stakeholders and providers to use. As an example, CTAI developed bus wraps that the providers may use so that they do not pay for wrap designs. In 2012, CTAI will begin the public awareness campaign. The I-Way website provides stakeholders with a toolbox, logos, etc. Website: www.i-way.org.
What are the performance measures?	Each of the four sets or families of performance measures are expanded below. **Ridership:** • Regular (fare paid by user). • Sponsored (fare paid by third party). • Elderly (not in a wheelchair), Elderly (in wheelchair). • Disabled (not on a wheelchair), Disabled (in wheelchair). • All Other Users/General Public. • Below the poverty level. • With no access to personal vehicle. **Community Social/Economic/Environmental Costs:** • Highway preservation cost/mile (goal=reduce). • Highway expansion cost/mile (goal=reduce). • Human service transportation costs (goal=reduce). • Cost of auto fatalities/injuries (goal=reduce). • No. of bike related fatalities/serious injuries (goal=reduce). • Health costs due to air quality problems (goal=reduce). • $ value or number of jobs created times multiplier effect. • Facilitate growth and business/economic development. • Congestion mitigation. • No. of trips not driven alone, no. of miles not driven alone.

	• No. of gallons of fuel saved. • Amount of vehicle emissions saved/air quality improvement. • Percentage of users who are choice riders vs. no choice. • Elderly/disabled live independently if options available. • Employed/in school only because options available. • Health benefits due to walking/biking. **General Mobility Measures:** • Percentage satisfied with their options to single-occupancy vehicle. • Percentage satisfied with access to goods, services, and activities. • Percentage total trips via alternative to single-occupancy vehicle. • Percentage commuting to work other than single-occupancy vehicle. • VMT—vehicle miles traveled (target = reduce). • Total ridership (all modes ex single occupancy vehicle)/capita. • Total ridership (all modes)/vehicle revenue mile. • Percentage of cities with population of >2,500 with access to intercity bus/rail. • Mean no. of paratransit rides per no. of elderly/disabled. • Walkability/Bikeability index (path length/road length) × path opinion rating. • Quality of Life index if no/limited access to vehicle. **Facilities and Equipment:** • No. of vehicles parked in Park N Ride/commuter lots. • Percentage of Park N Ride/commuter spaces utilized. • No. of bike racks, no. of covered outdoor bike racks. • No. of secured indoor bike parking spaces. • No. of bikes carried on public transit. • Availability of bike rental/sharing programs at/near transit. • No. of taxis with quick-mount bike racks. • No. of ADA taxis. • Miles of bicycle/pedestrian compatible streets/highways. • No. of automated bike counters.
What is their definition of Mobility Management?	Facilitating local mobility planning, public outreach, and implementation of local mobility plans, building partnerships to improve mobility and use of resources within the districts, and building partnerships for connected and coordinated travel.
Additional Comments	CTAI's mobility management perspective is different since the agency does not directly provide service. CTAI's role brings a neutral position to the state, which allows objective planning and needs assessment at a statewide level.

TriMet
Oregon

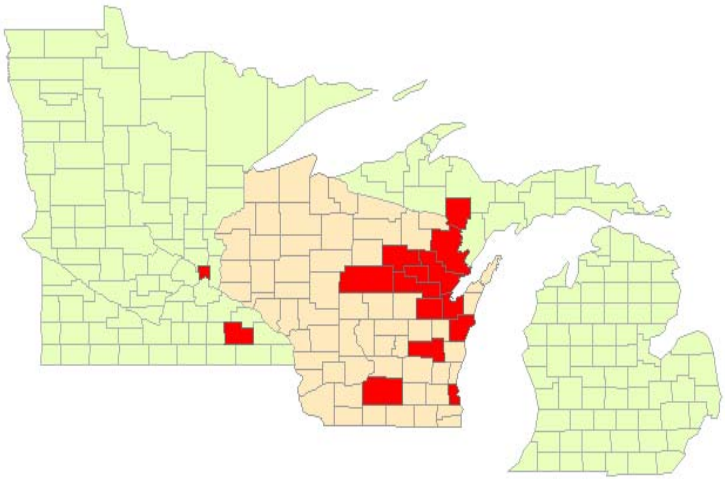
Service area:	Serves the three counties of Clackamas, Multnomah, and Washington in the Portland, Oregon metro area. TriMet has been in operation for 25 years.
Mission & Vision:	Build and operate a total transit system to connect people to their community and make Portland the most livable place in the world. Maintain transit equity and environmental justice while moving toward sustainability.
Structure:	TriMet is a municipal corporation of the state of Oregon. A seven-member Board of Directors is appointed by the governor. The general manager is responsible for operations.
Partners:	TriMet has an extensive list of partners, including: American Red Cross, American Cancer Society, Serendipity Center, Pacific University's School of Occupational Therapy, Goodwill, Coalition for Livable Future, Vision into Action PDX, Vision Action Network of Washington County, Regional Transportation Coordinating Council, Community Transportation Association of America, Canby Adult Center, David's Harp, East County U-Ride, Edwards Center, Inc., Emmanuel Temple Church, Friends of Estacada, Community Center, Gladstone Senior Center, Hoodland Senior Center, Lake Oswego Adult Center, Lifeworks Northwest, MFS Project Linkage, Milwaukie Senior Center, Molalla Senior Center, Neighborhood House, Northwest Pilot Project, Northwest Portland Ministries, Oregon Transit Association, Pacificab Company, Inc., Pioneer Community Center, Port City Development Center, Portland Impact, Providence Elder Place, Sandy Senior Center, Transportation Reaching People, Tri-Met. Urban League of Portland, and Wapato Shores Transport.
Goals & Objectives:	Goals include frequent, reliable, and comfortable service, access to transit via walking, biking or driving, stops with comfortable waiting areas and amenities, accurate and reliable service information, ensuring safe trips, and improving customer satisfaction.
Funding:	Funding for TriMet's program comes from state and federal operating grants, passenger revenue, payroll/self employment/state in lieu tax revenues, 5316, 5317, special transportation fund, and a cigarette tax.
Services Provided:	Fixed route, light rail, bicycling, TDM, carpool, discounted carpool parking, vanpool, emergency ride home (taxi vouchers), community shuttles, ADA complementary paratransit (LIFT), neighborhood shuttles, medical transportation.
Services Promoted:	Fixed route, light rail, bicycling, TDM, carpool, discounted carpool parking, vanpool, emergency ride home (taxi vouchers), community shuttles, ADA complementary paratransit (LIFT), neighborhood shuttles, medical transportation.



Mobility Management Activities	• Subsidized rides for seniors and disabled individuals (no charge). • 503 call center. • Full-time Mobility Manager on staff. • Market and promote transportation options countywide. • Personalized travel assistance.
How did the program get started?	In 1985, the Committee on Accessible Transportation was formed to advise the TriMet Board of Directors and staff on plans, policies, and programs for seniors and people with disabilities to meet the requirements of ADA.
What are the challenges?	TriMet's challenges include the environment (climate changes/air pollution), increasing fuel costs, and funding.
Is the program being marketed?	The program is being marketed in many ways: consistency in branding, social media, community outreach specialists, volunteer outreach assistants, community buy-in, radio advertisements, and articles in print media.
What are the performance measures?	Multiple performance indicators are used to assess the efficiency and effectiveness of the program, as follows: • Average weekday and weekly boarding rides (fixed route and paratransit). • Passenger revenue (annual). • Operations cost per boarding ride (fixed route and paratransit). • Passenger revenue/system cost. • System cost/boarding ride. • System cost/vehicle hour. • Bus and rail operator attendance. • Bus and rail maintenance attendance. • Weekly boarding rides per full-time employee. • Bus miles/vehicle accident. • Bus % maintained pullouts. • On-time performance. • Average weekly vehicle hours. • Rides per vehicle hours (weekly and weekday).
What is their definition of Mobility Management?	Mobility Management is a process of building partnerships with local jurisdictions to improve transit services and access to it throughout the region through focused investments in service, capital projects, and customer information.
Additional Comments	TriMet has developed a Transit Investment Plan to provide guidance to local governments to leverage their investments in transit-related activities.

Menominee Regional Public Transit (MRPT)
Tribal Lands of the Menominee, Wisconsin

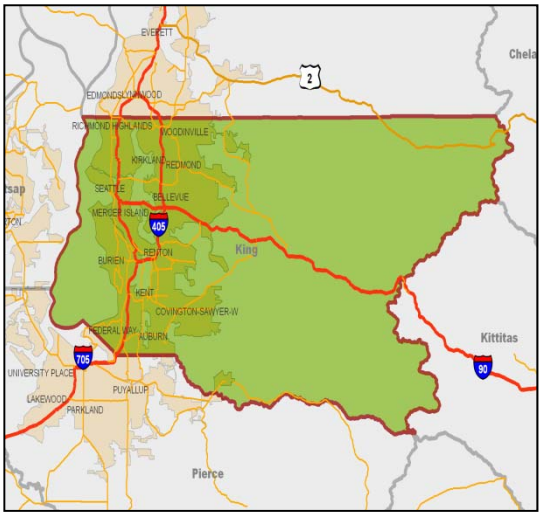
Service area:	Menominee (service to Brown, Dane, Fond Du Lac, Manitowoc, Langlade, Marathon, Marinette, Milwaukee, Oconto, Outagamie, and Shawano) county reservation and out-of-state services to Rochester and St. Paul, Minnesota, and Iron Mountain, Michigan. The service area totals 365 sq. miles in the reservation.
Mission & Vision:	Encourage the improvement, efficiency, and use of the Menominee Public Transit system within the Reservation/County in order to enhance access of employment, health care, recreation, education, and public services for the Menominee People.
Structure:	Menominee Transit runs its own bus service and has contracts with social agencies to provide human transportation service for seniors, disabled, and lower income individuals. It owns, operates, and maintains the buses and has dispatchers to respond to calls.
Partners:	MRPT's partners include the Human Services Department, medical clinics, the area aging organization for the elderly, tribal organizations, county agencies, tribal schools, the Headstart program, and the casino in the reservation.
Goals & Objectives:	To enhance access to employment, healthcare, recreation, education, and public services for the Menominee people.
Funding:	A state DOT grant provides 80 percent of the funding. In addition, MRPT's funding includes 5311, a federal tribal transit program fund, and supplemental funds obtained from partner agencies.
Services Provided:	Door-to-door and curb-to-curb public transit, complementary ADA paratransit, regional routes, and a voucher program.
Services Promoted:	Fixed route, complementary ADA paratransit, and regional routes.



Mobility Management Activities	• Subsidized rides for seniors. • Universal call center. • Full-time Mobility Manager on staff. • Market and promote transportation options countywide. • Personalized travel assistance.
How did the program get started?	MRPT's program began in the early 1990s as a transportation service program for seniors. Later, a local transportation study showed an increase in demand for transportation services. As a result, MRPT developed into a full transit system.
What are the challenges?	The challenges of the program include funding and the need to hire enough operators to cover the service route.
Is the program being marketed?	The program is marketed through word of mouth, the website, local radio stations, social service agencies, flyers, and the casinos. Notably, the casinos inform patrons of transportation services available to access their facilities.
What are the performance measures?	A quarterly review takes place to determine what is working and what is not working, including the customer demands that have and have not been met, ridership numbers, and a customer satisfaction survey.
What is their definition of Mobility Management?	Mobility Management is a process of providing good, efficient public transit service to all community members to meet their unique needs while preserving precious natural resources.
Additional Comments	In 2010, MRPT received a stimulus grant of $4.3 million to build a new transit center in Keshena and purchase vans and mini buses that are in compliance with ADA standards.

King County
Washington State

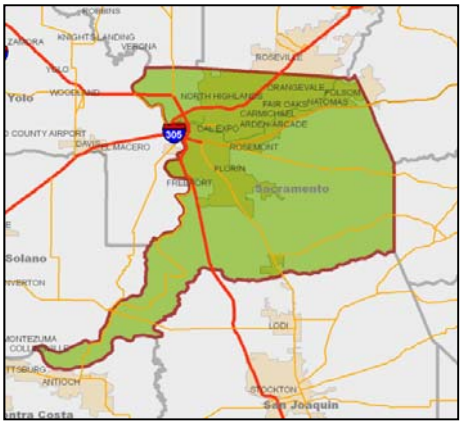
Service area:	The service area of this program is King County.
Mission & Vision:	Provide reliable, convenient, and safe public transportation services throughout the county and improve the region's economic vitality and environmental quality.
Structure:	The manager of paratransit and rideshare operations is assisted by a strategic planning and project director and an administrator. Accessible services are managed by two administrators.
Partners:	King County's partners include the King County Department of Transportation, social organizations, medical centers, human service organizations, schools, corporations (Microsoft), retail centers, the museum, and zoo.
Goals & Objectives:	King County wants to ensure riders are aware of their transportation options, and are safe and satisfied with their trip. Another goal is to coordinate transit, school and human service transportation so that current transportation dollars are used to maximum effectiveness. Lastly, King County seeks to match the needs of riders with the most appropriate transportation choice so that dollars can go further.
Funding:	Funding for King County's Mobility Management program comes from sales tax, 5316, service revenue, (ADA pass sales), fares, and paratransit contracts.
Services Provided:	Fixed route, water taxi, streetcar, downtown Seattle tunnel, rideshare, complementary ADA paratransit, taxis, and employer shuttles.
Services Promoted:	Fixed route, water taxi, streetcar, downtown Seattle tunnel, rideshare, complementary ADA paratransit, taxis, and employer shuttles.



Mobility Management Activities	• Subsidized rides for seniors. • 711 call center. • Full-time Mobility Manager on staff. • Market and promote transportation options countywide. • Personalized travel assistance.
How did the program get started?	The program began with three basic premises: put people first, move people efficiently, and move people more.
What are the challenges?	Challenges include fleet division (industry-wide shortage of automotive maintenance technicians), funding, fare evasion, inclement weather, and sustainability. King County has had to suspend some fixed-route service to maintain a sustainable service level.
Is the program being marketed?	King County's marketing program is Partners in Transit. The Partners in Transit Program helps to promote public transportation through communication with organizations, customers, and employers. Some of the marketing methods include dump the pump, flyers, Internet, monthly promotions, free ride tickets, radio and television ads, and posters.
What are the performance measures?	Some of the performance measures designed for system level use and to examine route performance include the following. • Annual boardings/boardings per platform hour. • Passenger miles per platform hour. • Operating cost minus fare revenue per boarding. • Operating revenue/operating cost. • Percentage of HOV use to CTR employment sites. • Percentage of households that use transit (both regular and infrequent riders). • Percent of population in minority/low income census blocks within ¼ mile of a bus stop served by frequent arterial or local services compared to percentage of population in non minority/low income census blocks served by frequent arterial or local services. • Percentage of population within census blocks with a density of 15/7 households per acre or greater within a ¼ mile of a bus stop of frequent arterial service. • Percentage of population within census blocks with a density of three households per acre or less within a ¼ mile of a bus stop of hourly service or better. • Transit vehicle CO_2 per passenger mile divided by the average King County automobile CO_2 use per mile.
What is their definition of Mobility Management?	Mobility management is a process of building partnership between people and organizations with common interest in human service transportation for special needs individuals. It requires identification of service gaps and/or barriers, development of solutions to meet needs based on local circumstances, and prioritization of those needs to empower the disability community to make the most use of public transit and promote equality of opportunity.
Additional Comments	Future plans for King County include the goal to cut fuel consumption and to reduce air pollution by using hybrid (diesel-electric) buses.

Paratransit, Inc. (An Innovative Paradigms Company)
Sacramento, California

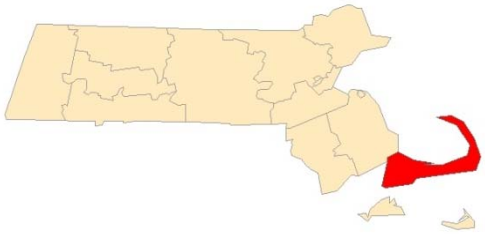
Service area:	Sacramento County, slightly less than the entire county (excludes the Southern portion of the county), encompassing approximately 400 square miles. Ridership for Fiscal Year 2010 460,000 passengers.
Mission & Vision:	Expand mobility options by advocating for a fully accessible, useable, and integrated public transportation system. Provide innovative community transportation services.
Structure:	Paratransit, Inc. has a Board of Directors consisting primarily of senior staff members of human service agencies in the community. Annual budget is $20 million.
Partners:	Currently, 13 human service agencies partner with Paratransit, Inc. (Alta Regional Center , Catholic Healthcare West, Eskaton, Asian Community Center, Developmental Disabilities Service Organization, Easter Seals, Elk Grove Adult Community Training, Health for All, Greater Sacramento Urban League, Sutter Health, Robertson Adult Health, United Cerebral Palsy, Community Transit Agency). Each agency operates some vehicles that Paratransit, Inc. has directly provided. The combination makes up their entire operating fleet.
Goals & Objectives:	The goals are to establish a structure that can eventually be managed locally, to increase the time and financial investment of partner organizations, to increase the number of individuals/organizations reached over time, to identify barriers to effective coordination/service provision, and to recommend a plan to overcome those barriers.
Funding:	The funding for Paratransit, Inc. is very unique. The various funding sources include: Sacramento RT ADA service contract, Local Measure A sales tax revenue allocated to the Consolidated Transportation Service Agency, Transportation Development Act funds (state sales tax) from the State of California, donations, 5310, 5316, and 5317, contracts for service and maintenance, private pay participant fees, and MediCal /Medicaid.
Services Provided:	Complementary ADA paratransit, maintenance, travel training, support services such as grant writing, specification review and preparation, central record keeping for maintenance inspections, loaner vehicles, fueling, insurance for small human service agencies, routing and scheduling for human service agencies.
Services Promoted:	Fixed route, complementary ADA paratransit.



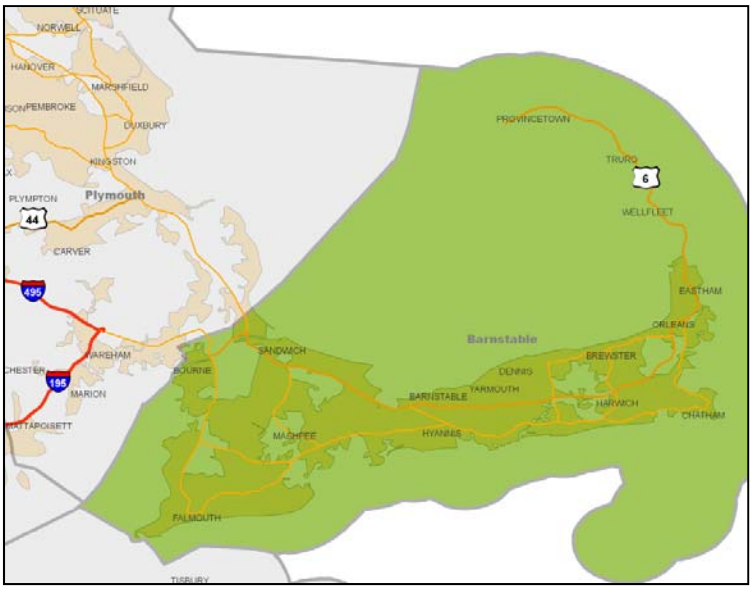
Mobility Management Activities	• Subsidized rides for seniors. • One-stop call center. • Full-time Mobility Manager on staff. • Market and promote transportation options countywide. • Personalized travel assistance.
How did the program get started?	Paratransit, Inc. was founded in July 1978, as a single-purpose transportation operating agency that better meets the needs of the elderly and disabled population than could the public transit agency, which ran a small parallel service for the disabled on a door-to-door basis.
What are the challenges?	The main challenge is to have enough personnel who understand mobility management to set up new systems and for local communities to understand the financial benefits of experienced subcontractors helping them to expand operations to assist with funding of services offered locally. Additionally, funding sources are always a challenge as is educating customers that the service is available.
Is the program being marketed?	Marketed through e-newsletters, web updates, Find the Right Ride, the travel ambassador program, and the travel training project.
What are the performance measures?	**Strong management and infrastructure:** • Was a lead agency established? • Was a formal oversight committee established? • How many agencies participated in the oversight committee, formalized or not? How regularly does each participate? • How many agencies submitted coordination project proposals? Of those, how many proposed in-kind/cash contributions from within their organization or partner agencies other than the city? • How much funding was requested? How much funding was received? **Informed public:** • How many people visited the website? • How many people visited Find the Right Ride? • How many individuals received the e-newsletter, how many people opened it, and how many people viewed full articles? • How many organizations were trained in the travel ambassador program? • How many people do those organizations serve? • How many individuals were trained in the travel ambassador program? • How many organizations were trained to be travel trainers? How many individuals? **Barriers overcome:** • Which projects were implemented? • What barriers were identified in each? • What were the recommendations to overcome those barriers? • Are any of the recommendations being implemented, and/or are there plans to implement any of the recommendations? If so, which ones?
What is their definition of Mobility Management?	Mobility Management is a process that involves close contact between various partners in the community in order to improve mobility for the target population (seniors, disabled, low-income). Involvement from the community defines success, and helps improve the likelihood that there will be success.

Additional Comments	Using Paratransit as a model, Assemblyman Walter Ingalls authored Assembly Bill 120, the Social Service Transportation Improvement Act. This landmark legislation included a provision calling for the designation of a Consolidated Transportation Service Agency in each California county. • Paratransit Inc. introduced the concept of shared cost contracting, the underlying element of the Consolidated Transportation Service Agency partnership agreements that have proven so effective in Sacramento today. This approach to service delivery builds on the resources of community agencies and offers partial support of their transportation through subsidized maintenance, insurance, or other technical contributions. The resulting service is far less expensive than traditional door-to-door service commonly provided today under ADA guidelines. • Another innovative program fostered by Paratransit in the early 1980s was travel training. Teaching disabled, elderly, and low-income individuals to use fixed-route public transit rather than door-to-door service proved to be extremely cost-effective. This included the developmentally disabled. • Through its partnership with the Area 4 Agency on Aging, Paratransit was able to transition a substantial number of individuals age 60 and over to fixed-route service from Consolidated Transportation Service Agency nutrition and senior taxi programs (which were oversubscribed). Sacramento system is being managed by Innovative Paradigm on a long-term contract. In addition, other California operations have been initiated in Stockton, San Joaquin County, California, and Modesto, Stanislaw County, California, covering the entire counties, and negotiations have also started with San Bernardino County, California.

Cape Cod Regional Transit Authority (CCRTA)
Barnstable County, Massachusetts



Service area:	Barnstable County encompasses 15 Cape towns and is 396 square miles. (CCRTA also owns and operates the Hyannis Transportation Center in downtown Hyannis.)
Mission & Vision:	Provide accessible, efficient, safe, reliable, and affordable transportation.
Structure:	CCRTA is one of 14 Regional Transit Authorities in the State of Massachusetts, and is responsible for developing, financing, and contracting with private companies.
Partners:	The partners of CCRTA include bus operators, state agencies, human service agencies, the Cape Cod Baseball League, the Department of Mental Retardation, the Department of Public Health, Medicaid, and the Cape Cod Child Development Program.
Goals & Objectives:	Completion of phases II and III of the Mobility Management Center, streamlining of bus operations, and investment in advanced technology. Collaborating with other modes of transportation in the region (marine, bus, boats, bikes, and others) and through coordination of services, ensure that people can get around efficiently in the region.
Funding:	Federal funding and funding from the Commonwealth of Massachusetts and member towns, as well as full fare recovery for customers of the partner organizations. Funding for CCRTA mobility management also comes from JARC and New Freedom grants.
Services Provided:	Fixed route, complementary ADA paratransit, demand response, seasonal transit, medical transportation.
Services Promoted:	Bus, boat, paratransit, demand response, medical transportation, and seasonal transit.



Mobility Management Activities	• Subsidized rides for seniors. • Call center. • Full-time Mobility Manager on staff. • Market and promote transportation options countywide. • Personalized travel assistance.
How did the program get started?	CCRTA's program was implemented as a means to comply with ADA requirements and provide accessible, efficient, safe, reliable, and affordable transportation to the 15 communities in its service area.
What are the challenges?	The major challenge for CCRTA's mobility management program is funding.
Is the program being marketed?	• Banners at the Hyannis Youth and Community Center either in gym or ice rinks. • Advertisement with Guidebook Cape Cod and Kids on the Cape. • Newsletter called *In the Loop*. • Advertisements in kiosks in malls that has a supply of Riders Guides. • Info boards and maps. • Smart Guide. • Facebook. • Website: www.capecodtransit.org
What are the performance measures?	The Cape Cod Mobility Management planning process was reviewed and implemented through the Cape Cod American Recovery and Reinvestment Act (2009) Mobility Management Project (MA-96-X009-01). This project is managed by an Owners Project Manager for Intelligent Transportation Systems. The project reports to an ARRA Mobility Management oversight committee of top agency staff and is chaired by the CCRTA Administrator. It meets weekly, at a minimum, at the CCRTA's Administrative Headquarters at the Hyannis Transportation Center. It uses Microsoft Project to manage the project schedule and milestones. The project manager provides written progress reports on each task of the CCRTA American Recovery and Reinvestment Act Mobility Management Project.
What is their definition of Mobility Management?	A project to connect all transportation modes so that people can connect from one mode of transportation to another without having to use their cars.
Additional Comments	Networking and having the right connections are important in mobility management.

REFERENCE SOURCES FOR SELECTING BEST NATIONAL CASES OF MOBILITY MANAGEMENT PROGRAMS

1. Easter Seals Webinar on Paducah, Kentucky and Aiken, South Carolina.
2. http://assets.aarp.org/rgcenter/ppi/liv-com/roundtable_091013_mobility.pdf. AARP policy paper on Mobility Management Paper.
3. http://www.fta.dot.gov/funding/grants/grants_financing_7633.html.
4. Telephone conversations with members of TRB Standing Committees (APO60, ABE60, and Rural Public and Intercity Bus Transportation Committees).
5. Conversations with James McLary, CTAA Head of MM, Region 2. December, 2010.
6. http://www.calact.org/assets/events/2010%20Conference/OVERVIEW%20OF%20MOBILITY%20MGT%20Cyra.pdf. Accessed on February 28, 2011.
7. Conversation/e-mail contact with Dan Dirks, CTAA.
8. Contacts with Nelson Nygaard, Consultants, November 2010.
9. Rosemary Gerty, Trans-Systems, Inc., Chicago Office, October 2010.
10. Conversation with Jon Burkhardt, Westat, Inc., January 2011.
11. E-mail contact with William Millar, President, APTA, February 2011.
12. http://passengertransport.apta.com/aptapt/issues/2010-12-20/12.html.
13. http://apta.com/resources/hottopics/mobility/Documents/mobility-management-brochure.pdf.
14. http://www.apta.com/resources/hottopics/mobility/Pages/default.aspx.
15. http://www.apta.com/resources/hottopics/mobility/Documents/Business-Case-for-Mobility-Management.pdf

APPENDIX F. DEFINITIONS OF MOBILITY MANAGEMENT

NATIONAL RESOURCE CENTER FOR HUMAN TRANSPORTATION COORDINATION

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.

EUROPEAN PLATFORM ON MOBILITY MANAGEMENT

Mobility Management is a concept to promote sustainable transport and manage the demand for car use by changing travelers' attitudes and behavior.

NATIONAL TRANSIT INSTITUTE

A policy of using all available resources to improve mobility, improve efficiency, and reduce cost.

AMERICAN PUBLIC TRANSPORTATION ASSOCIATION

A strategic approach to service coordination and customer service that is becoming a worldwide trend in the public transportation sector.

COMMUNITY TRANSPORTATION ASSOCIATION OF AMERICA

An innovative methodology that embraces the full family of transportation services, utilizes cutting-edge technology, and still maintains its focus on customers and community.

Per Scott Bogren at Community Transportation Association of America, "The definition of mobility management can be drawn on from all of the articles in the recent CTAA magazine on mobility management. Bogren is reluctant to define mobility management at the risk of excluding an idea. A definition so broad may not necessarily sit well with an agency that has been tasked at overseeing mobility management efforts; however, it is important to pilot new programs and test out new ideas associated with mobility management. The key is to adopt flexibility as much as possible and incentivize certain behaviors and programs within broad categories of mobility management."
http://web1.ctaa.org/webmodules/webarticles/articlefiles/Fall-2010-DigitalCT-Final.pdf

TCRP REPORT 21-A

A mobility manager is a transportation organization serving the general public that responds to and influences the 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.

UNITED WE RIDE

An innovative approach for managing and delivering coordinated transportation services to customers, including older adults, people with disabilities, and individuals with lower incomes. Mobility management focuses on meeting individual customer needs through a wide range of transportation options and service providers. It also focuses on coordinating these services and providers in order to achieve a more efficient transportation service delivery system for public policy makers and taxpayers who underwrite the cost of service delivery.

Per Doug Birnie at United We Ride, "Mobility Management is short-term planning and management activities to coordinate transportation service modes and providers to meet customer needs."

VICTORIA TRANSPORTATION INSTITUTE

Mobility management is a general term for strategies that result in more efficient use of transportation resources, as opposed to increasing transportation system supply by expanding roads, parking facilities, airports, and other motor vehicle facilities. Mobility management emphasizes the movement of people and goods, not just motor vehicles, and so gives priority to public transit, ridesharing, and non-motorized modes, particularly under urban conditions.