



Evaluating the State of Mobility Management and Human Service Transportation Coordination

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prepared by

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ABSTRACT

The Federal Transit Administration and its partners have worked to build a transportation coordination infrastructure to improve community mobility. Recent efforts at coordinating human services transportation have focused on mobility management, emphasizing the needs of customers and using the assets of a number of organizations. As a part of this study, an evaluation method was developed that can be used in communities across the country to examine the effectiveness of their mobility management and coordination programs. Results examine three key impacts: the impacts of services on meeting the needs of transportation-disadvantaged populations, the impacts of improved mobility on quality of life, and the impacts of mobility management and coordination efforts on meeting the goals of quality of service, ease of access, and efficiency. The evaluation method developed for the study consisted of a series of surveys of both transit users and stakeholders in communities across the country. Stakeholders included transit providers, human service agencies, and other organizations. Results from both the end-user and stakeholder surveys suggest improvements in efficiencies, ease of access, and quality of service. Most respondents to the stakeholder survey reported benefits that have been realized. Results from an ordered probit model demonstrate the positive impacts that improved mobility has on life satisfaction.

EXECUTIVE SUMMARY

Organizations across the country have been implementing mobility management programs and attempting to coordinate human service transportation to improve quality of transportation services and ease of access while increasing efficiencies. As agencies seek additional funding for these efforts, more information is needed on the effectiveness of these programs. Therefore, the objectives of this study are as follows:

- 1) Synthesize previous research on the effectiveness of mobility management and coordination programs.
- 2) Develop a survey instrument that could be used in different locations and across time to evaluate the impacts of mobility management and coordination programs on end users.
- 3) Determine the impacts of mobility management and coordination programs in meeting the goals of efficiency, ease of access, and quality of service.
- 4) Assess the effectiveness of mobility management and coordination programs in meeting the needs of transportation disadvantaged populations from the perspective of the end users.
- 5) Develop and test an evaluation model that could be applied to other communities across the country.

Methodology

Two survey instruments were developed and administered at locations across the country. The first was a survey of riders, and the second was a survey of stakeholders, including transportation providers, human service agencies, and other interested organizations. Agencies from across the country participated in the study. Some conducted both stakeholder and rider surveys, while others participated in just the stakeholder survey. These agencies were selected because of their participation in mobility management efforts.

The intent of the transit user survey was to evaluate the impacts that transit services have on the lives of users and to assess the importance and effectiveness of mobility management and coordination efforts. The goal of the stakeholder survey was to learn more about the types of mobility management and coordination activities being conducted, barriers and challenges that exist, successes that have been achieved, and the degree to which the needs of users are being met. By evaluating results from both surveys, the goal was to assess the impacts of mobility management and coordination activities on quality of service, ease of access, trip creation, efficiency, and quality of life impacts on users.

The surveys were developed so that they would not be specific to any community and could be used over time to assess progress. Therefore, the survey instruments provide an evaluation model that could be applied to other communities across the country and could be repeated over time.

The stakeholder survey was conducted online and the rider survey was sent by mail to users of JAUNT in Charlottesville, VA; St. Johns County Council on Aging in Florida; Neighborhood Transportation Services (NTS) and Linn County LIFTS in Cedar Rapids, IA; Seniors' Resource Center (SRC) in the Denver, CO, metro area; and Valley Metro Dial-a-Ride service in the Phoenix, AZ, metro area.

Participating agencies forwarded the stakeholder survey to organizations they partner with in their community, so responses were received from a variety of transportation providers, human service agencies, and other organizations. A total of 111 responses were received for the stakeholder survey and 501 responses for the rider survey.

Evaluation of Programs

Two of the objectives of this research were to assess the impacts of mobility management and coordination programs in meeting the needs of transportation-disadvantaged populations from the perspective of the end-user and to determine the impacts of these programs in meeting the goals of efficiency, ease of access, and quality of service. Results from the rider and stakeholder surveys can be used to address these questions.

Rider Responses

The respondents to the rider survey included a high percentage of women, older adults, people who cannot drive or do not have access to a vehicle, people with disabilities, and individuals from low-income households.

Survey participants included a mix of frequent and infrequent users, as well as long-time and new riders. About a third of respondents have been using the service for more than five years, and more than half have been using it for at least three years, while 10% of respondents just began using the service within the previous six months. Respondents most often use the services for medical trips, but they also use transit services for work, shopping, and a variety of other purposes.

Most respondents to the rider survey were satisfied with the quality of service they are receiving from their transportation provider. For example, 72% were very satisfied with how the service serves their needs, 73% were very satisfied with ease of use, and 69% were very satisfied with available travel destinations. On the other hand, many respondents were dissatisfied with a lack of weekend service, and some expressed dissatisfaction with scheduling procedures.

An important measure of the success of mobility management and coordination efforts is the degree to which service quality is improving for the transit user. A number of respondents reported improvements in service since they have been using it. For example, 31% reported that ease of use has improved, while only 3% answered that it is getting worse. Similarly, 28% reported that the service is doing a better job of serving their needs, while only 4% answered that the service is doing worse. These results show general improvements in quality of service, as perceived by the riders. One area where there does not appear to have been improvements is the availability of weekend service.

The results also show that these transportation programs have significant impacts on the lives of their users. Most of the riders (90%) said the service is very important to them. Many reported that they would not be able to make these trips if the service they use was not available. Survey findings showed that 29% of riders most often would not make the trip if the transportation service was not available, and most of the others would rely on family, friends, volunteer drivers, or taxi services. The results show the significant impact the services have on increasing the ability of riders to make trips.

Results from a model developed from the survey results also show how improving mobility and increasing the number of trips an individual can make improves quality of life. Those who had reported missing a trip during the previous week because of lack of transportation and those who reported greater difficulty in making trips gave significantly lower life satisfaction ratings. These results demonstrate the impacts that mobility management programs can have on the lives of the users. When these efforts result in new transportation options, new trips that can be made, and simplified access to service, quality of life for the users of these services is shown to improve.

While there is some dissatisfaction with lack of weekend hours, and a minority of respondents was dissatisfied with scheduling procedures and some of the other service qualities, the results overall from

the rider survey were positive and showed improvement. Of those who had participated in travel training services, most found it to be helpful.

Stakeholder Responses

Results from the stakeholder survey also suggest these programs have provided benefits. Among those agencies involved with coordination or mobility management, most reported benefits that have been realized, including 65% who reported simplified access to transportation services for riders, 63% who reported an increase in the range of transportation options available to riders, 63% who reported increased awareness of transportation services, and 57% who noted an increase in ridership. Regarding the goal for improved efficiency, 35% reported a reduction in service duplication or overlap, and 30% said that cost per ride has decreased.

The general perspective of the stakeholders is that 1) there are a number of challenges to implementing coordination and mobility management, such as lack of funding, lack of communication, unique needs of various client populations, and many other issues; 2) there is a need for more coordination of existing human service transportation programs; and 3) the programs that have been implemented have had a positive impact on quality of service, ease of access, and, to a lesser extent, efficiency.

Results from the stakeholder survey were somewhat mixed regarding how well services are meeting the needs of end-users. Most indicated some need for more service, such as longer hours, weekend service, or an increase in the scale of services currently available. Forty-four percent of the stakeholders agreed that the transportation needs of their clients are being met, while 42% disagreed. Similarly, 46% agreed that transportation services are easy for their clients to access, and 41% disagreed.

Results were also somewhat mixed regarding the impact that mobility management and coordination programs have had on quality of service, but stakeholders were more likely to indicate there have been improvements. For example, 66% agreed that these efforts have resulted in more transportation options available to their clients, 65% agreed it has resulted in simplified access to transportation services, and a majority also agreed that there has been increased awareness of transportation services and expanded service areas.

Of particular interest is whether or not funds dedicated specifically for mobility management have yielded positive results. Among the agencies surveyed, 29% receive funding specifically for mobility management. These agencies were more likely to report positive results. Sixty percent of those agencies receiving such funding agreed that the transportation needs of their clients are being met, compared to 38% of agencies not receiving funding for mobility management. These organizations were also more likely to note improvements. For example, 43% of organizations receiving funding strongly agreed that there are more transportation options available to their clients, while only 19% of those not receiving funding strongly agreed with this statement.

Assessment of Evaluation Method

Results from the research show that this survey method is effective in different geographic locations. The surveys collected enough information to allow for an effective evaluation of mobility management and coordination activities. Key for such an evaluation is to collect information from a variety of perspectives, including the end-users, transportation providers, human service agencies, and other stakeholders. The survey method can also be useful for tracking progress over time. Results from end-user responses on ability to make trips and satisfaction with transportation service, as well as stakeholder responses on benefits, needs of end-users, and quality of service could be used to track progress in individual communities.

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INTRODUCTION

The Federal Transit Administration (FTA) has been engaged, as part of its livability goals, in helping persons with disabilities, older adults, low income persons, and other transportation-disadvantaged populations to be active and involved in their communities by having access to the mobility options that connect them to employment, community services, and activities. The alternative is isolation or institutional care for these individuals, which drains governmental resources, thwarts individuals from contributing to their communities, and results in diminished health and unfulfilling lives for those who are not able or cannot afford to drive.

To pursue this objective of community connectivity through mobility, the Secretary of Transportation chairs a Federal Interagency Council on Access and Mobility (CCAM) that strives to coordinate federal programs funding transportation to improve community mobility options for transportation-disadvantaged populations. The intent of coordination and mobility management programs is to improve cost-effectiveness and quality of service. The FTA and its Council partners built a transportation coordination infrastructure, including the establishment of coordinated transportation planning processes, mobility management coordination practices, one call/one click transportation management centers, and state leadership activities, including the development of state and regional transportation coordinating councils.

However, a 2011 GAO report suggests that duplication still exists and many improvements could be made to the coordination efforts. The GAO did recognize that improvements had occurred, specifically at the state and local levels, but suggested Congress may want to consider requiring federal funding programs to participate in coordinated planning. A 2012 GAO report further analyzed the issue by examining federal programs that may fund transportation services for the transportation disadvantaged, federal coordination efforts undertaken since 2003, and coordination at the state and local levels. In doing so, the GAO interviewed program officials from eight federal agencies and the National Resource Center for Human Service Transportation Coordination, state and local officials from five states, transportation researchers, and representatives from relevant industry and advocacy groups. Previous research has also examined state human service transportation coordinating councils.

While interviews of federal, state, and local officials have been conducted, less research is available regarding the impacts of these programs on end users. To that end, this study conducted a series of surveys across the country of human service transportation users. The effectiveness of these programs can ultimately be evaluated based on the economic and quality of life impacts they have on their users. This study attempts to answer these questions and investigate quality of service and ease of access from the perspective of the user.

The objectives of the study are as follows:

- 1) Synthesize previous research on the effectiveness of mobility management and coordination programs.
- 2) Develop a survey instrument that could be used in different locations and across time to evaluate the impacts of mobility management and coordination programs on end users.
- 3) Determine the impacts of mobility management and coordination programs in meeting the goals of efficiency, ease of access, and quality of service.
- 4) Assess the effectiveness of mobility management and coordination programs in meeting the needs of transportation-disadvantaged populations from the perspective of the end users.
- 5) Develop and test an evaluation model that could be applied to other communities across the country.

The next section provides a review of previous reports on mobility management and human service transportation coordination, focusing on the evolution of coordination programs into mobility management, a history of federal and state encouragement of mobility management, evaluation methods and techniques, obstacles, and examples of success. To evaluate mobility management efforts in a community, this study developed two survey instruments. One survey is intended for transit users and the other for stakeholders. Section three provides a description of survey development and methodology. These surveys were conducted in a number of sites across the country. Results from the rider and stakeholder surveys are presented in sections four and five, and the final section is a discussion of the findings.

LITERATURE REVIEW

2.1 Evolution of Human Service Coordination Efforts into Mobility Management Strategies

In the past forty years many public sector and non-profit organizations have been created to respond to specific human service needs of children, low income, elderly, and disabled persons in both urban and rural areas. Early on, these organizations realized that lack of transportation prevented potential customers from accessing their services. In response, many human service agencies set up their own transportation services to directly provide rides for their clients. This fragmented response to mobility needs led to a proliferation of providers, and often resulted in duplicative, inefficient services. Further, agency efforts to operate a transportation system diverted attention from the agency's primary purpose. By the late 1970s, primarily due to local initiative, these fragmented systems were combined to offer region-wide transportation to the clients of many agencies and in some cases, especially in rural areas, to the general public.

These early efforts to coordinate human service transportation focused on the supply or provider side of the enterprise with the goal of creating cost-effective organizations that could provide more rides at a lower per-unit cost. More recently, especially in the past 10 years, the vision for coordinated transportation has been expanded to one of mobility management that focuses on customers and meeting their needs, using the assets of a number of organizations, rather than on the production of transportation services.

TCRP Report 53 (Cambridge Systematics, Inc. 1999) presented the case for this new vision. The authors argued that societal trends, industry trends, and public policy constraints create the need for a paradigm shift in local public transportation. This vision was expanded upon in TCRP Report 58 (Cambridge Systematics, Inc. et al. 2000), which addressed why fundamental change is needed in public transportation, what the scope and scale of that change should be, and how that change can be effectively pursued and sustained. They argued that this new paradigm should, among other things, "re-establish the customer's experience as the central, strategic focus of management; rely on expanding partnerships and alliances to assure responsiveness to customer needs;" and be "built on state-of-the-art information technology that provides real-time information on market requirements and service quality throughout the organization" (Cambridge Systematics et al. 2000 p. 24).

Mobility issues can be particularly challenging in rural areas, further emphasizing the need to coordinate transportation resources to use them as effectively as possible. As noted in TCRP Report 101, *Toolkit for Rural Community Coordinated Transportation Services* (Burkhardt et al. 2004), there has been a proliferation of small organizations in rural areas that provide transportation, often with inadequate capital and operating funds. Often each of these organizations owns a few vehicles that can be used only for their agency's own designated clients and purposes. To address these issues, TCRP Report 101 examined strategies and practices for coordinating rural transportation services. The report serves as a resource for implementing and improving coordination efforts in rural communities.

The current study focuses on measuring the impacts of coordination and mobility management efforts on end-users, especially with regard to ease of access, quality of service, and efficiency. Federal initiatives to encourage coordination have also been driven by a desire to attain these same user benefits. Therefore, this literature review will document the history of the federal encouragement of coordination, and mobility management strategies at the state and local level, and document previous evaluations of such efforts. Because of the 2004 Executive Order 13330 and the subsequent activities of the Federal Transit Administration's United We Ride initiative, much of the focus of efforts to promote coordination have been directed toward states and local regions. Therefore, several studies that document and evaluate state

and regional programs are included in this review. This review will also identify and summarize previous efforts to develop evaluation frameworks for mobility management programs.

2.2 The History of Federal and State Encouragement of Coordination and Mobility Management Programs

Nearly all of the earliest examples of coordinated transportation systems resulted from local initiatives. Chapter 2 of TCRP Report 105, *Strategies to Increase Coordination of Transportation Services for the Transportation Disadvantaged* (TransSystems Corporation et al. 2004), provides an excellent history of early coordination efforts and identifies key reasons for their success. This report identifies one of the key ingredients to the success of the efforts of the 1970s and 1980s to be the leadership of a particular individual who believed in the value of coordination and worked to make it a reality. Along with the local champion, access to funding for planning, startup, and operations was a key to continued development of coordinated systems.

In the early stages of coordination efforts, federal and state contributions were primarily in the form of funding for capital and operations. Because most, if not all, coordinated transportation systems receive federal funding, either directly or indirectly, through transit and human service agencies, early efforts to promote coordination focused on federal programs and policies because local efforts to coordinate brought to light barriers to coordination created by state and federal regulations and funding policies such as cost reimbursement, ridership eligibility, and data requirements.

2.2.1 Federal Initiatives to Encourage Coordination and Mobility Management

Federal interagency efforts to encourage coordination date from the mid-1980s and are chronicled and evaluated in a series of reports produced by the Government Accountability Office (GAO) (The GAO's name was changed from the General Accounting Office to the Government Accountability Office in 2004). These reports were produced in response to a legislative mandate, or by request of members of Congress.

The Transportation Equity Act for the 21st Century enacted in 1998 (*TEA-21*) included a requirement that the GAO report on federal agencies that provide non-emergency transportation. This report, *Transportation Coordination: Benefits and Barriers Exist, and Planning Efforts Progress Slowly* (GAO 1999), reviewed the benefits and incentives to human service transportation coordination, the Department of Health and Human Services' (HHS) and the Federal Transit Administration's (FTA) efforts to identify barriers to coordination, and HHS' and FTA's efforts to enhance coordination through state and local transportation planning. TEA-21 also required that regions wishing to receive New Freedom and Job Access Reverse Commute (JARC) grants needed to establish a coordinated transportation planning process.

This 1999 GAO study also chronicled the early history of federal efforts to encourage coordination and reduce the barriers that were said to exist. By 1986, 6,300 organizations provided human service transportation in the United States. These 6,300 organizations had 350,000 drivers and 1.4 billion passengers (Lave and Mathias 2000). With a multitude of human service transportation providers, the federal government attempted to coordinate these providers for the first time. This was deemed important from a multitude of viewpoints. A majority of the human service transportation providers did not have the necessary resources to operate transportation services in a continuous and efficient manner. This lack of resources, combined with the fact that transportation funding came from about 80 different federal programs and departments, made coordination a necessary move.

In October 1986, the Secretaries of the Department of Health and Human Services and the Department of Transportation established a Joint DOT/HHS Coordinating Council on Human Services Transportation Coordination. The two departments agreed to work in concert to promote five goals for achieving the most cost-effective use of federal, state, and local resources, and six objectives such as the removal of barriers that adversely affect coordination of services. In 1998, the Council was renamed the Coordinating Council on Access and Mobility. A key strategy of the newly reconstituted council was to encourage state-level actions to promote coordination.

In 1988 the Council initiated a nationwide effort to identify statutory, regulatory, and programmatic barriers to coordination. It met with 10 regional working groups and assembled a list of 64 barriers that can be categorized into four major areas: uncertainty regarding federal responsibilities for transportation, fragmented accounting and reporting, uncertainty in using resources for recipients other than program constituents, and prohibition against charging fares under the Older Americans Act. Some of the barriers were just misunderstandings of agency policies and regulations and could be easily clarified. Eliminating or reducing other barriers required legislative or regulatory action.

The 1999 GAO study reported that the Coordinating Council had done little since 1988 to resolve any of the issues identified in 1988. The same four major issues identified in 1988 were still unresolved. Likewise, outreach efforts by DOT and HHS in 1995 and 1996 through regional meetings failed to resolve the barriers. The GAO study noted that much of the input at these meetings was in very general, vague terms, such as “turf protection,” which did not allow for focus on specific policies or regulation.

Finally, the GAO study notes that the Coordinating Council developed a draft strategic plan which included six goals, 27 objectives, and 30 tasks; however, the GAO study authors doubted that much would happen with this plan, given the Coordinating Council’s past performance, and the failure to make the draft plan final after a considerable length of time.

The number of human service transportation providers and use of demand-response transportation continued to grow throughout the 1990s and 2000s, with passage of the Americans with Disabilities Act in 1990 contributing to this growth. Between 1996 and 2000, ridership for demand-respond service grew by 25% (Burkhardt et al. 2003). By 1998, there were 22,884 human service transportation providers and 370,000 vehicles designated for human service transportation (Lave and Mathias 2000).

A 2003 GAO study conducted at the request of Congress resulted in a report titled *Transportation Disadvantaged Populations: Some Coordination Efforts Among Programs Providing Transportation Services, but Obstacles Persist* (GAO 2003). The study identified 62 federal programs that funded transportation services. The majority of these programs were funded by four agencies – 23 programs by HHS, 15 programs in the Department of Labor, eight programs in the Department of Education, and six programs in DOT. A very significant finding of the 2003 GAO study was that the exact expenditures on transportation could only be ascertained for 29 of the 62 programs since specific transportation expenditures are not tracked. This lack of cost data was a major barrier to coordination in local areas as well. For fiscal year 2001, these 29 reporting programs spent \$2.4 billion on transportation.

The GAO (2003) found that while the departments of Labor and Education had a number of programs that could fund transportation, these agencies were not a part of the Coordinating Council. The GAO recommended that these two departments join in the Council’s activities. Another significant finding and recommendation was that CCAM’s strategic plan was not linked to its action plan and contained few measurable performance goals. Further, the strategic and performance plans of the two largest funding agencies for human service transportation, the DOT and HHS, had few references to coordination goals or activities.

A significant change and boost to coordination efforts occurred in 2004 with the signing of Executive Order 13330 that established the Interagency Transportation Coordinating Council on Access and Mobility (CCAM) chaired by the Secretary of Transportation. As outlined in the Executive Order (2004), CCAM had the following functions:

- a) promote interagency cooperation and establish appropriate mechanisms to minimize duplication and overlap of federal programs and services so that transportation-disadvantaged persons have access to more transportation services
- b) facilitate access to the most appropriate, cost-effective transportation services within existing resources
- c) encourage enhanced customer access to a variety of transportation and resources available
- d) formulate and implement administrative, policy, and procedural mechanisms that enhance transportation services at all levels, and
- e) develop and implement a method for monitoring progress on achieving the goals of this order

One of the first actions of the CCAM was to establish the United We Ride interagency initiative aimed at improving the availability, quality, and efficient delivery of services for older adults, people with disabilities, and individuals with low incomes (United We Ride 2014). This FTA-funded activity provided technical assistance and training and a range of other resources to help state and local officials enhance coordination efforts. United We Ride adopted a mobility management vision as an expanded view of coordination that emphasized service quality and advocacy for access. This vision is explained in a brochure entitled *Mobility Management* (United We Ride 2007) which states that “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 service delivery.” In addition to this vision, which is similar in scope to earlier coordination efforts, the new vision of mobility management proposes that mobility managers serve as policy coordinators, operations service brokers, and customer travel navigators. The policy coordination role is one of the key differences between previous coordination efforts and mobility management in that the mobility manager now helps communities develop coordination plans, programs, policies, and local partnerships.

In 2004, a member of Congress asked the GAO to follow up on its June 2003 recommendations to determine if, and how completely, they had been addressed by CCAM and its member departments. In response, the GAO reported that CCAM had made some progress in implementing recommendations that should result in improved coordination of federal programs at the state and local level, but that the member departments, with the exception of the DOT, had not included transportation coordination in their departments’ strategic plans (GAO 2004). Likewise, the CCAM had not included performance measures in its strategic plan. The GAO (2004) report also acknowledged that the United We Ride initiative held promise to improve coordination at the state and local levels.

More recently, in 2011, the GAO included recommendations related to coordinated human service transportation as one of 81 recommendations in a much larger study, *Opportunities to Reduce Potential Duplication of Government Programs, Save Tax Dollars, and Enhance Revenue* (GAO 2011). This report summarized the previous GAO studies related to coordination and federal expenditures on human service transportation and provided an updated estimate of \$1.7 billion spent on transportation for fiscal 2011. However, the report noted an inability to track expenses for a number of transportation programs because the federal agency in charge did not require separate tracking of transportation expenses. A further discouraging finding was that three departments with significant transportation programs (50 of the 80 programs identified by GAO), Health and Human Services, the Department of Labor, and the Department of Education, had yet to coordinate their planning processes and requirements with those of the DOT.

The 2011 report concludes that “With limited interagency coordination and direction at the federal level, the United We Ride initiative and the FTA have encouraged state and local coordination” (GAO 2011, p. 136). While the FTA has fully embraced these local coordination efforts, other agencies with major transportation programs have made such participation optional for their grantees. The report suggested that Congress may want to include statutory requirements for participation in coordinated transportation planning in order to assure that coordination benefits are realized.

The most recent GAO performance audit of federal coordination efforts was prepared for the U.S. Senate Committee on Banking, Housing, and Urban Affairs and delivered in June 2012. This report, *Transportation-Disadvantaged Populations: Federal Coordination Efforts Could Be Further Strengthened* (GAO 2012), updated previous studies that catalogued federal programs that funded transportation services for the transportation disadvantaged (Appendix II of the report contains a detailed inventory of these 80 federal programs), described and evaluated federal efforts since 2003 to improve coordination, and examined the types of coordination that has occurred at the state and local levels. The report also examined local and state efforts and included case studies and interviews with state and local officials in Florida, Texas, Virginia, Washington, and Wisconsin. Key findings of the 2012 performance audit noted an apparent lack of activity at the leadership level of the CCAM; the Secretary-level members of the CCAM had not met in four years. The GAO (2012) concluded that while most of the work of the CCAM necessarily took place at the staff working group level, the apparent absence of interest by agency leadership contributed to a lack of buy-in from federal officials. Further, though Executive Orders carry over from one administration to another unless specifically revoked, some agency officials were unclear as to whether Executive Order 13330 was still in effect (GAO 2012).

The GAO (2012) recommended attention in three major areas: adopting a CCAM strategic plan, developing a joint cost-sharing policy between agencies to guide local agencies and providers on approved cost-sharing methods, and expanding coordination planning requirements beyond just FTA programs to all programs administered by CCAM members.

The failure of non-FTA programs to encourage coordination is one of the major shortcomings of federal leadership reported by state and local officials that were interviewed as part of performance audit. Other obstacles to coordination reported by the interviewed officials were changes in state legislation and policies, limited financial resources, and growing unmet needs. Nevertheless, the report catalogued six coordination activities underway at the state and local level: state coordinating councils, regional and local planning processes, one-call centers, mobility managers, vehicle sharing, and outreach and communication activities (GAO 2012).

More recently, Dave Wise, GAO’s director of physical infrastructure issues, testified before the Senate Committee on Banking, Housing, and Urban Affairs and updated some of the findings of the 2012 report (GAO 2014). Specifically, CCAM had met and adopted its 2011-2013 Strategic Plan, which includes specific performance measures that will be discussed later in this chapter. Wise also indicated that the FTA was updating its individual program circulars to stress coordination and coordination planning.

2.2.2 State Initiatives to Encourage Coordination and Mobility Management

Since the 2004 Executive Order, a major focus of both the CCAM and the United We Ride program has been to encourage and facilitate state and local coordination efforts. This focus was in part because of a lack of success in coordinating the many federal programs and agencies with a stake in human service transportation, but perhaps more significantly, a recognition that local leadership and energy are required to achieve coordinated systems. Such leadership can best be encouraged by state and regional planning, policy, and funding efforts.

Some states, such as Florida, have for many years (since 1989) had state-level coordinating bodies created legislatively or by regulation to promote coordination or to directly control the distribution of state-managed program funds in a coordinated manner. Within the past 10 years many other states have taken steps to foster coordinated human service transportation. A report prepared by the National Conference of State Legislatures (NCSL) for the Federal Transit Administration and Department of Labor, *State Human Service Transportation Coordinating Councils: An Overview and State Profiles*, documents the progress in building state-level infrastructure to support coordination and mobility management efforts as of 2009-10 (NCSL 2010).

As of 2010, 26 states had coordinating councils: 12 created by statute and 14 by either a governor's executive order or initiative. Like the CCAM at the federal level, these state coordinating councils bring together representatives of state agencies with a stake in coordinated human service transportation, but they also include representatives of councils of governments with a role in coordination, transportation providers, non-profit organizations that represent people with disabilities, senior citizens, nursing homes, and transit agencies. These councils serve as a focal point for advocating better transportation through coordination, and they are usually responsible for creating inventories of services, conducting needs assessments, and determining how gaps should be filled (NCSL 2010). The report also includes State Coordinating Council Profiles for the states that responded to the survey. As part of the same project, NCSL commissioned more detailed reports for Florida, Wisconsin, Texas, Washington, and Kentucky.

2.3 Evaluation Methodologies for Federal and State Coordinated Transportation and Mobility Management Activities

The previous summary of federal efforts to promote coordination, and more recently a mobility management approach to human service transportation, report on the GAO's evaluation of the effectiveness of the federal activities, and in particular the effectiveness of the CCAM. These periodic judgments of the effectiveness of federal initiatives are usually based on qualitative, rather than quantitative, criteria which compare results to stated objectives, tasks, and milestones identified by the CCAM.

CCAM itself has set out plans and priorities for its activities and then reported on its performance in meeting specific objectives. In a 2011 progress report (CCAM 2011), CCAM summarizes the progress it has made in carrying out five recommendations contained in the 2005 Report to the President pursuant to Executive Order 13330 on Human Service Transportation Coordination. For example, the first recommendation was to seek mechanisms to require participation in a community transportation planning process for human service transportation. Significant progress on implementing this recommendation could be reported because the 2005 federal transportation authorization law, SAFETEA-LU, required the development of a planning process for coordinated public transit human services transportation as a condition for funding. Therefore, CCAM reported in 2011 that every one of the 152 largest urban areas and all 56 states and U.S. possessions have used a coordinated planning process to bring all parties together to explore ways to coordinate services. Another recommendation addressed questions of cost sharing among agencies and programs. CCAM drafted cost sharing principles and guidance but was awaiting ratification by the Office of Management and Budget. Further, CCAM encouraged a TCRP project to be completed that led to TCRP Report 144, *Sharing the Cost of Human Service Transportation* (Burkhardt et al. 2011).

2.3.1 CCAM's 2011-2013 Strategic Plan and Performance Measures

CCAM's 2011-2013 Strategic Plan continues efforts to encourage evaluation of its activities to promote coordination and mobility management by proposing three major strategies that are further defined in terms of 10 objectives. Each of the 10 objectives was then expanded into a number of action steps.

Performance indicators were then proposed to evaluate each action step. For example, Strategy 3 is to expand coordinated human service transportation infrastructure. Objective 7 is related to this strategy and calls for strengthening the coordinated planning process. Three performance measures are proposed: the first measure is that CCAM members must clearly state in their funding information that coordinated planning is an eligible expense; second, the number of new policies and mechanisms created to ensure participation should be reported; and third, the percentage of transportation providers participating in a coordinated planning process must be noted. Objective 8 of the plan is to deploy mobility management. Suggested performance measures include the increased use of FTA funds for mobility management, the number of mobility managers, and the number of mobility managers receiving training or technical assistance.

While the specifics of some measures can be debated, the general framework of the CCAM Strategic Plan and the connection among the overall strategies, specific objectives, tasks, and performance measures could provide a starting point for a more generalized framework for federal and state coordination and mobility management initiatives.

2.3.2 United We Ride Logic Model and Measures

A more general design and evaluation of a coordinated transportation program was promoted as part of the United We Ride technical assistance effort (United We Ride 2007). This design is a customized version of a technique called the Logic Model and Measures, which provides a representation of the theory of change behind a program or initiative. Some of the key concepts are: a description of the situation, a discussion of the inputs and outputs of the process, indicators that are initial markers of success, outcomes, and results. Appendix A presents the recommended specification of the logic model. Of particular interest to the current research is the specification of performance measures to be applied to each activity. The goals and indicators might be appropriate for evaluation of both individual coordinated systems and state-level programs. Further, the data used to conduct the evaluation for these measures should be readily available.

2.3.3 Summary of Evaluation Methodologies for Federal and State Coordination and Mobility Management Initiatives

The previous sections of this literature review summarize the history of federal and state efforts to promote human service coordination and the more recent effort to encourage a mobility management approach to such efforts. The most common form of evaluation was a qualitative judgment on whether federal and state agencies met targets or completed tasks that they agreed to accomplish. The evaluations focused on process and on delivery of products such as technical assistance, training, policy clarifications, etc. The implied assumption was that completion of these tasks would result in increased coordination and the related service and efficiency benefits.

Within the past few years two changes are evident from the review of the literature. First, the strategic and annual plans of CCAM and related programs such as United We Ride, explicitly contain performance measures to assist in the evaluation of program successes. Second, as an integral part of the mobility management philosophy, evaluation of the success of the federal and state programs has taken on a customer focus in addition to continued concern for the performance of the federal and state initiatives. The final section of this literature review will examine these recent efforts to measure local performance and, in particular, to measure performance based on customer-related criteria.

2.4 Evaluation Techniques to Measure the Impact of Mobility Management and Human Service Transportation Coordination on End Users

Performance measurement is nothing new for public transit and human service transportation agencies. Funding agencies often require that certain performance metrics be reported. In addition, many providers have adopted evaluation criteria and measures as part of their internal strategic and business plans. Because of readily available financial and operating data, most measures focus on efficiency criteria. Effectiveness measures, such as customer satisfaction or measures of access to service, are more difficult to quantify than measures such as expense per vehicle hour or one-way passenger trips per hour, so they are not as readily reported. In TCRP Report 53, Cambridge Systematics, Inc. (1999) argued that while traditional measures remain important, it has become increasingly necessary to measure the success of transit investments in broader terms that reflect community goals and expectations. They further argued that measures should shift from those of efficiency and output to measures of impact and outcome.

Mobility management in practice is broader than traditional transit; therefore, conventional performance evaluation schemes need to be adapted to mobility management programs. Recognizing the need for a more robust evaluation framework, the FTA sponsored a study of the state of the art and practice to examine how existing U.S. mobility management programs incorporate performance evaluation. The resulting report, *Performance Measures for Public Transit Mobility Management*, prepared by a group of researchers led by the Texas Transportation Institute (TTI), presents the results of surveys and case studies of state and local entities that received FTA or Texas DOT funding for mobility management activities (Sen et al. 2011). The study included the results of 20 case studies and reported on key measures used by each case study system. The measures vary significantly, but are still primarily focused on measuring traditional transit service objectives.

The surveys conducted by Sen et al. (2011) showed that most mobility management programs used traditional transit performance measures, such as:

- Riders or trips per revenue hour
- Total passengers
- Operating expenses per passenger trip
- Operating expenses per vehicle mile or hour
- On-time performance

A number of organizations, primarily in urban areas, reported unique performance measures considered critical to the success of their programs, such as:

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

This second list of measures requires data that may not be readily available and therefore requires additional effort and expense to collect. Since the terminology used for some of these measures may be new, terms and methods of calculation need to be defined. A representative of one of the five systems identified for a listing of best practices, the San Francisco Metropolitan Transit Authority, is quoted in the report, candidly stating that his agency's goals are "warm and fuzzy, but do they work?" (Sen et al. 2011,

p. 61) Answering this question is a key challenge in designing an evaluation framework that goes beyond traditional transit measures and captures the intended outcomes of a mobility management strategy.

The TTI study summarizes its review of previous literature by concluding that performance measures generally fall into one of five basic types: input, process, output, outcome, and impact measures. The report goes on to suggest the general framework for measures that could be applied to mobility management programs shown in Appendix B.

The authors of the study conclude their research by presenting a detailed framework suggesting seven program goals along with a series of objectives, possible performance measures, and outcomes. Equally important, the recommended framework also specifies how the outcome is measured, who does the measurement, and finally, the type of service environment (rural, small regional, metro) for which the measures might be appropriate. Appendix C presents the list of recommended goals and objectives.

Burkhardt and Yum (2010) also developed recommendations for measuring the performance of human service transportation programs at the national, state, and local levels. At the national level, they argued that several performance measures should be introduced, including allotting a specific amount of annual allocated federal funds for human service transportation projects only and conducting a survey to determine the number of American Public Transportation Association (APTA) member transit systems that employ mobility managers and the percentage of FTA-funded urban areas where programs employ mobility managers. At the state level, they proposed performance measures such as the number of state departments that provide funds for human service transportation activities and the number of state departments providing technical assistance for human service transportation activities. Locally, they proposed that performance measures should include the number of rides provided, overall annual agency budget, annual human service transportation expenses, and list of transportation services supervised or organized by the lead agency and other organizations.

2.5 Obstacles towards Achieving Objectives

The GAO (2012) found that 80 federal programs in eight different departments are authorized to fund transportation services for the transportation-disadvantaged. The departments of Agriculture, Education, Health and Human Services, Housing and Urban Development, Interior, Labor, Transportation, and Veterans Affairs all have programs funding transportation services. The GAO was unable to determine total federal spending on transportation services for the transportation-disadvantaged because many federal departments did not separately track spending for transportation. While there have been efforts to improve coordination between these programs, there still exists a number of obstacles toward coordinating human service transportation and implementing mobility management.

TCRP Reports 91 and 101 (Burkhardt et al. 2003, Burkhardt et al. 2004) provide a discussion of factors that inhibit coordination. Some of these may be considered system obstacles, while others are user-side or provider-side obstacles.

2.5.1 System Obstacles

System obstacles include the incompatibility of software systems, regulatory barriers, and lack of uniformity with respect to measures. The incompatibility of software systems is a significant obstacle, affecting data collection, dispatching, vehicle locating, and reporting. Regulatory barriers regarding trip purpose, eligibility criteria, and fare/donation policies create obstacles, as do the lack of uniformity with respect to different measures, questions about cost allocation, and the inherent difficulty in coordinating individual, one-time, or infrequent rides with transit or group-ride programs.

Burkhardt et al. (2004) noted the following issues (among others) have been considered hindrances: problems in dealing with the various requirements of a large variety of federal funding programs; problems with accountability, cost allocation, paperwork, and reporting; funding issues including matching requirements for federal funds, funding cycles, and lack of sufficient funding; and regulatory requirements, such as prohibitions on crossing local or state boundaries. Burkhardt et al. (2004) noted that while these obstacles exist, they have all been addressed and resolved in one community or another.

The advent of statewide brokerages for Medicaid transportation is another challenge for public transit and human service transportation providers. Current TCRP Project B-44 is examining the effects of separate non-emergency medical transportation (NEMT) brokerages on transportation coordination. The problem statement for this project expresses a concern that this trend leads to less coordination, more duplication, loss of local revenue for transportation providers, trip shifting, and challenges to riders who may be required to book trips through multiple systems, depending on their type of trip (Transportation Research Board 2014).

2.5.1 User-Side Obstacles

Riders, as well as policy-makers, are used to thinking about transportation as segmented services, with certain services belonging to certain groups. As a result, there is passenger resistance to coordination and shared rides. There also can be privacy issues with coordination efforts.

In addition, many mobility management providers do not have their own marketing department. As a result, the user or a potential user has a constrained amount of knowledge regarding the services available. There are also those with a constrained budget who therefore cannot use the mobility management services if they are too expensive (Burkhardt et al. 2003).

2.5.2 Provider-Side Obstacles

From the perspective of the provider, there are a number of obstacles hindering the advancement of a coordinated mobility management system. Obstacles include the fact that organizations are used to working as independent providers. As a result, providers may have trust and respect issues with other providers and may refrain from coordinating service. Uncoordinated service may result in numerous issues including little or no communication amongst providers, lack of an all-inclusive mobility management plan, duplicate services, service that is not cost efficient, and poor quality service (Burkhardt et al. 2003).

There is also the notion amongst providers that service will be worse after coordination than before. The basis of this notion is that there is angst among the agencies that funding will be lost as a result of coordination, as well as a lack of cost efficiencies. There is also concern among providers that laws will prohibit the interaction of specific passengers. (Lave and Mathias 2000). If human service transportation is to be successful, it is necessary to first address these concerns.

2.6 Examples of Success

Three ways to reduce expenditures for transportation providers include vehicle sharing, migrating paratransit users to fixed-route services, and reducing expenditures through proper organization. Examples across the country show how transportation providers have been able to decrease expenses.

The first case addresses reducing expenditures through vehicle sharing. In Yakima, WA, the local mobility management agency, People for People, developed an agreement with the local school district that would allow the agency to use the school's vehicles for seniors when not in use at the school. This

agreement with the schools has saved People for People \$15,000 in annual expenditures. However, there are some disadvantages to sharing service. It may be hard for the user to determine whether the vehicle is in service for the school or for mobility management. Another issue includes the procedure to collect fares, as school buses do not normally contain fare boxes (Burkhardt et al. 2011).

The second case highlights an example of transferring eligible fixed-route users from specialized transportation services. In Miami-Dade County, Florida, Medicaid had been providing costly specialized transportation service. To reduce Medicaid expenditures, Miami-Dade County Transit implemented a new strategy. Medicaid-eligible riders who make six round trips a month for three consecutive months were issued a free bus pass as an incentive to switch from using specialized transportation service to fixed-route service. While only 1% of the users switched to fixed route, the switch in service saved Medicaid \$9.285 million and provided Miami-Dade County Transit an additional \$1.9 million in revenue (Burkhardt et al. 2011).

The following cases shows how costs can be reduced through appropriate organization. Costs can be reduced if the local human service agency provides or coordinates services. ACCESS, in Allegheny County, Pennsylvania, is the mobility management coordinator for the county. ACCESS also provides transportation services for the county. By being the mobility management coordinator and transportation provider, ACCESS has saved the county \$26 million annually (Burkhardt et al. 2011).

Another example is Reach Your Destination Easily (RYDE), in Nebraska. RYDE coordinates mobility management services in south central Nebraska. With RYDE overseeing mobility management in the area, expenditures have been reduced approximately \$400,000 (Burkhardt et al. 2011).

In the state of Massachusetts, the Massachusetts Executive Office of Health and the Massachusetts Human Service Transportation Office created the “Commonwealth of Massachusetts Executive Office of Human Services Transportation Office” in 2001. The goal of the Commonwealth was to enhance coordination and provide guidance to local human service transportation organizations. Though its coordination efforts, the Commonwealth utilized trip coordination to reduce costs through shared rides. In addition, there is a 50% Medicare match rate for rides for those who are eligible for Medicare. By 2010, ridership increased by 7% from the previous year, to a total of 5.5 million trips, and total expenditures decreased by more than 2% (Burkhardt et al. 2011).

The Denver Regional Transportation District (RTD) implemented a mobility management program for the city of Denver and surrounding counties. The two main programs that stem from the Denver RTD mobility management program include its Vanpool Program and its User-Side Subsidy Taxi Program. The Denver RTD Vanpool program receives a subsidy of \$1.19 per rider, while the remaining Denver RTD service receives a \$3.20 per passenger subsidy. With more than 300 thousand riders using the Vanpool Program over conventional transit, the Denver RTD saved nearly \$700 thousand in subsidies in 2006. The second program, the User-Side Subsidy Taxi Program, is a taxi service in which both the Denver RTD and the rider contribute to the cost of the trip. By implementing the Taxi Program, the Denver RTD saved \$1.48 million in expenditures in 2005 (Burkhardt et al. 2011).

Reductions in costs and improvements in service quality have also been achieved through increased development of technologies (Lave and Mathias 2000; Pagano, Metaxatos, and King 2001). While the use of computer technology in the 1970s was not as successful as anticipated, today’s computer technology plays a significant role with regard to mobility management.

SURVEY DEVELOPMENT AND METHODOLOGY

To accomplish the objectives of the research, two survey instruments were developed and administered at locations across the country. The first survey was a survey of riders, and the second was a survey of stakeholders, including transportation providers, human service agencies, and other interested organizations.

The intent of the transit user survey was to evaluate the impacts that transit services have on the lives of users and to assess the importance and effectiveness of mobility management and coordination programs. The goal of the stakeholder survey was to learn more about the types of mobility management and coordination activities being conducted, barriers and challenges that exist, successes that have been achieved, and the degree to which the needs of users are being met. By evaluating results from both surveys, the goal was to assess the impacts of mobility management and coordination activities on quality of service, ease of access, trip creation, efficiency, and quality of life impacts on users.

The surveys were developed so that they would not be specific to any community and could be used over time to assess progress. Therefore, the survey instruments provide an evaluation model that can be applied to other communities across the country and can be repeated over time.

In developing both surveys, input was sought from experts across the country. A project advisory panel was assembled, consisting of experts on mobility management from transit providers, transit organizations, consultants, the North Dakota DOT, and the FTA.

3.1 Survey Development: Rider Survey

Different methods were considered for the rider survey, including conducting it onboard or by mail. Onboard surveys provide a few advantages, including the physical presence of the surveyor who can help and encourage riders to complete the questionnaire. There are also advantages to conducting it by mail. With the mail survey, it was easier to reach a greater percentage of the target population, and it permitted a more in-depth survey instrument that would otherwise be too lengthy or difficult for participants to complete during a transit trip. It was expected that a mail survey would have a lower response rate than one conducted onboard, but more surveys could be distributed by mail, and cost constraints for the study limited the ability to conduct in-person surveys at multiple locations across the country. A mail survey sent to a random selection of riders can also reduce bias. For these reasons, the mail survey was employed. Individual agencies conducting their own surveys, however, may find some advantages to the onboard method. The mail survey was possible because the target population was paratransit and demand-response users, and the participating agencies had mailing lists for their riders.

The rider survey contains six sections. The complete instrument is shown in Appendix D. Part A of the survey asks respondents about their use of the transportation service. Specifically, they are asked how important the service is to them, how often they use it, how long they have been using it, and why they started using the service.

Part B asks about travel destinations and other transportation options. Participants were asked where they go when using the transportation service. Information about trip purpose is useful for understanding the value of the service provided. Providing trips for medical purposes, for example, has positive health impacts on riders, while providing work trips helps riders maintain employment, and providing other types of trips provide various other types of benefits, included improved quality of life.

Respondents were asked if they would make the same number of trips or fewer trips for these activities if the transit service they use was not available. This is important for understanding the impact transit

services have on creating trips and improving mobility for riders. The survey asked about other options available to riders, such as whether they can drive themselves, get a ride from others, use a taxi, etc., or if they have no other options. Results will provide insight into how many trips made by transit riders would be foregone if the service was not available.

Respondents were asked how easy it is, in general, for them to travel to the places they want or need to go to, how often they are able to get the transportation they need, and if there was any destination they needed or wanted to go to during the previous week but could not because of a lack of transportation. Responses to these questions will provide some general insight into how well transportation services are meeting the needs and desires of their users.

Part C includes customer satisfaction questions. First, respondents were asked to rate their level of satisfaction, along a five-point scale ranging from “very satisfied” to “very dissatisfied,” regarding each of the following characteristics of the service they use: serves your needs, number of trips offered, weekend hours, goes where you want to go, ease of use, scheduling procedures, access to information, door-to-door service availability, cost of the service, and comfort. An important measure of the success of mobility management and coordination efforts is the degree to which service quality is improving for the transit user. Therefore, for each of the service qualities surveyed, respondents were asked to indicate if service has gotten better, stayed about the same, or gotten worse.

In Part D, respondents were asked about their use of travel training. First, they were asked if travel training, or help for learning to ride public transportation is available to them. Then they were asked if they had participated in any of the following travel instruction services:

- **Travel orientation:** Where you learned about transportation options, but did not travel on a particular vehicle or did not receive any personal instruction on how to travel.
- **Travel familiarization:** Where you learned about transportation options and traveled on a specific vehicle, but did not receive any personal instruction on how to travel.
- **Travel training:** Where you learned about transportation options, traveled on a specific vehicle, and received personal instruction on how to travel.

If respondents participated in any of these travel instruction activities, they were asked how helpful it was to them. Finally, they were also asked if anyone from an agency or organization had helped them plan their trips.

Part E included an open-ended question where respondents had the opportunity to provide additional comments or suggestions about transportation. Finally, Part F collects information about the respondents, including their gender, age, if they have a valid driver’s license or if they have access to a vehicle, if they have a medical condition or disability that makes travel difficult, their health status, employment situation, and household income.

The final section also includes the following life satisfaction question: “All things considered, how satisfied are you with your life as a whole these days? Use a 1 to 10 scale, where 1 is completely dissatisfied and 10 is completely satisfied.” This question has been used in previous surveys as a measure of life satisfaction (Kahneman and Krueger 2006). The intent of including it in this survey is to analyze how mobility, or how difficult it is to make trips, affects a person’s quality of life. Data on other factors that may affect life satisfaction, such as age, income, disability, and health status, are also collected in the survey. Therefore, responses from the survey can be used to develop a regression model that estimates life satisfaction as a function of these variables. Results could demonstrate the impact of mobility on quality of life.

The survey was initially tested with St. Johns County Council on Aging (COA) in Florida. Minor edits were made after this test run. Questions that may have been too complicated or were inadequately answered were removed or simplified, and new questions were added. Despite these changes, the final survey instrument was mostly the same as the original, so results from the St. Johns COA survey were used in the analysis.

3.2 Survey Development: Stakeholder Survey

The stakeholder survey was conducted online, with links to the survey instrument distributed via email. This survey collected information in the following areas: organization information, involvement in coordination and mobility management activities, barriers and challenges for coordination and mobility management, benefits of these activities, and the degree to which transportation services are meeting the needs of their clients.

First, the survey collected information about the type of organization to which the respondent belongs, the populations they serve, and if they directly provide transportation to their clients. Respondents were asked if their organization has been involved with efforts to coordinate transportation services in their area, and if so, they were asked about their role, factors that contributed to the initiation of these efforts, specific coordination activities they have engaged in, and barriers faced. They were also asked if they receive funds that are specifically to be used for mobility management or if they provide services they consider to be mobility management. If so, they were asked to identify specific mobility management activities their organization has been doing and challenges they have encountered. Survey participants were also asked if there is a need for more coordination in their region, and if so, they were asked to identify additional efforts that should be pursued and the major barriers hindering further coordination.

Respondents were asked if they have documented or noticed any benefits that they could attribute to improved coordination and mobility management in their community. Specifically, they were asked if they have noticed any of the following: reduced cost per ride, increased ridership, simplified access to transportation services for riders, increase in the range of transportation options and services available, expanded transit service area to include new destinations, expanded hours of service, increased service days per week, new weekend service, increased service frequency, reduction in service gaps, reduction in service duplication or overlap, increased awareness of transportation services, increased funding, and improved access to services. They were asked if these efforts have resulted in improved access to transportation services for different transportation-disadvantaged groups, and they were also given an open-ended question to provide more details regarding the benefits realized through coordination and mobility management.

Lastly, respondents were asked to provide opinions on how well the transportation needs of their clients or customers are being met. Specifically, they were asked the degree to which they agree or disagree with whether the transportation needs of their clients are being met and whether the transportation services are easy for their clients to access. They were also asked if they agree that efforts to coordinate transportation services have resulted in a number of different improvements in service quality.

The development of the survey built upon previous surveys conducted by Sen et al. (2011) and United We Ride (UWR) (Virginia Department of Rail and Public Transportation 2006). Sen et al. (2011) studied the state of mobility management throughout the state of Texas, and in doing so, conducted a survey of mobility managers across the state. The Virginia Department of Rail and Public Transportation (DRPT) (2006) report provided information on the status of the human service transportation system in the state of Virginia and its efforts toward coordination. In conducting this research, they surveyed different types of human service agencies throughout the state. Some of the questions for the stakeholder survey were

derived from the surveys conducted by Sen et al. (2011) and Virginia DRPT (2006). For example, questions about potential coordination and mobility management activities and barriers to these efforts were identified through these studies.

Like the rider survey, the stakeholder survey was initially tested with St. Johns County COA, and a few minor changes were made. After conducting the survey in Iowa, Texas, and Virginia, a few comments were received from participants who thought the survey was too long or that some questions were too confusing or contained too much jargon. At this point, additional minor changes were made to improve the organization and clarity of the survey. The changes were minor enough to permit the use of results from all locations. The final survey instrument is shown in Appendix E.

3.3 Survey Locations

One of the goals of the study was to develop an evaluation method that could be used by any community in the country. In conducting our own evaluation, it was desirable to receive survey responses from different types of agencies, in both urban and rural areas, from different locations across the country. Therefore, attempts were made to conduct surveys in each of the 10 FTA regions and with a mix of urban, suburban, and rural areas.

Agencies were identified as potential participants if they were actively engaged in mobility management or transportation coordination activities. These agencies were identified through previously published reports and referrals from United We Ride Ambassadors, the project advisory panel, and other experts across the country.

Potential participants were sent invitations to participate in both the end-user and stakeholder surveys. Because the evaluation model includes both end-user and stakeholder surveys, the intent was for each participating community to conduct both of these surveys. The end-user survey would be conducted of riders for one of the transportation providers in the community, and the stakeholder survey would be completed by the participating transportation provider as well as other transportation providers, human services agencies, and interested stakeholders within that community.

Some of the agencies that were contacted, however, were only interested in participating in the stakeholder survey. Most transportation providers already conduct their own rider surveys, and some indicated that they did not want to add another survey for their riders or that it would be a poor time for a survey because they had just recently completed a rider survey. Other potential participants contacted were involved in mobility management and coordination but did not directly provide transportation themselves, so they were not able to conduct rider surveys.

Although response rates differed between the 10 FTA regions and not all regions were represented with rider surveys, responses were received from a number of different locations across the country, including a mix of urban, suburban, and rural. End-user surveys were completed by riders from six different transportation providers from five different communities and five FTA regions. Stakeholder surveys were received from each of the 10 FTA regions. Table 3.1 shows details about the participating agencies, by FTA region, and their locations are mapped in Figure 3.1.

Table 0.1 Participating Agencies

FTA Region	Participating Agency	Location	Rider Survey	Stakeholder Survey
1	Way to Go CT	North Central Connecticut	No	Yes
2	Tompkins County Dept. of Social Services	Tompkins County, NY	No	Yes
3	JAUNT, Inc.	Charlottesville, VA	Yes	Yes
4	St. Johns County COA	St. Johns County, FL	Yes	Yes
5	Dane County Dept. of Human Services	Dane County, WI	No	Yes
6	Harris County RIDES	Harris County, TX	No	Yes
7	Neighborhood Transportation Service (NTS)	Cedar Rapids, IA	Yes	Yes
	Linn County LIFTS			
	Heart of Iowa Regional Transit Agency (HIRTA)	Central Iowa	No	Yes
8	Seniors' Resource Center (SRC)	Denver, CO	Yes	Yes
9	Valley Metro	Phoenix, AZ	Yes	Yes
10	Community Transportation Association of Idaho (CTAI)	Idaho	No	Yes
	Ride Connection	Portland, OR	No	Yes

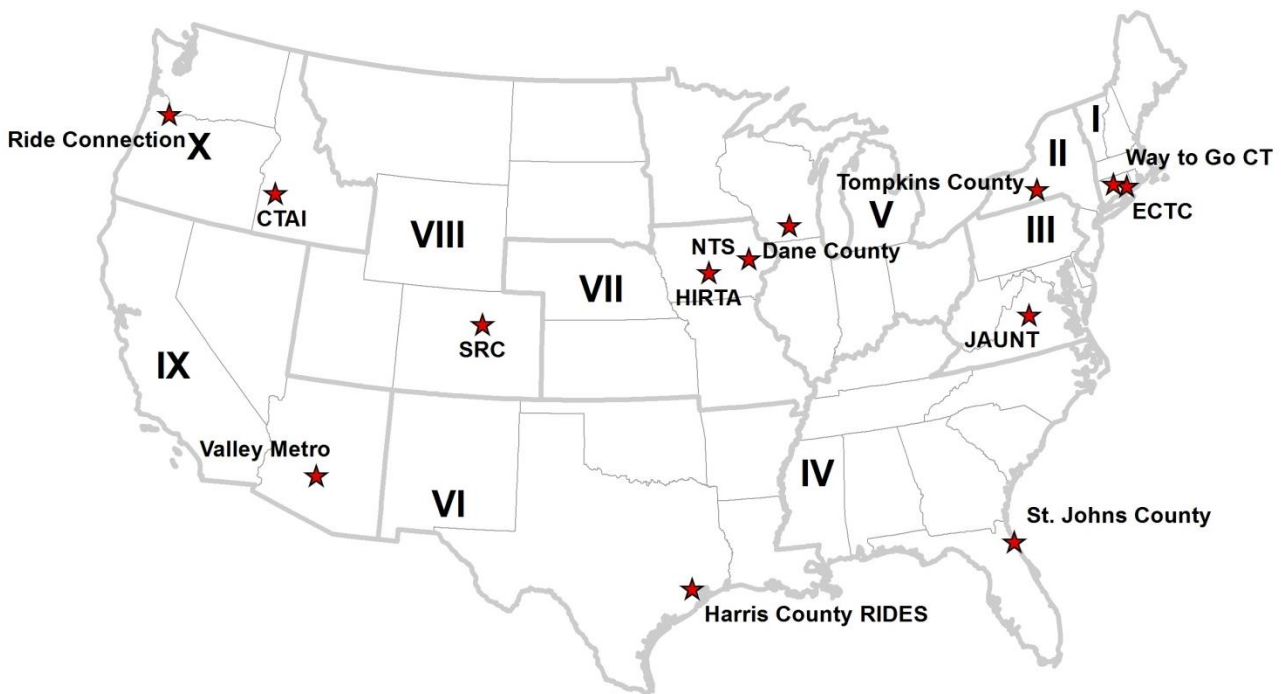


Figure 0.1 Participating Agencies

Region 1: Way To Go CT. The mission of Way To Go CT is to promote the coordination and consolidation of paratransit services in North Central Connecticut for persons of low income, the elderly, and those with physical and mental disabilities. Their goal is to help these transportation-disadvantaged individuals navigate transportation options by creating a point of access for all services available in their region. The program began in 2013 after receiving New Freedom funds.

Region 2: Tompkins County Department of Social Services, NY. This county agency takes a leading role in the coordination of human service transportation in Tompkins County, NY. APTA has a profile of the mobility management programs at Tompkins County on its website (APTA n.d.).

Region 3: JAUNT, Inc. JAUNT Inc. is a regional transportation system providing service to the citizens of Charlottesville, Albemarle, Fluvanna, Louisa, Nelson, and Buckingham Counties in Virginia.

Region 4: St. John's County COA. St. John's COA provides door-to-door transportation for residents who are transportation-disadvantaged and/or are more than 60 years of age. The COA also provides a variety of mobility resources, including information on alternate transportation services in St. Johns County, FL, direction on how to connect to public transit networks throughout northeast Florida, help on how to plan for retirement from driving, travel training for fixed-route bus service, access to volunteer driver services, and safety courses to support independent drivers.

Region 5: Dane County Department of Human Services, WI. This agency provides individual and group transportation services which enable people with disabilities, older adults, and veterans to access their communities and needed services. It provides transportation assistance for low-income families or those with unusual medical transportation expenses, and has programs for refugees and job seekers, as well as a low-income vehicle purchase/repair loan program. The Dane County Department of Human Services plays a leading role in the coordination of human service transportation in Dane County, WI. The Community Transportation Association of America (CTAA) published a profile of the mobility management programs in Dane County (CTAA 2010).

Region 6: Harris County RIDES. Harris County RIDES provides specialized transportation for Harris County, TX, which includes the Houston metropolitan area. It provides a curb-to-curb subsidized program that allows eligible customers and participating agencies to purchase transportation services. The customer or participating agency provides 50% of the total trip cost. The agency provides both a shared ride service, which must be scheduled 24 hours in advance, and a taxi service that can be booked 90 minutes in advance.

Region 7: Neighborhood Transportation Service, Linn County LIFTS, and the Heart of Iowa Regional Transit Agency. Two transportation services in Cedar Rapids, IA, participated in the project: Neighborhood Transportation Service (NTS) and Linn County LIFTS. Also in Iowa, the Heart of Iowa Regional Transit Agency (HIRTA) participated in the stakeholder survey. NTS is a private, non-profit organization that operates curb-to-curb van service and provides night and weekend transportation to work, school, and life skill classes during times when the fixed-route buses in Cedar Rapids are not operating. Service is available in the Cedar Rapids metro area seven days a week, 24 hours a day. Riders schedule appointments for transportation to work, education, and job training at least 24 hours in advance. Linn County LIFTS provides door-to-door transportation service for older adults and people with disabilities in the Cedar Rapids metro area, and they provide public transportation to all Linn County residents outside the metro area. HIRTA provides transit services in the following seven counties in central Iowa: Boone, Dallas, Jasper, Madison, Marion, Story, and Warren.

Region 8: Seniors' Resource Center. Seniors' Resource Center (SRC) is a multi-service provider where older adults in the Denver, CO, metro area can either gain access to direct services provided by SRC or obtain referrals to services provided by others in the community. SRC provides accessible door-through-

door transportation to older adults and people with mobility impairments in Adams, Clear Creek, Gilpin, and Jefferson counties of Colorado. In addition to transportation services, it also provides adult day and respite services, in-home care services, mental health outreach, volunteer opportunities, and care management services.

Region 9: Valley Metro. Valley Metro is a regional transit system for the Phoenix, AZ, metropolitan area. Its services include local, express, and commuter bus; light rail; neighborhood circulators; a rural route; dial-a-ride; vanpools; and assistance to local businesses to help them meet country trip reduction goals.

Region 10: Community Transportation Association of Idaho (CTAI) and Ride Connection. CTAI is a member-driven nonprofit that promotes alternative transportation options, facilitates a variety of programs and trainings, and receives state and federal grant funding to facilitate several multi-modal transportation programs in Idaho. It employs district mobility managers for each of six districts across the state to help target their programs to meet specific community needs. Ride Connection is a non-profit that works with community partners to provide and coordinate transportation options primarily for older adults and people with disabilities. Ride Connection and its network of partners serve individuals in Clackamas, Multnomah, and Washington counties of Oregon.

3.4 Survey Administration

Rider surveys were administered by mail, and surveys were conducted from May-September 2013. Each potential survey participant received a cover letter explaining the project and inviting them to participate, the survey, and a preaddressed and postage-paid return envelope. Rider surveys were distributed differently at each location depending on the preferences of the participating agency.

- JAUNT had its drivers hand out copies of the survey, along with return envelopes, to their riders. They distributed 100 surveys.
- St. John's COA provided names and mailing addresses of 145 of their transit users and SURTC mailed surveys to these individuals. Of these, 14 were returned undeliverable, resulting in 131 surveys that were delivered. Postcard reminders were delivered three weeks after the initial mailing.
- In Iowa, we sent 200 copies of paper surveys with postage-paid return envelopes to NTS and 250 to LIFTS. NTS and LIFTS then distributed the surveys to a sample of their riders.
- We provided SRC with 750 surveys and postage-paid return envelopes, and SRC mailed the surveys to their riders.
- Valley Metro provided names and addresses of users of their East Valley Dial-a-Ride service. We randomly selected 750 of these users and mailed them surveys and postage-paid return envelopes. Postcard reminders were delivered two weeks after the initial mailing. Among the 750 surveys were 17 large-print versions of the survey sent to individuals known to have visual impairments.

Stakeholder surveys were administered online. A link to the survey was sent to individuals from each of the participating agencies identified in Table 3.1. The intent was for there to be a variety of responses from different organizations in each community. Therefore, each recipient was asked to complete the survey and also pass it on to organizations they partner with or other interested stakeholders within the area, or they were asked to provide names of other organizations and individuals in the area that the survey could be sent to.

RIDER SURVEY RESULTS

Responses to the rider survey were received from six different transportation providers across the country, as shown in Table 4.1. Transportation providers from the Charlottesville, VA; St. Johns County, FL; Cedar Rapids, IA; Denver, CO; and Phoenix, AZ, areas participated in the survey. A total of 2,181 surveys were distributed, and 501 responses were received, yielding a response rate of 23%. Response rates at the individual agencies ranged from 13% to 31%, and responses from SRC users in the Denver, CO, area represented the largest share of responses.

Table 0.1 Rider Survey Participating Locations and Response Rates

FTA Region	Participating Agency	Location	Surveys Distributed	Survey Responses Received	Response Rate
3	JAUNT	Charlottesville, VA	100	19	19%
4	St. Johns COA	St. Johns County, FL	131	32	24%
7	Neighborhood Transportation Services (NTS)	Cedar Rapids, IA	200	42	21%
7	Linn County LIFTS	Cedar Rapids, IA	250	75	30%
8	Seniors' Resource Center (SRC)	Denver, CO	750	232	31%
9	Valley Metro – East Valley Dial-a-Ride	Phoenix, AZ	750	101	13%
Total			2,181	501	23%

4.1 Characteristics of Respondents

Respondents to the survey tended to be older, female, and of lower income, and many do not drive or have a condition or disability making travel difficult. As shown in Table 4.2, 72% of the respondents were female; 44% were aged 75 or older, and nearly two-thirds were 65 or older; 40% had a valid driver's license while just less than one-fourth had access to a vehicle; 70% had a medical condition or disability that makes it difficult to travel; and 72% had household income of less than \$20,000. These results suggest the respondents were largely transit-dependent riders who likely have limited transportation options.

Table 0.2 Characteristics of Respondents

	Response Percent	Response Count
Gender		
Male	28%	129
Female	72%	340
Age		
18 to 24	2%	10
25 to 34	5%	25
35 to 49	6%	30
50 to 64	22%	104
65 to 74	21%	101
75 or older	44%	211
Valid Driver's License		
Yes	40%	193
No	60%	286
Access to a Vehicle		
Yes	23%	110
No	77%	361
Medical Condition/Disability		
Yes	70%	325
No	30%	136
Overall Health		
Good	37%	173
Fair	49%	234
Poor	14%	66
Employment Status		
Employed, full-time	8%	36
Employed, part-time	7%	34
Not employed, looking for work	2%	10
Not employed, not looking for work	4%	18
Retired	54%	256
Disabled, not able to work	25%	116
Household income		
\$0-\$19,999	72%	310
\$20,000-\$39,999	21%	93
\$40,000-\$59,999	4%	16
\$60,000-\$79,999	2%	7
\$80,000 or more	2%	7

1.2 Use of the Transportation Service

The survey shows that these transportation agencies are providing a very valuable service to their riders. Nearly all respondents answered that the service is important to them, including 90% who said it is very important (Table 4.3). Response to this question was consistent across agencies surveyed.

Table 0.3 How important is this service to you?

Answer Options	Response Percent	Response Count
Very Important	90%	445
Somewhat Important	9%	44
Not Important	1%	4
answered question		493

The respondents included a mix of frequent (15% use the service five or more days per week) and infrequent (10% use it less than once a month) users (Table 4.4). About a third of respondents have been using the service for more than five years, and more than half have been using it for at least three years, while 10% of respondents just began using the service within the previous six months (Table 4.5).

Table 0.4 How often do you use this transportation service?

Answer Options	Response Percent	Response Count
5-7 days a week	15%	74
2-4 days a week	32%	154
Once a week	14%	70
Once or twice a month	29%	138
Less than once a month	10%	48
answered question		484

Table 0.5 How long have you been using this service?

Answer Options	Response Percent	Response Count
More than 5 years	34%	165
3-5 years	22%	108
1-2 years	26%	125
6 months to a year	8%	41
Less than 6 months	10%	50
answered question		489

Respondents provided a number of different reasons for why they started using the service (Table 4.6). Most commonly, they said they could no longer drive or had difficulties driving, while a number also said they began using the service when they could not get a ride from others or no longer had access to an automobile.

Table 0.6 Why did you start using this service? (check all that apply)

Answer Options	Response Percent	Response Count
I could no longer drive or had difficulties driving	58%	283
I could not get a ride from others or did not want to	40%	192
I no longer had access to an automobile	40%	195
I use this service because it is most convenient	32%	157
Service became available	28%	135
I moved or began traveling to different locations	15%	71
I don't like to drive in poor weather	13%	62
I use this service to save money	13%	64
I use this service because it is good for the environment	12%	56
Other	9%	45
answered question		486

4.3 Travel Destinations and Transportation Options

Respondents most commonly use these services for health care trips (Table 4.7). Overall, 73% of the respondents use the service, at least some of the time, for medical trips, while 32% use it for shopping, 18% use it for other personal business, and 16% use it for work. The responses differ between agencies, however. For example, NTS primarily provides work trips, and SRC, serving older riders, provides a high percentage of medical trips. The results show that while agencies may focus on medical or work trips, riders use the services for a number of different purposes.

Table 0.7 Where do you go when using this transportation service?

Answer Options	St. Johns					Valley	Total (n=496)
	COA (n=31)	JAUNT (n=19)	NTS (n=42)	LIFTS (n=74)	SRC (n=228)	Metro (n=101)	
Health care/medical appointments	97%	74%	14%	59%	85%	73%	73%
Work	10%	42%	88%	19%	0%	17%	16%
Volunteering	10%	26%	2%	11%	1%	12%	6%
School or job training	0%	16%	10%	7%	0%	10%	4%
Shopping	29%	63%	0%	31%	28%	53%	32%
Visit friends or family	3%	21%	0%	5%	3%	28%	9%
Agency/organization providing services	7%	11%	0%	23%	11%	16%	13%
Other personal business	10%	32%	2%	19%	17%	29%	18%
Other social or recreational activities	10%	32%	0%	20%	9%	35%	16%

The impact of the transportation service can be demonstrated by how riders indicated they would respond if the service was no longer available. Many respondents would not be able to make these trips if the service they use was not available. Only 38% of respondents would continue to make the same number of trips if the service was not available (Table 4.8). The remainder would either make somewhat fewer trips (13%), a lot fewer trips (26%), or no trips at all for (22%) for the activities they currently use the service for. These results show the significant impact the services have on increasing the ability of riders to make trips, and the results are especially important considering the percentage of trips that are for health care purposes.

Table 0.8 If this service was not available, would you make the same number of trips or fewer trips for these activities?

Answer Options	St. Johns					Valley	Total (n=443)
	COA (n=31)	JAUNT (n=18)	NTS (n=42)	LIFTS (n=68)	SRC (n=215)	Metro (n=100)	
Same number of trips	29%	39%	43%	38%	44%	25%	38%
Somewhat fewer trips	23%	17%	10%	12%	12%	17%	13%
A lot fewer trips	24%	33%	21%	22%	25%	33%	26%
No trips	24%	11%	26%	28%	20%	25%	22%

When asked what mobility options were available if this service was no longer available, only 7% of respondents said that they can drive themselves (Table 4.9). Although higher percentages reported having a drivers' license and access to a vehicle, many may be limited drivers who are comfortable driving in only certain conditions or for certain trips. Other transportation options available to these transit riders most commonly include getting a ride from a family member or friend (an option for 46% of respondents) or using a taxi (an option for 31% of respondents). Nearly one fourth answered that they have no options other than the transit service they are using. When asked to identify how they most often would get to where they are going if the service was not available, 32% said they would get a ride from a family member or friend, 12% would get a ride from a volunteer driver, 11% would use a taxi, and very few would use some other option (Table 4.10). Only 4% would drive and 29% would not make the trip.

Table 0.9 If this service was not available, what other options are available to you (check all that apply)

Answer Options	St. Johns	JAUNT	NTS	LIFTS	SRC	Valley	Total
	COA (n=32)					Metro (n=100)	
Drive myself	6%	21%	2%	5%	9%	2%	7%
Ride with family member or friend	59%	63%	29%	45%	49%	44%	46%
Get a ride from a volunteer driver	16%	5%	2%	19%	33%	14%	22%
Walk or bicycle	6%	0%	24%	7%	5%	14%	9%
Use a taxi	28%	32%	29%	22%	24%	53%	31%
Other	13%	11%	14%	8%	14%	7%	11%
I have no other options	13%	26%	36%	32%	18%	20%	23%

Table 0.10 Most often, how would you get to where you're going if this service wasn't available (select one response)?

Answer Options	St. Johns	JAUNT	NTS	LIFTS	SRC	Valley	Total
	COA (n=28)					Metro (n=80)	
Drive myself	0%	11%	0%	5%	5%	0%	4%
Ride with a family member or friend	39%	56%	21%	29%	35%	28%	32%
Get a ride from a volunteer driver	7%	0%	3%	12%	17%	6%	12%
Walk or bicycle	4%	0%	23%	2%	2%	1%	4%
Use a taxi	18%	11%	18%	3%	5%	28%	11%
Other	0%	6%	8%	7%	11%	5%	8%
I would not go	32%	17%	28%	41%	26%	33%	29%

4.4 Ability to Make Trips

Responses varied regarding how easy it is to make trips, as 20% said it is very easy to travel to the places they want or need to go, and the same number also said it is very difficult (Table 4.11). Half of respondents said they always, or almost always, are able to get the transportation they need, so they can go where they want to go, while 20% are often able to get transportation, 23% are only sometimes able to get transportation, and 8% are rarely able to get transportation (Table 4.11). Meanwhile, 20% said there was a destination they wanted to travel to during the previous week but could not because of a lack of transportation (Table 4.13).

Table 0.11 In general, how easy is it for you to travel to the places you want or need to go to, considering all forms of transportation?

Answer Options	St. Johns COA	JAUNT (n=17)	NTS (n=42)	LIFTS (n=71)	SRC (n=220)	Valley Metro (n=95)	Total (n=445)
Very easy	-	18%	19%	30%	15%	25%	20%
Somewhat easy	-	12%	17%	18%	21%	29%	22%
Neither easy nor difficult	-	47%	14%	7%	11%	17%	13%
Somewhat difficult	-	6%	33%	21%	29%	19%	25%
Very difficult	-	18%	17%	24%	24%	9%	20%

Table 0.12 How often are you able to get the transportation you need, so you can go where you want to go?

Answer Options	St. Johns COA	JAUNT (n=18)	NTS (n=41)	LIFTS (n=68)	SRC (n=226)	Valley Metro (n=98)	Total (n=451)
Always or almost always	-	72%	29%	53%	51%	49%	50%
Often	-	11%	34%	16%	16%	26%	20%
Sometimes	-	11%	24%	24%	25%	19%	23%
Rarely	-	6%	12%	7%	8%	6%	8%

Table 0.13 Was there any destination you needed or wanted to go last week but did not due to lack of transportation?

Answer Options	St. Johns COA (n=30)	JAUNT (n=19)	NTS (n=42)	LIFTS (n=66)	SRC (n=221)	Valley Metro (n=99)	Total (n=477)
Yes	40%	0%	21%	15%	19%	22%	20%
No	60%	100%	79%	85%	81%	78%	80%

4.5 Satisfaction with Transportation Service

Most respondents were satisfied with the quality of service they are receiving from their transportation provider. As shown in Table 4.14, respondents were asked to rate how satisfied they are with different aspects of service quality. With just one exception, a majority of respondents answered that they are very satisfied with the service qualities. For example, 72% were very satisfied with how the service serves their needs, 73% were very satisfied with ease of use, 69% were very satisfied with available travel destinations, and similar results were found for other characteristics. The one exception was weekend hours, where only 35% were very satisfied with the availability of service on the weekends. The percentage of respondents who expressed dissatisfaction, either being somewhat or very dissatisfied, was at or below 10% for each of these characteristics, with the exception of weekend hours. The characteristic respondents were least satisfied with, after weekend hours, was scheduling procedures, which was given a dissatisfactory rating by 10% of respondents.

Table 0.14 Level of satisfaction with the transportation service

	Very Satisfied		Somewhat satisfied		Neither satisfied nor dissatisfied		Somewhat dissatisfied		Very dissatisfied	
	%	No.	%	No.	%	No.	%	No.	%	No.
Serves your needs	72%	347	20%	95	4%	19	3%	12	1%	6
Number of trips offered	64%	262	23%	95	8%	32	3%	13	2%	8
Weekend hours	35%	107	18%	54	26%	79	10%	31	12%	37
Goes where you want to go	69%	314	18%	81	7%	30	4%	17	3%	12
Ease of use	73%	319	18%	78	5%	20	3%	13	2%	9
Scheduling procedures	58%	261	26%	118	6%	28	7%	30	3%	14
Access to information	63%	271	21%	91	10%	42	5%	20	2%	7
Door-to-door service availability	80%	367	12%	55	5%	21	2%	10	2%	8
Cost of the service	74%	330	13%	59	7%	29	4%	19	2%	8
Comfort	75%	350	16%	73	5%	25	2%	8	2%	8

An important measure of the success of mobility management and coordination efforts is the degree to which service quality is improved for the transit user. For each of the service qualities included in Table 4.14, respondents were asked to indicate if service has gotten better, stayed about the same, or gotten worse. A majority of respondents answered that service had stayed about the same, but a number also reported improvements in service and fewer noted declines in service (Table 4.15). For example, 31% of respondents reported that ease of use has improved, while only 3% answered that it is getting worse. Similarly, 28% reported that the service is doing a better job of serving their needs, while only 4% answered that the service is doing worse. These results show general improvements in quality of service, as perceived by the riders. One area where there does not appear to have been improvement is the availability of weekend service.

Table 0.15 Have you noticed any changes in quality of service?

	Has gotten better		Has stayed the same		Has gotten worse	
	%	No.	%	No.	%	No.
Serves your needs	28%	123	68%	303	4%	19
Number of trips offered	20%	81	75%	306	5%	20
Weekend hours	15%	43	73%	209	12%	34
Goes where you want to go	27%	114	70%	294	4%	15
Ease of use	31%	129	66%	277	3%	12
Scheduling procedures	26%	114	67%	289	7%	29
Access to information	26%	103	71%	281	4%	14
Door-to-door service availability	33%	141	64%	273	3%	11
Cost of the service	24%	100	68%	278	8%	32
Comfort	31%	132	67%	287	2%	9

4.6 Travel Training

Close to half of respondents did not know if they had travel training available to them, while about one-fifth had participated in some type of travel instruction service (Tables 4.16 and 4.17).

Table 0.16 Is travel training, or help for learning to ride public transportation, available to you?

Answer Options	St. Johns COA (n=30)	JAUNT (n=17)	NTS (n=41)	LIFTS (n=64)	SRC (n=215)	Valley Metro (n=96)	Total (n=465)
Yes	38%	41%	46%	31%	22%	39%	31%
No	9%	6%	15%	22%	26%	19%	21%
Don't know	53%	53%	39%	47%	52%	43%	48%

Table 0.17 Have you participated in any of the following travel instruction services?

	St. Johns COA (n=30)	JAUNT (n=18)	NTS (n=40)	LIFTS (n=56)	SRC (n=193)	Valley Metro (n=90)	Total (n=427)
Travel orientation	7%	0%	3%	2%	9%	18%	9%
Travel familiarization	13%	0%	5%	0%	9%	11%	8%
Travel training	17%	11%	5%	5%	9%	16%	10%
None of the above	80%	89%	88%	93%	82%	67%	81%

Respondents were specifically asked about three different types of travel instruction services: travel orientation, travel familiarization, and travel training. Definitions of each were provided to survey participations, as shown in section 3.2, and they were asked to indicate if they have received any such instruction.

In total, 19% of respondents reported participating in one of these types of services, with the distribution between the three being fairly even. Some respondents reported participating in more than one.

Of those who had participated in travel instruction services, most found it to be helpful, and a majority said it was very helpful (Table 4.18). Only 6% did not find it to be helpful. In addition to these travel instruction services, 23% of respondents said that someone has helped them plan their trips (Table 4.19).

Table 0.18 If you have participated in travel training or any travel instruction activities, was it helpful to you?

	St. Johns COA (n=4)	JAUNT (n=4)	NTS (n=9)	LIFTS (n=11)	SRC (n=38)	Valley Metro (n=27)	Total (n=93)
Very helpful	100%	50%	44%	55%	55%	56%	56%
Somewhat helpful	0%	50%	44%	45%	37%	37%	38%
Not helpful	0%	0%	11%	0%	8%	7%	6%

Table 0.19 Has anyone from an agency or organization helped you plan your trips?

	St. Johns COA (n=31)	JAUNT (n=16)	NTS (n=37)	LIFTS (n=64)	SRC (n=214)	Valley Metro (n=94)	Total (n=456)
Yes	32%	19%	11%	34%	23%	17%	23%
No	68%	81%	89%	66%	77%	83%	77%

4.7 Impact of Mobility on Quality of Life

Results from the survey can be used to show the impact of mobility on quality of life, or life satisfaction. It is expected that life satisfaction could be influenced by a number of factors, including age, disability, health status, and income. Data on all of these variables, as well as life satisfaction and different measures of mobility, were collected in the survey. Using these data, an ordered probit model was developed that estimated life satisfaction as a function of age, disability, health status, income, whether or not the individual missed a trip during the previous week because of a lack of transportation, and the degree of difficulty in making trips. Responses from 344 survey respondents were used to calibrate the model.

Life satisfaction was measured on a 1-10 scale, with a higher number indicating greater satisfaction. An ordered probit model was used because the dependent variable was measured using a scale, where there is a natural order to the choice categories. Ordered probit and logit models are commonly used when the dependent variable is a ranking.

The explanatory variables were also measured using a scale or with a dummy variable. Age was measured with a 1-6 scale (where 1=18-24, 2=25-34, 3=35-49, 4=50-64, 5=65-74, and 6=75 or older), disability was measured using a dummy variable equal to 1 if the individual reported having a disability or medical condition that makes it difficult to travel and 0 if not, health status was measured with a 1-3 scale (where 1=poor, 2=fair, and 3=good), and income was measured with a 1-5 scale (where 1=less than \$20,000, 2=\$20,000-\$39,999, 3=\$40,000-\$59,999, 4=\$60,000-\$79,999, and 5=\$80,000 or more). It is expected that increases in income and improvements in health status will have positive effects on life satisfaction, while it is hypothesized that those with disabilities will have lower life satisfaction. The expected effect of age on life satisfaction was uncertain.

Finally, mobility was measured using two factors. The first was a dummy variable equal to 1 if the respondent had missed a trip during the previous week because of lack of transportation and 0 otherwise. The second was the response regarding how difficult it is to travel to the places they want or need to go to, considering all forms of transportation available. The variable was measured with a 1-6 scale, where 1=very easy and 6=very difficult.

Table 4.20 shows the estimated results. The statistically significant variables are noted, and the calculated odds ratios are shown. If an odds ratio is greater than 1, it indicates an increased probability of the respondent giving a higher life satisfaction score as the value of the independent variable increases, and a value less than 1 indicates a decreased probability.

The impacts of age, disability, and income were all statistically insignificant, while the other three variables had significant impacts. As expected, health status was found to have a significant impact on life satisfaction. Increases in health status were associated with higher life satisfaction ratings. The results show that the odds of giving a higher life satisfaction score increase by 88% as health status increased from poor to fair or from fair to good.

Table 0.20 Factors Affecting Life Satisfaction: Results from Ordered Probit Model (n=344)

Variable	Estimate	Odds Ratio
Age (1-6 scale)	0.012	1.01
Disability (0-1)	-0.023	0.98
Health Status (1-3 scale)	0.633**	1.88
Income (1-5 scale)	0.0148	1.01
Missed Trip (0-1)	-0.4067**	0.67
Travel Difficulty (1-5 scale)	-0.1138**	0.89

* $p < .05$, ** $p < .01$

The results demonstrate the importance of mobility on life satisfaction. Those who had reported missing a trip during the previous week because of lack of transportation and those who reported greater difficulty in making trips gave significantly lower life satisfaction ratings. The odds ratios for these two variables were 0.67 and 0.89, respectively, indicating decreases in the odds of a respondent giving higher life satisfaction scores if they missed a trip or if travel became more difficult. The impacts of mobility on life satisfaction were found after controlling for other factors such as age, disability, health status, and income.

These results demonstrate the impacts that mobility management programs can have on the lives of the users. When these efforts result in new transportation options, new trips that can be made, and simplified access to service, quality of life for the users of these services is shown to improve significantly.

STAKEHOLDER SURVEY RESULTS

The number of stakeholder responses by location is shown in Table 5.1. A total of 111 responses were received. The greatest concentration of responses was received from the participating agencies in Iowa, but responses were received from each of the 10 FTA regions.

Table 0.1 Number of Responses to Stakeholder Survey by Location

FTA Region	Contact Agency	Location	Number of Responses
1	Way to Go CT	North Central Connecticut	7
	Eastern CT Transportation Consortium, Inc.	Eastern Connecticut	1
2	Tompkins County Dept. of Social Services	Tompkins County, NY	2
3	JAUNT, Inc.	Charlottesville, VA	11
4	St. Johns County COA	St. Johns County, FL	4
5	Dane County Dept. of Human Services	Dane County, WI	4
6	Harris County RIDES	Harris County, TX	13
7	Neighborhood Transportation Service	Cedar Rapids, IA	21
	Heart of Iowa Regional Transit Agency	Central Iowa	39
8	Seniors' Resource Center	Denver, CO	3
9	Valley Metro	Phoenix, AZ	1
10	Community Transportation Association of Idaho	Idaho	4
	Ride Connection	Portland, OR	1
Total			111

5.1 Characteristics of Survey Respondents

A number of different types of organization completed the survey, as shown in Table 5.2. Approximately one third of respondents identified themselves as belonging to a multi-purpose human service agency, 15% were from a public transit agency, and the remainder was from a variety of different types of organizations. Among the other agencies not identified in Table 5.2 include organizations serving older adults or people with intellectual disabilities, visual impairments, or mental health problems, as well as agencies focused on counseling, early childhood education, school district special programs, environmental issues, supportive community living, youth shelter, and sheltered employment. Responses were also received from local government, municipal social services departments, a metropolitan planning organization, community centers, non-profit organizations, and statewide transit associations. These agencies serve a number of different populations, as shown in Table 5.3. Half of the respondents were from organizations that directly provide transportation services to their clients (Figure 5.1).

Table 0.2 Types of Organizations Represented in Stakeholder Survey

Answer Options	Response Percent	Response Count
Multi-purpose human service organization	35%	39
Public transit agency	15%	17
Public health agency/healthcare clinic/hospital	9%	10
Area Agencies on Aging	5%	5
Housing and shelter organization	5%	5
Non-profit community service transportation	5%	5
Food and nutrition agency	3%	3
Assisted Living Facility	3%	3
ADA services	2%	2
Veterans organization	1%	1
Employment agency	0%	0
Other	32%	35
<i>answered question</i>		110

Table 0.3 Populations Served by Responding Organizations

Answer Options	Response Percent	Response Count
The elderly	71%	79
People with disabilities	71%	79
Children and families	54%	60
Veterans	47%	52
The homeless	41%	46
General public	41%	46
People with addictions	38%	42
Immigrants	33%	37
Other	19%	21
<i>answered question</i>		111

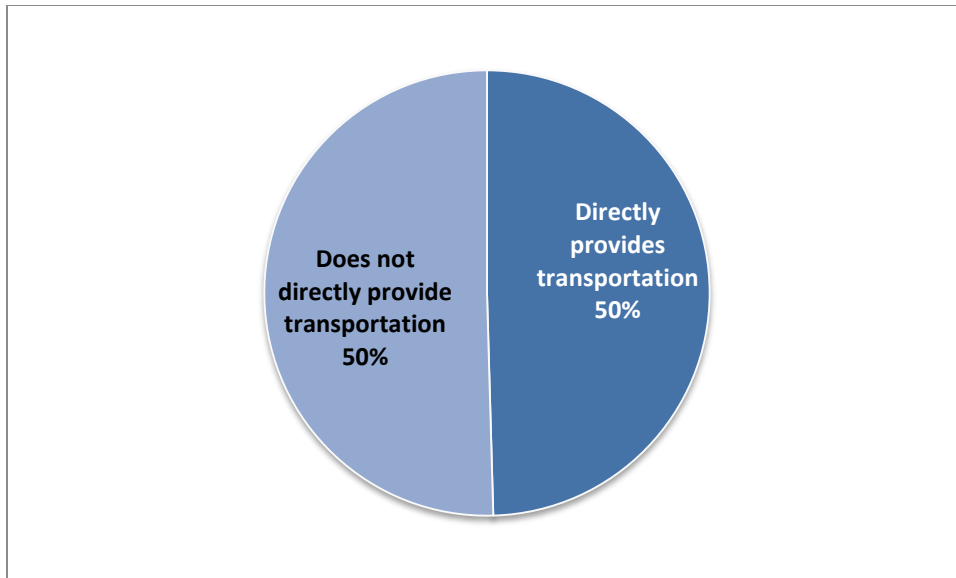


Figure 0.1 Percentage of Responding Agencies that Directly Provide Transportation

Among those agencies that directly provide transportation, about two-thirds identified themselves as specialized transportation providers that receive FTA Section 5310, 5316, or 5317 funding but not FTA Section 5307 or 5311 funding. The remainder included both urban and rural transit agencies and lead agencies for regional service coordination (Table 5.4) (respondents could identify themselves as more than one type of organization).

Table 0.4 Types of Transportation Providers Represented in Survey

Answer Options	Response Percent	Response Count
Lead agency for regional service coordination	10%	4
Urban transit agency	18%	7
Rural transit agency	30%	12
Intercity bus operator	0%	0
Specialized transportation provider	65%	26
	<i>answered question</i>	40

These transportation providers most commonly provide a door-to-door or curb-to-curb demand response service. Ten respondents provide fixed-route service, and some provide other services, such as group trips or door-through-door services (which is provided by 14 respondents).

5.2 Coordination Efforts

Close to 80% of the organizations surveyed indicated they have been involved with efforts to coordinate transportation services in their service area, and most indicated they have been taking an active role in coordination.

Seventy-five percent of organizations involved with coordination said that high unmet transportation needs contributed to the initiation of coordination efforts, while a number cited interest from local leaders and potential financial opportunities (Table 5.5). Other factors cited by respondents but not specified in

the survey included state or federal mandates, a desire to reduce duplication of services, and to improve current services.

Table 0.5 Factors Contributing to the Initiation of Coordination Efforts

Answer Options	Response Percent	Response Count
High unmet transportation needs	75%	39
Local leaders interested	42%	22
Potential financial opportunity	33%	17
Other	35%	18
<i>answered question</i>		52

Table 5.6 lists coordination activities being conducted by these organizations. Respondents most commonly attend communication coordination meetings that specifically deal in part with transportation. Many provide services to human service agencies by contract, transport clients of another agency, share or have compatible transportation software, or engage in a number of different activities. In addition to the activities included in the survey, respondents commented on a number of different activities with which they have been involved. Appendix F provides a complete list of comments from respondents regarding other coordination activities mentioned.

Table 0.6 What type of coordination have you engaged in with other agencies (check all that apply)

Answer Options	Response Percent	Response Count
Attend communication coordination meetings that specifically deal in part with transportation	79%	37
Provide services to human service agencies by contract	51%	24
Transport clients/consumers of another agency on a local basis	36%	17
Transport clients/consumers of another agency on a regional basis	28%	13
Share or have compatible transportation software as other agencies	26%	12
Formal Cooperative agreement across human service agencies exists regarding transportation	23%	11
Provide or receive vehicle maintenance support in accordance with another agency	19%	9
Coordination on insurance costs or coverage	15%	7
Consolidation – we provide a majority of human services transportation on a regional basis	9%	4
Engage in dispatch assistance with another agency	6%	3
Share radio communication with private transportation companies	0%	0
Use compatible accounting systems with another agency	0%	0
<i>answered question</i>		47

Lack of funding was the most common barrier that these organizations faced when initiating these transportation coordination efforts (Table 5.7). Other common barriers included lack of communication, fear of responsibility shifting, and lack of time. Comments from respondents mentioned turf issues and other barriers (see Appendix F).

Table 0.7 What barriers to transportation coordination did you face? (check all that apply)

Answer Options	Response Percent	Response Count
Lack of funding	51%	25
Lack of communication	33%	16
Fear of responsibility shifting	24%	12
Lack of time	22%	11
Fear of cost shifting	18%	9
Unwillingness of providers	12%	6
Low need	4%	2
Unwillingness of consumers	2%	1
<i>answered question</i>		49

Respondents often commented that working through these barriers required attention to communication efforts, education, bringing together stakeholders and building relationships, and continually searching for funding. A few respondents mentioned they had to reduce the scope of the project because they could not accomplish everything they wanted. A complete list of comments regarding how respondents addressed these barriers is shown in Appendix F.

Most of the respondents indicated there is a need for more coordination of transportation in their region (Figure 5.2). The greatest barriers hindering more coordination of existing human service transportation programs include the unique needs of various client populations, conflicts in hours of need, and lack of communication across agencies (Table 5.8). Comments made by respondents regarding other barriers are shown in Appendix F.

When asked what additional coordination programs should be pursued, a number of respondents mentioned statewide or regional coordination that extends beyond the county. Specific comments are shown in Appendix F.

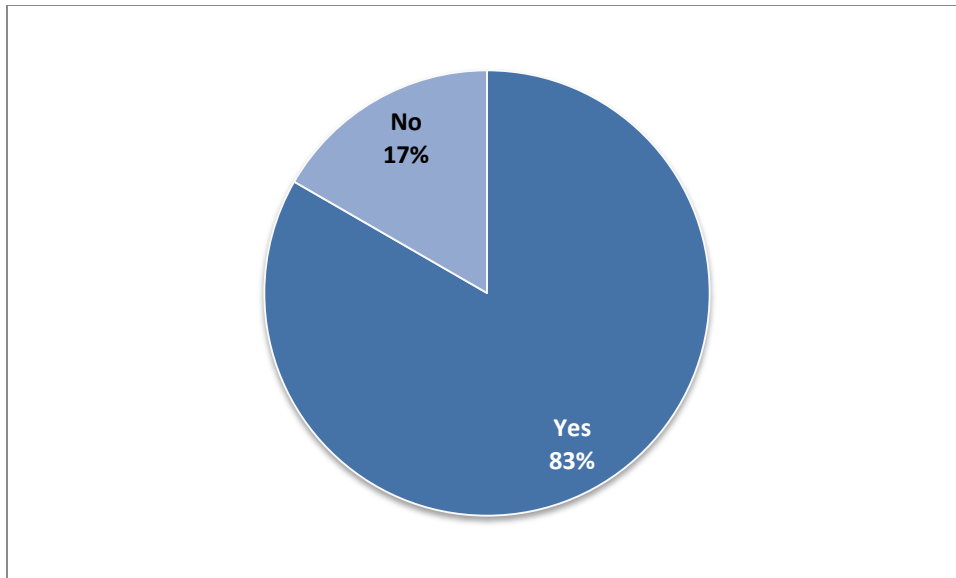


Figure 0.2 Is there a need for more coordination of transportation in your region? (n=60)

Table 0.8 What are the greatest barriers in your area that hinder more coordination of existing human service transportation programs? (check all that apply)

Answer Options	Response Percent	Response Count
Unique needs of various client/consumer populations	53%	30
Hours of need conflict	44%	25
Communication across agencies (the time and/or the will)	42%	24
Routes conflict	25%	14
Consumers prefer services customized to their own disability/intermingling not desirable	19%	11
Personalities of individuals involved	19%	11
Potential loss of control of vehicles/Potential loss of business control	18%	10
Local officials object to merger and coordination/Board or agency policies prohibit vehicle sharing	14%	8
Fear of losing job	14%	8
Federal regulations against vehicle sharing/State or local regulations against vehicle sharing	9%	5
Training needs would be intense and expensive	7%	4
<i>answered question</i>		57

5.3 Mobility Management Activities

Twenty-nine percent of the responding agencies receive funds specifically to be used for mobility management, and an additional 23% provide services they consider to be mobility management, while 13% currently do not provide mobility management but would like to in the future (Figure 5.3).

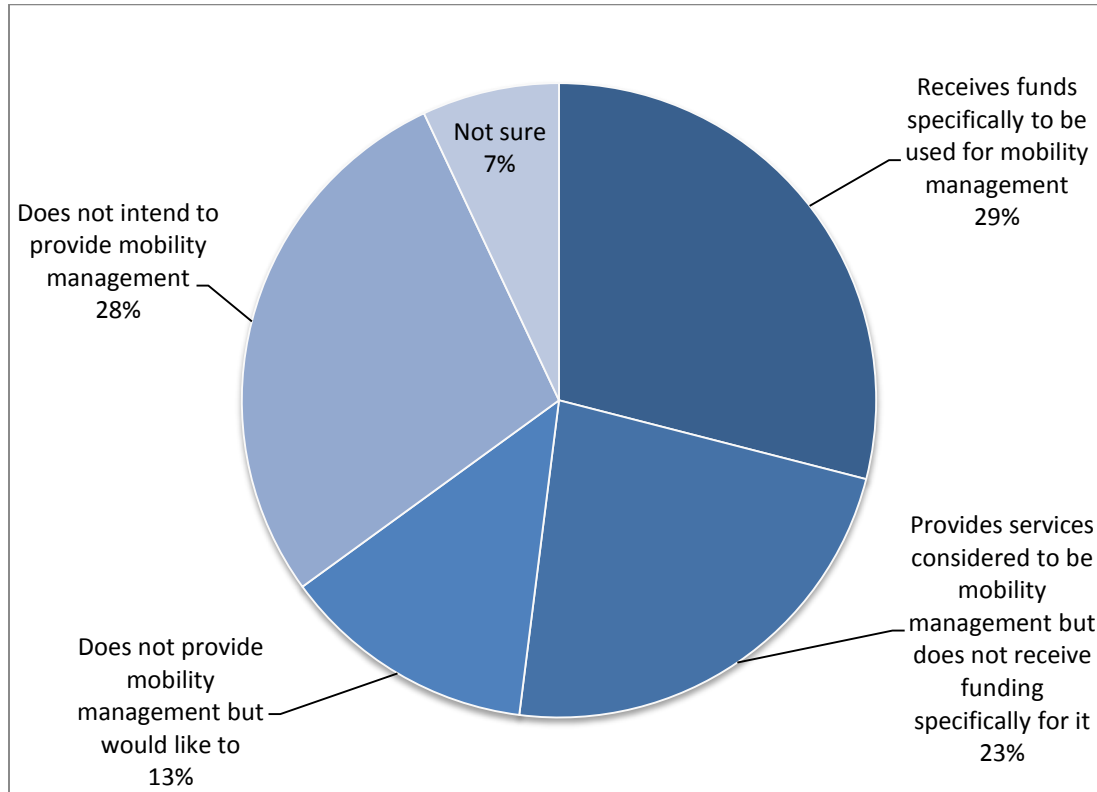


Figure 0.3 Agencies Providing Mobility Management Services (n=100)

The types of mobility management activities being conducted by these agencies are depicted in Table 5.9. Most commonly, they participate in outreach regarding public transit access, provide agencies and individuals with information and training materials on how to use local transportation, conduct needs assessments, or employ agency staff to plan and manage activities to improve coordination among public transportation providers, other transportation service providers, and agencies that serve people who need transportation services. As shown in the table, they also engage in a number of different activities. Appendix F provides specific comments on other mobility management activities being conducted.

Table 0.9 Does your agency do any of the following activities? (Check all that apply)

Answer Options	Response Percent	Response Count
Participate in outreach regarding public transit access	61%	35
Provide agencies and individuals with information and training materials on how to use local transportation	60%	34
Conduct needs assessments	53%	30
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 service people who need transportation services	49%	28
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	39%	22
Provide transportation coaches (ambassadors, facilitators) to provide travel training or trip planning for individuals who are seniors, have disabilities, or others who need transportation	32%	18
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	32%	18
Develop cooperative policies around transportation	30%	17
Fund transportation services that coordinate public transportation and other transportation service providers or fill service gaps	25%	14
Deploy advanced technology to enhance the ability to coordinate among public transportation and other transportation service providers	21%	12
<i>answered question</i>		57

Respondents mentioned some challenges with implementing these programs, such as lack of funding, limited time and resources, turf issues, and lack of leadership. A complete list of comments provided is shown in Appendix F.

Thirty-seven percent of these organizations have a marketing plan for the mobility management programs. This often includes doing public outreach with human service agencies, community centers, and organizations that serve older adults, people with disabilities, and those with low-income; distributing brochures and flyers; maintaining a website; networking with area professionals; and participating in forums and stakeholder groups.

Other general comments received regarding mobility management and coordination activities, including accomplishments, communication and partnerships, and needs and barriers, are provided in Appendix F.

5.4 Benefits of Mobility Management and Coordination

Respondents were asked if they had documented or noticed positive results that they attributed to mobility management and coordination efforts. Many reported that these activities have had positive results, as shown in Table 5.10. Nearly two-thirds have recognized simplified access to transportation services for riders, and a majority also identified an increase in the range of transportation options and service

providers available to riders, increased awareness of transportation services, and increased ridership. A number of other benefits have also been observed by a smaller percentage of respondents.

Table 0.10 Percentage of Agencies Involved with Coordination or Mobility Management that have Realized Specific Benefits

Answer Options	Response Percent	Response Count
Simplified access to transportation services for riders	65%	39
Increase in the range of transportation options and service providers available to riders	63%	38
Increased awareness of transportation services	63%	38
Increased ridership	57%	34
Reduction in service gaps	48%	29
Expanded transit service area to include new destinations where individuals need to go	43%	26
Expanded span of service (provide transit service earlier or later)	37%	22
Reduction in service duplication or overlap	35%	21
Increased service days per week (provide transit service more days of the week)	32%	19
Increased frequency of service	32%	19
Reduced cost per ride	30%	18
Expanded transit service days to include weekends	23%	14
	<i>answered question</i>	60

A complete list of specific comments given by survey participants regarding the benefits of coordination and mobility management programs is shown in Appendix F. Many respondents commented on the benefits of partnership and increased communications. A few of these comments are shown below:

“Networking with multiple human service organizations has allowed us to increase awareness of existing transportation resources and helped us to identify other transportation barriers faced by their consumers.”

“Biggest benefits are learning to understand each other's perspectives, get past the rock throwing, and agree that we can improve once we agree we are all working hard to make life better for those we serve.”

“Working together, we not only have a greater awareness of the transportation services available to residents, we have a greater capacity to address unmet transportation needs in our communities. We are better able to identify gaps in services and work together to create solutions.”

“As federal programs have fallen aside, increased communication has helped riders find options.”

“The transportation collaborative group put together a brochure that all human service agencies can reference or give out to their clients that may need transportation that rely on others for rides to their appointments. This was huge for the human service agencies as before, they just knew to call public transit. Now they have more options available.”

Some respondents provided specifics about new services that have been implemented or other accomplishments. Several new services were mentioned, such as after-hours commuter services, seasonal shuttles, dialysis transportation, new and expanded carshare programs, and expanded paratransit services, and many mentioned that their clients now have more options. Some commented on how the programs have improved efficiencies:

“At times we are able to combine routes to create efficiencies in service and cost of service provided.”

“We also saw the discontinuation of a poorly used service While service reductions are usually viewed as a bad thing, this was the opposite. It freed up resources to be used for much more productive uses. We also saw the elimination of a service duplication.”

“When we are able to combine routes, we create efficiencies in service that cut the cost of transportation for riders considerably (by half, typically).”

“By blending funds from several sources, and co-mingling trips, we are able to increase usage and reduce per trip cost.”

“Coordinating with another transportation provider has saved time and money.”

In addition to the increased availability of transportation options and improved efficiencies, some respondents commented on how the programs have improved quality of life for the users and their families:

“Our program provides the benefit of a more personal connection for riders, as they are matched with the same driver over a period of time. The benefits of this extend beyond the transportation needs of clients, providing a more personal service.”

“We are able to relieve family members of numerous stressful trips and provide help with rides when no other options exist. Riders and drivers often build a personal connection, which helps to break the social isolation that some of our clients experience. Drivers, who are volunteers, have helped with additional tasks such as shoveling a long drive for elderly patients or stopping on the way home to pick up food for clients.”

“Our residents are able to be more independent.”

Most respondents indicated that these efforts have resulted in improved access to transportation services for older adults and people with disabilities (Table 5.11).

Table 0.11 Have coordination or mobility management efforts resulted in improved access to transportation service for any of the following groups? (check all that apply)

Answer Options	Response Percent	Response Count
Older adults	89%	39
People with disabilities	77%	34
Individuals with lower incomes	52%	23
Individuals with limited English proficiency	32%	14
Children and youth	27%	12
<i>answered question</i>		44

5.5 Needs of End-Users and Impacts on Quality of Service

5.5.1 Overall Results

Fifty-six percent of all respondents to the survey said that they have engaged in data collection to understand the transportation needs of the people they serve. Respondents most commonly mentioned a need for longer hours of service to accommodate varying work schedules and other needs and service on the weekends. Many also mentioned the need to increase the scale of services that are currently available.

All survey participants were asked the degree to which they agree or disagree with whether the transportation needs of their clients are being met and whether the transportation services are easy for their clients to access. Opinions were somewhat mixed. Forty-four percent of respondents either strongly agreed or somewhat agreed that the transportation needs of their clients are being met, while 42% either strongly or somewhat disagreed (Figure 5.4). Similarly, 46% agreed that transportation services are easy for their clients to access, and 41% disagreed (Figure 5.5).

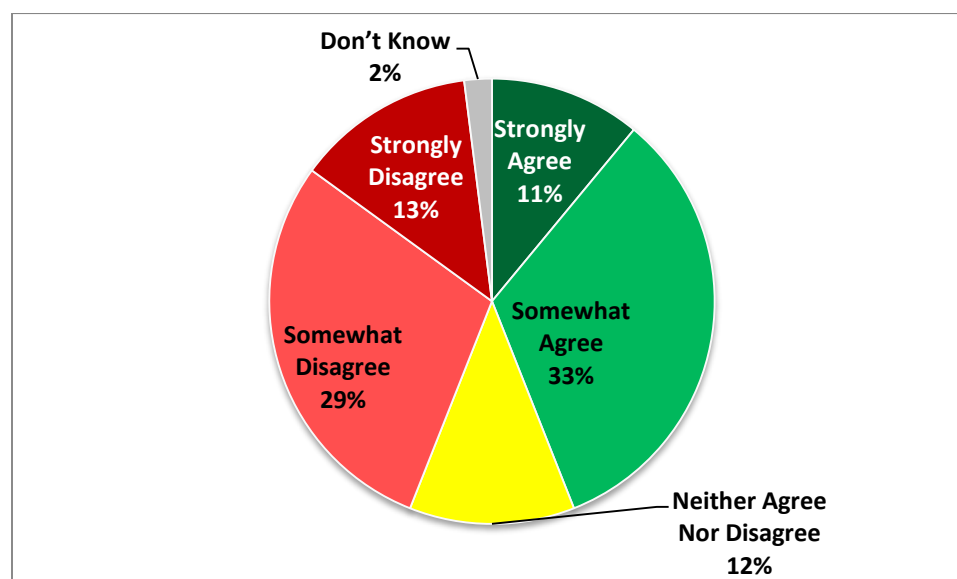


Figure 0.4 The Transportation Needs of Your Clients are being Met (n=100)

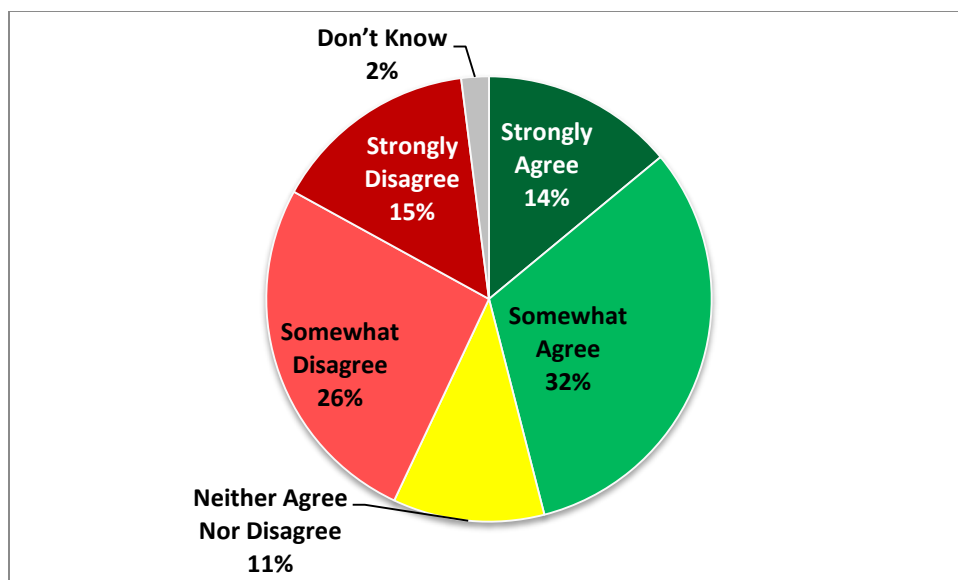


Figure 0.5 Transportation Services in Your Community are Easy for Your Clients to Access (n=100)

Results were also somewhat mixed regarding the impact that mobility management and coordination programs have had on quality of service, but respondents were more likely to indicate there have been improvements. For example, 66% agreed that these efforts have resulted in more transportation options available to their clients, 65% agreed it has resulted in simplified access to transportation services, and a majority also agreed that there has been increased awareness of transportation services and expanded service areas (Figure 5.6). On the other hand, only 25% agreed that these efforts have resulted in expanded weekend service.

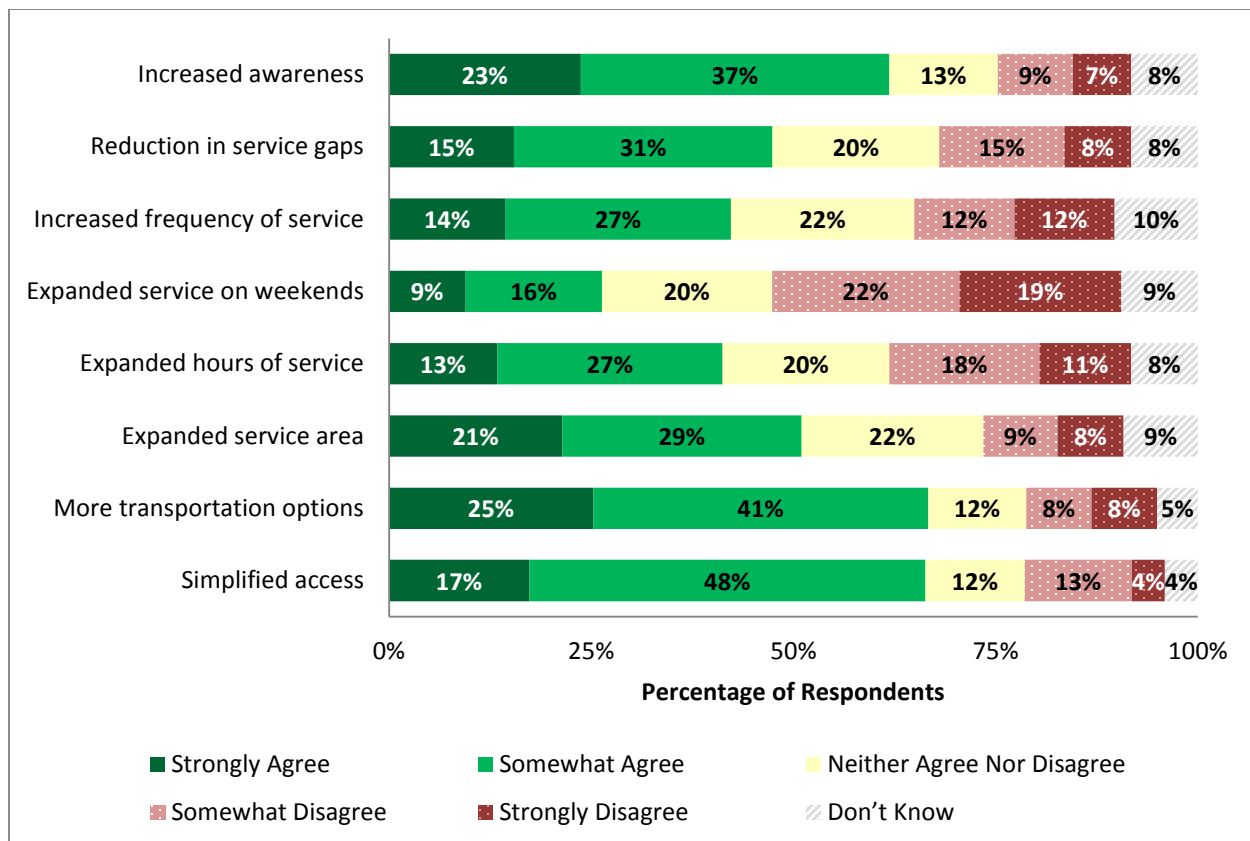


Figure 0.6 Percentage of Stakeholders who Agree that Transportation Services have Improved (n=99)

5.5.2 Perceived Impacts of Funding for Mobility Management

The data presented in Figures 5.5 and 5.6 were analyzed further based on whether the responding organization receives funds specifically for mobility management. As shown in Figure 5.3, 29% of the participating organizations receive funding specifically to be used for mobility management. Their responses were compared to those of agencies not receiving such funds to determine if there were any perceived differences in quality of service. Figure 5.7 shows that agencies receiving funds specifically for mobility management were more likely to agree that the transportation needs of their clients are being met and that the transportation services in their community is easy for their clients to access. Sixty percent of those agencies receiving such funding agreed that the transportation needs of their clients are being met, compared to 38% of agencies not receiving funding for mobility management.

Figure 5.8 shows differences in responses regarding perceived service improvements. The results show that for every category, organizations receiving funds for mobility management were more likely to agree that there have been improvements. For example, 43% of organizations receiving funding strongly agree that there are more transportation options available to their clients, while only 19% of those not receiving funding strongly agree with this statement.

The findings show that organizations receiving funding specifically for mobility management are more likely to perceive improvements in quality of service for their clients, and they are more likely to believe that the transportation needs of their clients are being met.

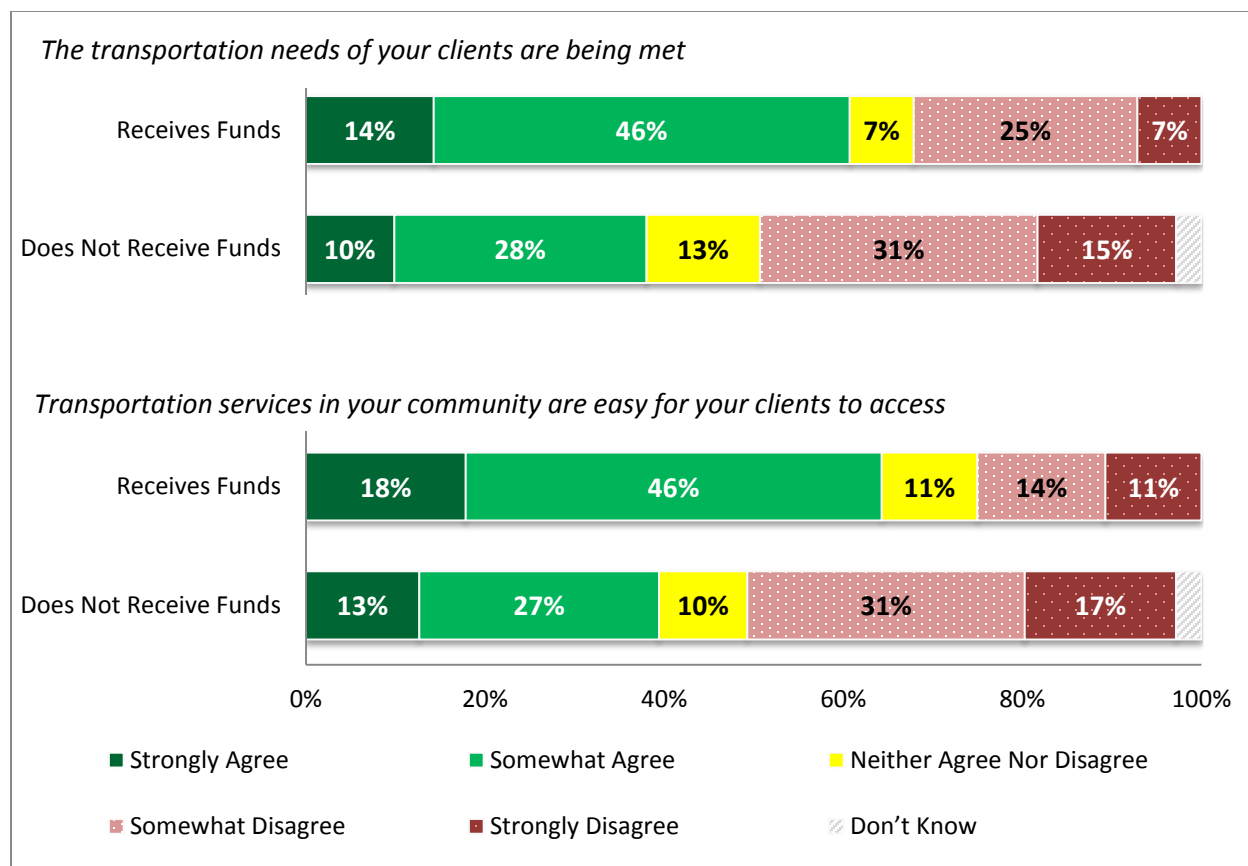


Figure 0.7 Perceived Quality of Service Differences between Organizations Receiving Funds for Mobility Management and those Not Receiving Funds

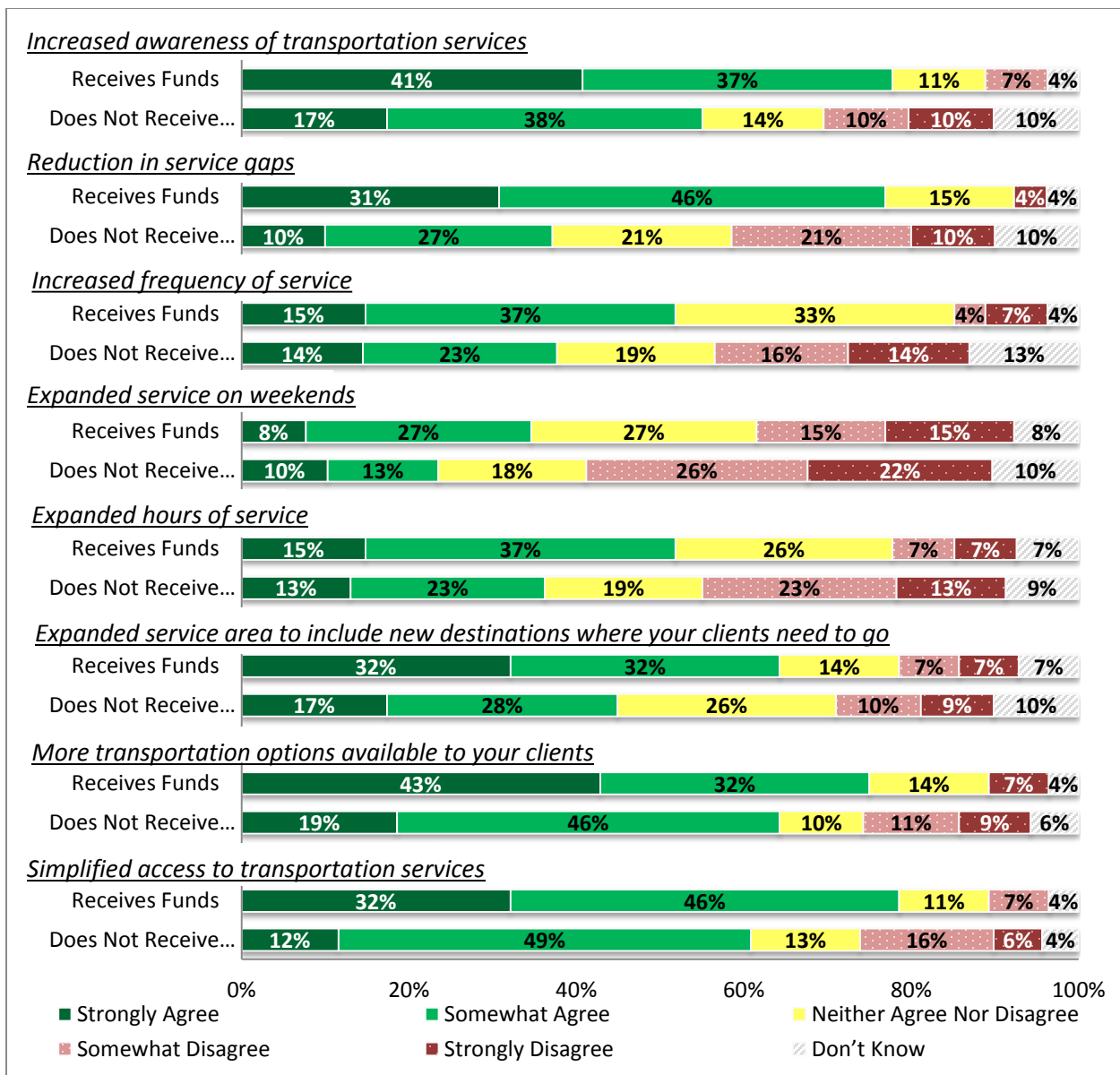


Figure 0.8 Perceived Differences between Organizations Receiving Funds for Mobility Management and those Not Receiving Funds Regarding Quality of Service Improvements

DISCUSSION

6.1 Evaluation of Programs

Two of the objectives of this research were to assess the impacts of mobility management and coordination programs in meeting the needs of transportation-disadvantaged populations from the perspective of the end-user and to determine the impacts of these programs in meeting the goals of efficiency, ease of access, and quality of service. Results from the end-user and stakeholder surveys can be used to address these questions.

6.1.1 Meeting the Needs of Transportation-Disadvantaged Population from the Perspective of the End-User

Most respondents to the end-user survey were satisfied with the quality of service they are receiving from their transportation provider. For example, 72% were very satisfied with how the service serves their needs, 73% were very satisfied with ease of use, and 69% were very satisfied with available travel destinations. On the other hand, many respondents were dissatisfied with a lack of weekend service, and some expressed dissatisfaction with scheduling procedures.

An important measure of the success of mobility management and coordination efforts is the degree to which service quality is improving for the transit user. A number of respondents reported improvements in service. For example, 31% of respondents reported that ease of use has improved, while only 3% answered that it is getting worse. Similarly, 28% reported that the service is doing a better job of serving their needs, while only 4% answered that the service is doing worse. These results show general improvements in quality of service, as perceived by the riders. One area that does not appear to have been improved is the availability of weekend service.

The results show that these transportation programs have significant impacts on the lives of their users. Most riders (90%) said the service is very important to them. Many respondents reported that they would not be able to make these trips if the service they use was not available. Survey findings showed that 29% of riders most often would not make the trip if the transportation service was not available, and most of the others would rely on family, friends, volunteer drivers, or taxi services. The results show the significant impact the services have on increasing the ability of riders to make trips.

Results from an ordered probit model developed from the survey results show how improving mobility and increasing the number of trips an individual can make improves quality of life. Those who had reported missing a trip during the previous week because of lack of transportation and those who reported greater difficulty in making trips gave significantly lower life satisfaction ratings. These results demonstrate the impacts that mobility management programs can have on the lives of the users. When these efforts result in new transportation options, new trips that can be made, and simplified access to service, quality of life for the users of these services is shown to improve significantly.

6.1.2 Impacts on Efficiency, Ease of Access, and Quality of Service

As noted previously, results from the end-user survey suggest improvements in ease of access and quality of service, although there is some dissatisfaction with lack of weekend hours, and a minority of respondents was dissatisfied with scheduling procedures and some of the other service qualities. Overall, the results were positive and showed improvement.

Results from the stakeholder survey suggest these programs have provided benefits. Among those agencies involved with coordination or mobility management, most reported benefits that have been

realized, including 65% who reported simplified access to transportation services for riders, 63% who reported an increase in the range of transportation options available to riders, 63% who reported increased awareness of transportation services, and 57% who noted an increase in ridership. Regarding the goal for improved efficiency, 35% reported a reduction in service duplication or overlap, and 30% said that cost per ride has decreased.

The general perspective of the stakeholders is that 1) there are a number of challenges to implementing coordination and mobility management, such as lack of funding, lack of communication, unique needs of various client populations, and many other issues; 2) there is a need for more coordination of existing human service transportation programs; and 3) the programs that have been implemented have had a positive impact on quality of service, ease of access, and, to a lesser extent, efficiency.

Results from the stakeholder survey were somewhat mixed regarding how well services are meeting the needs of end-users. Most indicated some need for more service, such as longer hours, weekend service, or an increase in the scale of services currently available. Forty-four percent of the stakeholders agreed that the transportation needs of their clients are being met, while 42% disagreed. Similarly, 46% agreed that transportation services are easy for their clients to access, and 41% disagreed. Results were somewhat mixed regarding the impact that mobility management and coordination programs have had on quality of service, but stakeholders were more likely to indicate there have been improvements. For example, 66% agreed that these efforts have resulted in more transportation options available to their clients, 65% agreed it has resulted in simplified access to transportation services, and a majority also agreed that there has been increased awareness of transportation services and expanded service areas.

Comparing responses between organizations that are receiving funds specifically for mobility management and those that are not receiving such funds shows that the organizations receiving funding are more likely to perceive improvements in quality of service for their clients, and they are more likely to believe that the transportation needs of their clients are being met. Collecting more detailed data on performance measures is necessary to measure the significance of this impact, but the results suggest that the funding has some positive effect.

6.2 Assessment of Evaluation Method

Other objectives of this study were to develop a survey instrument that could be used in different locations and across time to evaluate the impacts of mobility management and coordination programs on end users and to develop and test an evaluation model that could be applied to other communities across the country.

These surveys were conducted in different locations across the country, including a mix of urban, suburban, and rural areas. Results from the research show that this survey method is effective in different geographic locations. The surveys collected enough information to allow for an effective evaluation of mobility management and coordination activities. Key for such an evaluation is to collect information from a variety of perspectives, including the end-users, transportation providers, human service agencies, and other stakeholders.

The survey method can be useful for tracking progress over time. Results from end-user responses on ability to make trips and satisfaction with transportation service, as well as stakeholder responses on benefits, needs of end-users, and quality of service could be used to track progress.

While the surveys provide enough information to evaluate mobility management and coordination efforts, more specific data for performance measures would provide more precise results. Future evaluation methods could investigate the possibility of collecting more specific data on performance measures.

Other possible improvements could be to reduce the survey length and reduce the jargon in the stakeholder survey. Some respondents to the stakeholder survey found it to be too long and sometimes confusing. Not all stakeholders were as familiar with the jargon or did not know what “mobility management” included. In future efforts, all such terms should be clearly defined.

The rider survey instrument worked well for a mail survey, but it would have to be shortened considerably if it was conducted onboard. Shortening the survey could also improve response rate, although the response rate in this study was typical for a mail survey.

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APPENDIX A. The United We Ride Logic Model Cross Cutting Performance Measures

These goals and performance measures are from the United We Ride Logic Model and Measures (United We Ride 2007).

Overall Desired Impact Goal:

Greater ability to autonomously participate in all aspects of life through increased access to transportation services for people with disabilities, older adults, children and youth, and individuals with lower incomes.

The way communities will reach this long-term goal is to provide easier access to more rides with higher customer satisfaction in service quality for people with disabilities, older adults, children and youth, and individuals with lower incomes.

Definition/Description:

Access to transportation for people with disabilities, older adults, children and youth, and individuals with limited incomes is critical for their physical, social, economic and psychological well-being. Transportation helps individuals to more actively participate in work, school, health, play, and other community activities. The interface between transportation, housing, health, and employment is a critical aspect of community life. As an expression of public policy—transportation provides equal access to services and opportunities in order for individuals to participate in all aspects of life. Improved access to transportation will lead to a decreased dependence on government funded service and enable people to live independently, participate in the community, contribute to society, and have an overall enhanced quality of life. To achieve this goal, United We Ride has developed three measures: an efficiency measure, an effectiveness measure and a quality measure.

Three short term goals and commensurate outcomes measures support the longer term impact goal:

Goal 1: MORE RIDES FOR TARGET POPULATIONS FOR THE SAME OR FEWER ASSETS.

Measure 1: Increase the # of rides for the same or fewer assets for people with disabilities, older adults, children and youth, and individuals with lower incomes. (Efficiency outcome)

Definition:

Performance Measure (PM)1: Increase the number of communities and states reporting the use of shared resources (e.g., staff, equipment, funding, etc) between different agencies and organizations so that they can provide more rides for more people with disabilities, older adults, children and youth, and individuals with lower incomes. Communities and/or States implementing measures should consider collecting baseline data as appropriate.

Potential Related Indicators

1.1: Increase the number of individuals employed in a senior staff position to manage and coordinate all aspects of human service transportation for people with disabilities, older adults, children and youth, and individuals with lower incomes between multiple agencies and organizations.

1.2: Increase the number of agencies and funding sources by community or state participating in a coordinated human service transportation system.

1.3: Increase the number of coordinated human service transportation plans that are developed and implemented between multiple agencies at the state and local levels. (The indicator at the local level is the development and implementation of the plan; the potential national measure is the increase in the numbers of such plans).

1.4: Increase the number of rides for persons who are older, people with disabilities and individuals with limited incomes.

Goal 2 – SIMPLIFY ACCESS

Measure 2: Increase the # of communities with easier access to transportation services for people with disabilities, older adults, children and youth, and individuals with lower incomes. (Effectiveness outcome)

Definition:

Performance Measurement 2: To increase the number of communities (e.g., urban, rural, other) which have a simplified point-of-access coordinated human service transportation system for people with disabilities, older adults, children and youth, and individuals with lower incomes so that they can have easier access to transportation services. Simplified point of access is defined as an easy and single entry point for consumers who are accessing transportation services regardless of the target population, funding agency, transportation provider, or type of transportation service being provided. Communities and/or States implementing measures should consider collecting baseline data as appropriate.

Potential Related Indicators

2.1: Increase the number of agencies, service providers and funding sources participating in a simplified point of access to transportation services for consumers.

2.2: Increase the types of modes (e.g., bus, paratransit, taxi, volunteer, etc) included in a simple point of entry system implemented at the local level

2.3: Increase the numbers of individuals with disabilities, older adults, children and youth, and persons with limited incomes accessing transportation services within a simplified point of entry -coordinated human service system

Goal 3: INCREASE CUSTOMER SATISFACTION

Measure 3: Increase the quality of transportation services for people with disabilities, older adults, children and youth, and individuals with lower incomes (Customer Satisfaction outcome)

Definition

Performance Measure 3: To increase the level of customer satisfaction reported in areas related to the availability, the affordability, the acceptability, and the accessibility of transportation services for people with disabilities, older adults, children and youth, and individuals with lower incomes. Communities and/or States implementing measures should consider collecting baseline data as appropriate.

Potential Related Indicators

3.1: Increase the percentage of people with disabilities, older adults, children and youth, and individuals with lower incomes who feel that transportation services are more available.

3.2: Increase the percentage of people with disabilities, older adults, children and youth, and individuals with lower incomes who feel that transportation services are more accessible.

3.3: Increase the percentage of people with disabilities, older adults, children and youth, and individuals with lower incomes who feel that transportation services are more affordable.

3.4: Increase the percentage of people with disabilities, older adults, children and youth, and individuals with lower incomes who feel that transportation services drivers are more courteous and helpful.

APPENDIX B. Example Measures that could be Applied to Mobility Management Programs

The following are example measures developed by Sen et al. (2011, p. 62) that could be applied to 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 by implementing 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

APPENDIX C. Recommended Goals, Objectives for Mobility Management

These goals and objectives for mobility management were adapted from Sen et al. (2011, p. 73-79).

Goal: Focus on the Individual

Objectives:

- Provide customer-driven transportation services
- Develop and offer services to meet individual needs
- Focus on the quality of customer service

Goal: Improve Coordination

Objectives:

- Establish partnerships to coordinate transportation projects, planning, service and expertise
- Coordinate service delivery to eliminate overlaps
- Agencies work together to close transportation gaps by offering service in areas that may not be served by a local transit provider

Goal: Promote Accessibility and Livability

Objectives:

- Offer transportation services that are accessible, lead to livable communities, and improve quality of life
- Use universal design concepts to integrate transit-oriented and pedestrian-oriented design in community development
- Consider the effect of land use design and development on the provision of transportation mobility and accessibility

Goal: Ensure Diversity in Products and Services

Objectives:

- Ensure meaningful access to transportation services for older adults, individuals with disabilities, children and youth, and individuals with lower incomes
- Offer materials for those with language barriers
- Use universal symbols for transportation services

Goal: Foster Education and Awareness

Objectives:

- Change individuals' attitudes and behavior toward alternative transportation choices through education and marketing
- Build a strong foundation for mobility management programs through funding and resource support
- Provide public information on transportation service options

Goal: Develop Financial Sustainability

Objectives:

- Improve service efficiency and effectiveness
- Leverage limited funding and resources through partnerships
- Use advanced technologies to manage and monitor transportation systems

Goal: Ensure Safety and Security

Objectives:

- Ensure safe and secure transportation services for the customer

APPENDIX D. RIDER SURVEY

NDSU

UPPER GREAT PLAINS TRANSPORTATION INSTITUTE
SMALL URBAN AND RURAL TRANSIT CENTER

NDSU Dept. 2880 · PO Box 6050 · Fargo, ND 58108-6050

Dear Transit User:

My name is Jeremy Mattson. I am a researcher with the Small Urban & Rural Transit Center at North Dakota State University. Nationally, organizations such as *[name of organization]* have been attempting to improve the quality and ease of use of transit services. We are conducting a nation-wide survey of users of such services to learn about how well these efforts are working and how important these services are to the people who use them. *[name of organization]* is cooperating with us on this project.

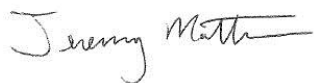
As a user of a transit service, you are invited to participate in this study and answer questions regarding your use and satisfaction with this service. The survey should not take more than 20 minutes to complete. When you have completed the survey, please return it using the enclosed preaddressed and prepaid envelope. The results can be used by *[name of organization]* and other transit agencies around the country to improve service.

Your participation is entirely your choice, and you may change your mind or quit participating at any time, with no penalty to you. Neither your name nor any other personal identifier will be collected for the survey, and your responses will remain confidential. Your information will be combined with information from other people taking part in the study.

If you have any questions about this project, please contact Jeremy Mattson, by phone at 701-231-5496 or by email at jeremy.w.mattson@ndsu.edu. If you have questions about the rights of human participants in research, or to report a problem, contact the NDSU IRB Office toll free at 1-855-800-6717 or ndsu.irb@ndsu.edu.

Thank you for your participation in this research. Please let me know if you wish to receive a copy of the results.

Sincerely,



Jeremy Mattson
Small Urban & Rural Transit Center

Survey of Transit Users to Evaluate Mobility Management and Transportation Coordination

Part A. Use of this Transportation Service

1. How important is this transportation service to you?

- ☐ Very Important ☐ Somewhat Important ☐ Not Important

2. How often do you use this transportation service?

- ☐ 5-7 days a week
☐ 2-4 days a week
☐ Once a week
☐ Once or twice a month
☐ Less than once a month

3. How long have you been using the service?

- ☐ More than 5 years
☐ 3-5 years
☐ 1-2 years
☐ 6 months to a year
☐ Less than 6 months

4. Why did you start using the service? **(check all that apply)**

- ☐ Service became available
☐ I moved or began traveling to different locations
☐ I could no longer drive or had difficulties driving
☐ I could not get a ride from others or did not want to
☐ I no longer had access to an automobile
☐ I don't like to drive in poor weather (too hot, too cold, rain, snow)
☐ I use this service to save money
☐ I use this service because it is most convenient
☐ I use this service because it is good for the environment
☐ Other: _____

Part B. Travel Destinations and Transportation Options

5. Where do you go when using this transportation service? **(check all that apply)**

- ☐ Health care/medical appointments
- ☐ Work
- ☐ Volunteering
- ☐ School or job training
- ☐ Shopping
- ☐ Visit friends or family
- ☐ Agency/organization providing services
- ☐ Other personal business
- ☐ Other social or recreational activities

6. If this service was **not available**, would you make the same number of trips or fewer trips for these activities?

- ☐ I would make the same number of trips to the places I currently use transit for
- ☐ I would make somewhat fewer trips to the places I currently use transit for
- ☐ I would make a lot fewer trips to the places I currently use transit for
- ☐ I would make no trips to the places I currently use transit for

7. If this service was not available, what other options are available to you **(check all that apply)**

- ☐ Drive myself
- ☐ Ride with a family member or friend
- ☐ Get a ride from a volunteer driver
- ☐ Walk or bicycle
- ☐ Use a taxi
- ☐ Other: _____
- ☐ I have no other options

8. Most often, how would you get to where you're going if this service wasn't available **(select one response)**?

- ☐ Drive myself
- ☐ Ride with a family member or friend
- ☐ Get a ride from a volunteer driver
- ☐ Walk or bicycle
- ☐ Use a taxi
- ☐ Other: _____
- ☐ I would not go

9. In general, how easy is it for you to travel to the places you want or need to go to, considering all forms of transportation available to you?

- ☐ Very easy
- ☐ Somewhat easy
- ☐ Neither easy nor difficult
- ☐ Somewhat difficult
- ☐ Very difficult

10. How often are you able to get the transportation you need, so you can go where you want to go?

- ☐ Always or almost always
- ☐ Often
- ☐ Sometimes
- ☐ Rarely

11. Was there any destination you needed or wanted to go last week but did not due to lack of transportation?

- ☐ Yes, please list type of destination _____
- ☐ No

Part C. Satisfaction with Transportation Service

12. Rate your level of satisfaction with this transportation service

	Very Satisfied	Somewhat Satisfied	Neither Satisfied nor Dissatisfied	Somewhat Dissatisfied	Very Dissatisfied
Serves your needs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Number of trips offered	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Weekend hours	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Goes where you want to go	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ease of use	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Scheduling procedures	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Access to information	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Door-to-door service availability	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cost of the service	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comfort	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

13. Have you noticed any changes in quality of service?

	Has gotten better	Has stayed about the same	Has gotten worse
Serves your needs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Number of trips offered	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Weekend hours	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Goes where you want to go	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ease of use	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Scheduling procedures	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Access to information	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Door-to-door service availability	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cost of the service	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comfort	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Part D. Travel Training

14. Is travel training, or help for learning to ride public transportation, available to you?

- ☐ Yes ☐ No ☐ Don't know

15. Have you participated in any of the following travel instruction services? (check all activities below that you have participated in)

- ☐ **Travel orientation:** Where you learned about transportation options, but did not travel on a particular vehicle or did not receive any personal instruction on how to travel.
- ☐ **Travel familiarization:** Where you learned about transportation options and traveled on a specific vehicle, but did not receive any personal instruction on how to travel.
- ☐ **Travel training:** Where you learned about transportation options, traveled on a specific vehicle, and received personal instruction on how to travel.
- ☐ None of the above

16. If you have participated in travel training or any travel instruction activities, was it helpful to you?

- ☐ Very helpful
- ☐ Somewhat helpful
- ☐ Not helpful
- ☐ Not applicable

17. Has anyone from an agency or organization helped you plan your trips?

- ☐ Yes ☐ No

Part E. Other Comments

18. If you have any additional comments or suggestions about transportation, provide them here:

Part F. About You

Please provide some information about yourself. Your answers will be kept entirely confidential.

19. Gender: ☐ Male ☐ Female

20. Age: ☐ 18-24 ☐ 25-34 ☐ 35-49 ☐ 50-64
☐ 65-74 ☐ 75 or older

21. Do you have a valid driver's license? ☐ Yes ☐ No

22. Do you own or have access to a vehicle? ☐ Yes ☐ No

23. Do you have a medical condition or disability that makes it difficult to travel? ☐ Yes ☐ No

24. In general, how would you rate your overall health?

☐ Good ☐ Fair ☐ Poor

25. All things considered, how satisfied are you with your life as a whole these days? Use a 1 to 10 scale, where 1 is completely dissatisfied and 10 is completely satisfied.

Completely dissatisfied ←

→ Completely satisfied

1 2 3 4 5 6 7 8 9 10

26. Describe your current employment situation.

☐ Employed, full time ☐ Employed, part-time
☐ Not employed, looking for work ☐ Not employed, NOT looking for work
☐ Retired ☐ Disabled, not able to work

27. What is your yearly household income level from all sources?

☐ Less than \$20,000 ☐ \$20,000 to \$39,999 ☐ \$40,000 to \$59,999
☐ \$60,000 to \$79,999 ☐ \$80,000 or more

THANK YOU FOR YOUR HELP!

When you have completed the survey, please return it using the enclosed preaddressed and prepaid envelope.

APPENDIX E. STAKEHOLDER SURVEY

Mobility Management and Transportation Coordination - Stakeholder Survey

The National Center for Transit Research, a collaboration between the University of South Florida, North Dakota State University, and the University of Illinois, Chicago, is conducting research to evaluate mobility management and human service transportation coordination programs.

As part of this project we are conducting surveys of transportation providers, human service agencies, and other stakeholders to identify the types of mobility management and coordination activities within which they have been involved and to learn about any barriers faced and successes achieved. The results from these surveys will be useful for determining if these programs are working, what types of results they are producing, and what may be needed to overcome barriers or improve service. The intent of this project is to learn more about the types of activities being conducted in various places across the country and the impacts they have on the users of transportation services.

Please answer the following questions regarding your activities and experiences. The survey should not take longer than 20 minutes. Your input is very valuable and appreciated.

If you have any questions, contact Jeremy Mattson at 701-231-5496 or jeremy.w.mattson@ndsu.edu.

*1. Organization Name:

2. Person Completing Survey

Name:	<input type="text"/>
Title:	<input type="text"/>
City/State:	<input type="text"/>
Email:	<input type="text"/>
Phone number:	<input type="text"/>

3. Type of organization

- ☐ Public transit agency
- ☐ Area Agencies on Aging
- ☐ Employment agency
- ☐ Food and nutrition agency
- ☐ Housing and shelter organization
- ☐ ADA services
- ☐ Veterans organization
- ☐ Multi-purpose human service organization
- ☐ Other (please specify)

Mobility Management and Transportation Coordination - Stakeholder Survey

4. What populations do you serve? (check all that apply)

- ☐ Children and families
- ☐ The elderly
- ☐ The homeless
- ☐ Immigrants
- ☐ People with addictions
- ☐ People with disabilities
- ☐ Veterans
- ☐ General public
- ☐ Other (please specify)

*5. Does your organization directly provide transportation services to your clients/customers?

- ☐ Yes
- ☐ No

6. Please identify agency type

- ☐ Lead agency for regional service coordination
- ☐ Public transit agency (urban)
- ☐ Rural transit agency
- ☐ 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 JARC, and/or c) 5317 New Freedom Program)

7. What types of transportation services are provided to the clients/customers who your organization serves (check all that apply)

- ☐ Curb-to-curb services
- ☐ Door-to-door services
- ☐ Door-through-door services or escort services
- ☐ Group pick-ups
- ☐ Fixed-route service
- ☐ Other (please specify)

Mobility Management and Transportation Coordination – Stakeholder Survey

8. Which agency in your region is responsible for coordination?

***9. Has your organization been involved with efforts to coordinate transportation services in your service area?**

☐ Yes

☐ No

10. What factors contributed to the initiation of coordination efforts? (check all that apply)

☐ High unmet transportation needs

☐ Local leaders interested

☐ Potential financial opportunity

☐ Other (please specify)

11. What is your agency's role in coordination?

☐ Leader

☐ Participant

12. Does your agency take an active or passive role in coordination?

☐ Active

☐ Passive

Mobility Management and Transportation Coordination - Stakeholder Survey

13. What type of coordination have you engaged in with other agencies (check all that apply)

- ☐ Share radio communication with private transportation companies
- ☐ Engage in dispatch assistance with another agency
- ☐ Attend communication coordination meetings that specifically deal in part with transportation
- ☐ Share or have compatible transportation software as other agencies
- ☐ Use compatible accounting systems with another agency
- ☐ Coordination on insurance costs or coverage
- ☐ Provide or receive vehicle maintenance support in accordance with another agency
- ☐ Provide services to human service agencies by contract
- ☐ Transport clients/consumers of another agency on a local basis
- ☐ Transport clients/consumers of another agency on a regional basis
- ☐ Formal Cooperative agreement across human service agencies exists regarding transportation
- ☐ Consolidation – we provide a majority of human services transportation on a regional basis

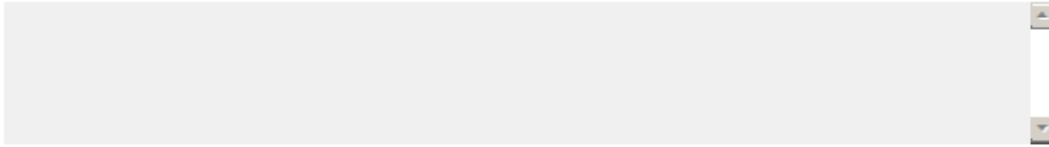
If your coordination activities are not listed above, briefly describe coordination efforts in your area:

14. What barriers to transportation coordination did you face? (check all that apply)

- ☐ Fear of cost shifting
- ☐ Fear of responsibility shifting
- ☐ Lack of communication
- ☐ Lack of time
- ☐ Low need
- ☐ Lack of funding
- ☐ Unwillingness of consumers
- ☐ Unwillingness of providers
- ☐ None
- ☐ Other (please specify)

Mobility Management and Transportation Coordination - Stakeholder Survey

15. How did you address these barriers?



16. Does your organization arrange or support transportation from private or public providers for clients/customers to destinations within your service area?

☐ Yes

☐ No

***17. Does your agency receive funds that are specifically to be used for “Mobility Management”?**

☐ Yes

☐ No

***18. 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?**

☐ Yes, we do provide services we 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

☐ Not sure

Mobility Management and Transportation Coordination - Stakeholder Survey

19. Does your agency do any of the following activities? (Check all that apply)

- ☐ 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 service people who need transportation services
- ☐ Fund transportation services that coordinate public transportation and other transportation service providers or fill service gaps
- ☐ Provide agencies and individuals with information and training materials on how to use local transportation
- ☐ Provide transportation coaches (ambassadors, facilitators) to provide travel training or trip planning for individuals who are seniors, have disabilities, or others who need transportation
- ☐ 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
- ☐ 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
- ☐ Deploy advanced technology to enhance the ability to coordinate among public transportation and other transportation service providers
- ☐ Develop cooperative policies around transportation
- ☐ Conduct needs assessments
- ☐ Participate in outreach regarding public transit access
- ☐ None of the above

20. Does your agency have any other activities that would be included in mobility management?

- ☐ Yes
- ☐ No

If yes, please describe

21. What are some of the challenges encountered by your agency in the implementation of mobility management?

Mobility Management and Transportation Coordination - Stakeholder Survey

22. Do you have a marketing plan or program for your mobility management program?

☐ Yes

☐ No

If yes, please describe

23. Have you documented or noticed any of the following benefits that you could attribute to improved coordination and mobility management in your community? (check all that apply)

☐ Reduced cost per ride

☐ Increased ridership

☐ Simplified access to transportation services for riders

☐ Increase in the range of transportation options and service providers available to riders

☐ Expanded transit service area to include new destinations where individuals need to go

☐ 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

☐ Reduction in service gaps

☐ Reduction in service duplication or overlap

☐ Increased awareness of transportation services

☐ Increase in funding

☐ Improved access to services

☐ None of the above

☐ Don't know

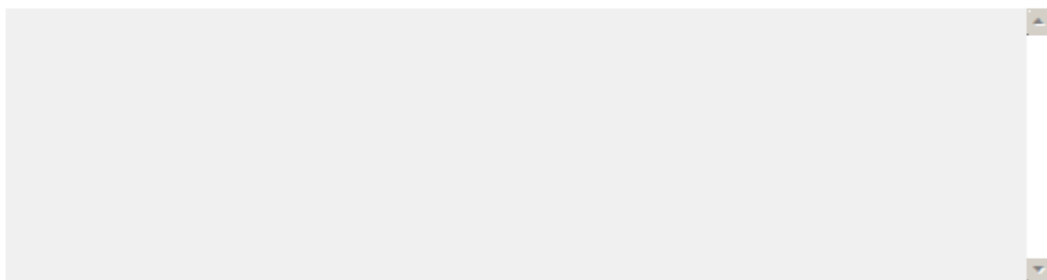
☐ Other (please specify)

Mobility Management and Transportation Coordination - Stakeholder Survey

24. Have coordination or mobility management efforts resulted in improved access to transportation service for any of the following groups? (check all that apply)

- ☐ Older adults
- ☐ People with disabilities
- ☐ Children and youth
- ☐ Individuals with lower incomes
- ☐ Individuals with limited English proficiency
- ☐ Veterans
- ☐ None of the above
- ☐ Don't know

25. If you can, please provide more details regarding the benefits realized through coordination or mobility management.



26. Is there a need for more coordination of transportation in your region?

- ☐ Yes
- ☐ No

Mobility Management and Transportation Coordination - Stakeholder Survey

27. What are the greatest barriers in your area that hinder more coordination of existing human service transportation programs? (check all that apply)

- ☐ Hours of need conflict
- ☐ Routes conflict
- ☐ Local officials object to merger and coordination/Board or agency policies prohibit vehicle sharing
- ☐ Federal regulations against vehicle sharing/State or local regulations against vehicle sharing
- ☐ Potential loss of control of vehicles/Potential loss of business control
- ☐ Fear of losing job
- ☐ Unique needs of various client/consumer populations
- ☐ Communication across agencies (the time and/or the will)
- ☐ Consumers prefer services customized to their own disability/intermingling not desirable
- ☐ Training needs would be intense and expensive
- ☐ Personalities of individuals involved
- ☐ None
- ☐ Don't know
- ☐ Other (please specify)

28. What additional coordination of existing human service transportation programs should be pursued?

***29. Have you engaged in any data collection to understand the transportation needs of your clients/customers?**

- ☐ Yes
- ☐ No

Mobility Management and Transportation Coordination - Stakeholder Survey

30. Are there any types of transportation services needed by clients/customers that are not currently available? (check all that apply)

- ☐ Curb-to-curb services
- ☐ Door-to-door services
- ☐ Door-through-door services or escort services
- ☐ Group pick-ups
- ☐ Fixed-route service
- ☐ Weekend service
- ☐ Longer hours of service
- ☐ None
- ☐ Other (please specify)

31. Please indicate whether you agree or disagree with the following statements.

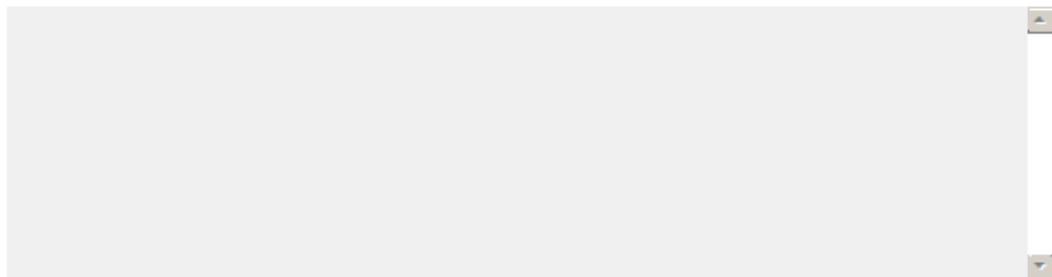
	Strongly Agree	Somewhat Agree	Neither Agree Nor Disagree	Somewhat Disagree	Strongly Disagree	Don't Know
The transportation needs of your clients are being met	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Transportation services in your community are easy for your clients to access	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

32. Please indicate whether you agree or disagree that efforts to coordinate transportation services in your community have resulted in the following

	Strongly Agree	Somewhat Agree	Neither Agree Nor Disagree	Somewhat Disagree	Strongly Disagree	Don't Know
Simplified access to transportation services	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
More transportation options available to your clients	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Expanded service area to include new destinations where your clients need to go	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Expanded hours of service	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Expanded service on weekends	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Increased frequency of service	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Reduction in service gaps	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Increased awareness of transportation services	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Mobility Management and Transportation Coordination - Stakeholder Survey

33. If you have any other thoughts on mobility management or human service transportation coordination activities, or if you have any accomplishments you would like to share with us, we would appreciate your comments.



Thank you so much for taking the time to support this important work. We will email a copy of the results when it is completed.

34. Is it okay if we follow-up with you with a brief telephone interview to clarify and extend on your responses?

☐ Yes

☐ No

APPENDIX F. DETAILED STAKEHOLDER SURVEY RESPONSES

Other Coordination Activities

- “We participate with the local paratransit provider on an interagency council, and transportation opportunities and resources are a regular agenda topic.”
- “I work with Jaunt to assist my clients in getting transportation scheduled properly. I occasionally will transport my clients to their appointments”
- “Partner with transport services to provide for the elderly”
- “Program coordination across agencies, eg., veterans transportation: The county one-call center (DHS) receives requests for service, the county purchases and leases for \$1 accessible vehicles to a local vet's svc org, which contract with DHS to provide routed services, while the local RSVP provides volunteer drivers for on-demand accessible trips in those vehicles. The RSVP also has a vets-helping-vets volunteer driver program using volunteers' cars (non-accessible), and contracts with the VA's DVA van program to provide supplemental service. Further, the county VSO distributes bus passes to vets. Finally, vets participate in the county zero-interest vehicle purchase/repair loan program. There are similar multi-agency agreements with regard to dialysis, homeless, and oversize wheelchair riders.”
- “Provide scheduling/dispatch and drivers for ADA paratransit service in southeastern CT. These vehicles are maintained by the transit district and loaned to our agency to provide the service. A transportation resource guide has been compiled for eastern CT and distributed to libraries, social service agencies, local government offices, senior centers, schools, colleges, religious institutions, housing authorities, etc. We are partnering with local agencies to better educate the disabled community about existing transportation resources.”
- “We evaluate all ride requests and forward riders for whom we are not well suited.”
- “Share radio communication with County Emergency System (fire, police, ambulance).”
- “Help apply for grants, provide grant oversight advice, help emerging leaders consider effective strategies”
- “Madison County Transportation transports our members to and from our Day Habilitation program and to community activities during the day. Genesis also transports members to work services in Indianola under waiver funding.”
- “Communicate ongoing projects with human service agencies/clients; market open to the public transportation services for the county within a developed brochure; helped finance/develop online resource guide for the county; provide emergency transit tickets/gas vouchers for low-income clients; provide bus tickets for Alternative Learning Program school students and letters of support for several national discretionary grants. Results include three fixed-routes added/frequency increased, new medical transportation service crossing county borders developed/financed, bus for regional service purchased, private yellow school buses being used to provide fixed-route trippers for urban transit system due to high demand for transportation

along certain corridors; intermodal facility housing private airport shuttle operations and two intercity bus carriers bus depot within parking ramp etc.”

- “Marketing Coordination (joint brochure); Referral to other transportation providers when it is appropriate”
- “Provide transportation services to partner agency clients and subsidize trip cost by 50%; Set insurance guidelines, monitor safety and compliance to providers. Contract with local providers for service; both van service and taxi companies. Service area 1,723 square miles- unincorporated and incorporated areas of Harris County. Fill in the gap in services.”
- “My coordination efforts involve 1) discovering/understanding a community need, 2) developing possible solutions, 3) getting the right folks to the table and convincing them of 1 and 2, buying into the need and understanding they're part of the solution, and then 4) helping with planning/implementation.”
- “One-Call/One-Click service (211 Tompkins Information & Referral/ Way2go.org); Community mobility education program (Way2Go.org); Regional travel training network - led by Way2Go; Regional rideshare consortium - Three colleges/university, County MPO, County DSS, transit system; Affordable carshare membership - Ithaca Carshare & Way2Go; Wheelchair accessible taxi - independent living center, County and taxi company”
- “We are contracted to provide rides for rural dialysis patients using our pool of volunteer drivers. Coordination involves receiving referrals and matching drivers with riders for on-going transportation needs.”
- “Mobility Managers develop and seek public input to develop Local Mobility Network Plans which describe opportunities for coordinated public transportation services, the needs in the communities in which we serve, and work with public transportation providers to address those needs.”
- “The rural mobility management program being implemented in Idaho is done on a systems basis and not on an individual basis. The District Mobility Manager is responsible for identifying transportation challenges in a community and opportunities to leverage and/or coordinate existing resources to improve transportation options for that community. The coordination being implemented in Idaho by the District Mobility Managers may at times involve the items checked above as a way to leverage and coordinate. However, there typically are not two transportation agencies overlapping in one area.”
- “RSVP of Dane Co. coordinates rides for the cities of Madison/Monona through our office. In rural areas, we work closely with Focal Points who serve as our Volunteer Stations. We have some Senior Centers that coordinate rides and some areas where we have RSVP Volunteers that coordinate rides. We also have a Vets Helping Vets Coordinator in the RSVP office that coordinates those types of rides. It's also very important to note that we work very closely with the Dane Co. Mobility Manager. If RSVP is unable to provide rides to any particular potential passenger, we refer them to the Mobility Manager to see if that person can find transportation for someone we can't provide rides for.”
- “We provide joint Dial-A-Ride trips on occasion to popular destinations (malls, restaurants) with a neighboring town/senior center.”

Comments on Other Barriers

- "Turf issues"
- "Real and perceived regulatory barriers"
- "Many people are needing individual transportation to get them to and from their job, especially after metro hours and on weekends - we can do it much more affordable and much safer but no avenue is available to provide the service"
- "Inconsistency in pick up and drop off times."
- "Convincing providers to travel outside of the city limits and into the unincorporated areas of the county."
- "We are still not utilizing all of our resources and coordinating the funding. All of the funding tends to be in silos and we are not able to designate at the local level where the federal funding should be spent."
- "Transit operator was concerned about other actors taking initiative in mobility services. Transit operator wanted to control all FTA funds."
- "Lack of general knowledge of who is providing transportation and the areas that can be coordinated to assist with cost savings, safer transportation, and the expansion of services to the unserved,"
- "Some challenges have been confusing communication and lack of understanding about the type of service our agency can provide."
- "It was mostly around turf issues. The urban entities did not want the rural mobility managers to do anything within the urban area, although everyone knows individuals in the rural communities need transportation from the rural area to the urban area for services, shopping, recreation, and medical appointments. There is also a fear of the funding shifting from the previous transportation providers to the new transportation services that have been implemented in new communities. In addition, there is fear the rural mobility management program is reducing the amount of available 5311 funding because some 5311 funding is being used to implement the rural mobility management program."
- "Increased cost. Loss of program control"

Comments on How Agencies Addressed Barriers

- “Always looking for grant funding for transportation resources as well as volunteer assistance.”
- “Search for grant opportunities etc.”
- “Win/win negotiation; we try to make sure all parties feel that they have a bonus in it for them. And I beat the “good public policy” drum in public all the time.”
- “Communication, show examples of benefits gained for ridership.”
- “Having someone who has done a great job of keeping people in the loop.”
- “Regular meetings and educational programming.”
- “Found some money (not nearly enough, so far); Began building a coalition; Articulated a vision; Listened”
- “Reduced the overall project scope”
- “United Way of Story County established a Story County Transportation Collaboration, bringing together all of the stakeholders with an interest in the development/maintenance of an effective and comprehensive transportation service system. This collaboration brings together transportation service providers, human service agencies (representing consumers with transportation needs), funders, the faith community, and others in an effort to educate each other and coordinate services that better meet transportation needs.”
- “Addressed issues at local Transit Advisory Group meetings”
- “Conducting meetings with providers and submitting a Request for Proposal that would adequately compensate for their service, as well as convincing them that they would not only be providing a service, but assisting clients in need who are elderly, disabled and low income.”
- “Educate and let them know how this benefits their day to day life and/or bottom line.”
- “Hard work and determination.”
- “We are trying to obtain funding through private donations and memberships. However, when the contract provider does not show up to pick up the people or is critically late, it gives us a black mark and it’s very difficult to get the local support. I have been monitoring the rides and when these issues arrive, I go get the folks. We are working to establish a volunteer driver program and believe this will help us with our PR and get the local support we need.”
- “Stakeholders were involved in planning process and ongoing discussions. Providers were engaged to determine what items they needed in the model to be willing participants. Agencies gave up independent owned vans and bought into the RIDES model.”
- “We must work together and ensure we are not losing any money while coordinating trips. Time is very important for coordination to work.”
- “Great communication and involving all partners in the planning and implementation process.”
- “We built trust in our partners by delivering what we said we would do. It is an ongoing process and we consider ourselves never done with the process of building trust.”

- “My background in sales was most helpful. It seems to me that in the transit world, most people expect to have a meeting, make a pitch, and get an answer. Whether that is asking for coordination, participation in a program or on a board, or asking for match. They're often disappointed by the ‘no’ response that they get. In sales, particularly with larger ticket items, or financial/insurance products, it is well understood that you're talking about 5-7 contacts before the sale is made. So everything from finding the right person to make an introduction for me rather than cold-calling, to helping with an effort that is important to them but nothing to do with transportation, to general debriefs/updates on transit topics/issues, etc. I've been consistent with being available, a resource, etc. Then when it is time to make the ask, I've got an 'in', and a relationship built, and I know it isn't going to happen in one pitch. Consistency, communication, relationship-building. That gets over most of the barriers.”
- “Since 2010, the coordinated planning committee meets monthly, operates a website, and uses email marketing and listservs. We have an annual coordinated plan amendment process and use an open competitive selection process to allocate Federal funds. The county secured new local funding source for the transit operator, and the transit operator decided not to have a public fight with agencies active in coordinated planning.”
- “As part of a bigger system, my primary responsibility is to develop communication among all providers so that areas of cooperation and coordination can be identified and implemented. This coordination goes from the state level down to the local areas. In the late ‘80s I co-authored legislation which set up a formal coordination body among state agencies under the Office of the Governor. Governors changed, agencies changed, and this important effort was minimized to a lifeless group that did not understand the original purpose. We are attempting now under the leadership of our State Transportation agency and a few key legislators to revitalize this group. The progress has been good.”
- “Using in-person and phone communication to follow-up when understanding has been unclear. Creating printed materials addressing how to make proper referrals to distribute to groups who would provide referral for communication. Defining what service we DO provide.”
- “Support legislation to provide state funding for public transportation.”
- “Continue to show the value or return on investment for the rural mobility management program. And, continue to stress the importance of more communities having transportation services not only for their community but also to raise the awareness of the need for state funding for public transportation services with more communities voicing their need for funding.”
- “We're still trying to address these issues. The increase in cost may not be resolved. We are trying to gain more specific rider/trip data from our shared transportation provider in an effort to plan routes that are more efficient.”
- “Maintained lines of communication and exhibited willingness to continue to work together.”
- “We cannot run as many trips as we would like to.”

Other Barriers Hindering More Coordination

- “State Dept. of Health contracts for state broker for NEMT (Medicaid) who prefers single-client taxi over coordinated paratransit trips.”
- “Appropriate referrals - limited funding for coordination”
- “The inability of the state agencies providing transportation services to coordinate with the public transportation providers so more rides are provided with the same amount of funding.”
- “Lack of funds and geographic area (i.e. cannot keep riders on the bus for hours at a time).”
- “There is a need for evening and weekend services for which there are no funds.”
- “Distance is also an issue, ownership of vehicles - insurance,”
- “Regulations against population mixing, especially with respect to age and definition of ‘older adult’”
- “Limited resources in some of the more rural areas.”
- “Funding”
- “Cost, meeting demand, lack of resources to provide service.”
- “RSVP receives funding for mileage reimbursement to transport seniors age 55+ to non-emergency medical appointments outside of the county in which we live. Currently we limit clients to 2 rides per week but find that some clients have treatments 4-5 times per week. When RSVP is not able to transport clients they may be forced to use the county transportation service (JETS) at a rate of \$25/hour. This becomes very costly as most medical facilities are at least 45 minutes away and appointments often take several hours, costing clients upwards of \$100 per ride.”
- “Perceptions that the problem is unsolvable.”
- “Fear of insurance regulations for vehicle sharing (who is liable); Fear of funding program not directly benefiting city/county taxpayers; costly operational service needs with no group/organization willing to subsidize (such as emergency transportation 24/7 or free public transportation for K-12 students).”
- “Some areas are not served by public transportation and there aren't enough transportation providers to cover all the areas. In areas where there is public transportation, it is difficult for some people to access it due to infrastructure issues. We have a huge geographic area to cover.”
- “Funding between the counties.”

Comments on Coordination Programs that Should be Pursued

- “Would like to see a statewide coordination of county-owned DAV vans to regional services, ridesharing for oncology patients, and better coordination of homeless/low-income transportation options.”
- “Better coordination of communication services for the public. Make this information more accessible.”
- “Central dispatch, vehicle and driver sharing, rider sharing, ‘easy-out’ contracting for transportation by agencies for whom it is peripheral to mission, and assurance that current drivers won’t be pushed out of jobs”
- “Sharing of vehicles and/or driving staff between human service agencies. Nursing home driver/vehicle sharing/coordination allowing more access to social outing transportation for their clients. Seamless county-to-county transportation between regional public transit providers throughout Iowa.

“There is a fear among leaders to fund programs/services that may benefit non-taxpayers (residents from another community or county). This is seen in ASSET which is a coordinated process to fund programs within Story County to eliminate repetitive programs. Funders of this do not traditionally support programs that do not directly impact their residents.

“Emergency transportation is needed for victims of sexual assault or battery that need transportation to emergency services. The supportive services are now being extremely limited through new legislation and transit systems/cabs/support staff will need to transport these individuals to shelters often several counties away to obtain services.”

- “Crossing the ‘hidden’ boundaries of counties.”
- “We need to look at some of the successful models around the country and look to change the way our coordination is set up. A seamless fare would also help, along with county-to-county transfer points.”
- “Funding that would allow enough drivers and vehicles to meet the need and also allow for crossing of county lines.”
- “Requirement for coordination across federal agencies and their providers - not just among traditional transportation providers.”
- “Regionalization.”
- “Adopt the Berkshire Rides (Berkshire, MA) business model of agency van-sharing and operating cost-sharing. Develop the ITNEverywhere business model of volunteer-centered community mobility.”
- “Our services are fairly new so the major enhancement will come as we continue to expand our sphere of influence throughout the 5-county area.”
- “There is a need to increase access for medical transportation beyond medical dialysis - more coordination of rides for reoccurring medical appointments in general throughout Dane County (not just rural areas.)”

- “State agencies providing transportation services should increase coordination through the Interagency Working Group as set in Idaho code potentially by utilizing the public transit agency as the coordination entity. MPOs and Urban transportation providers should look to coordinate services better with the rural areas.”
- “Perhaps a regional Dial-A-Ride bus to transport seniors and those with disabilities to their out-of-town medical appointments....this is a huge need!”
- “More regional coordination is needed. RIDES provides limited coordination beyond the Harris County lines by using inter-local agreements with other transportation providers or agencies from neighboring counties.”

Other Mobility Management Activities being Conducted

- “Interfacing and partnering with the disability community.”
- “We employ ‘Travel Options Counselors’ who work with each new customer in a self-assessment of what transportation options best suit their needs.”
- “Facilitate web meetings, NTI training & communication among mobility managers in Upstate NY.”
- “Establish a network of local groups regionally which support and advocate for coordinated transportation throughout the state; affect public policy which supports coordinated public transportation services at the state and local levels; hands-on assistance in local areas in the coordination activities.”
- “Our agency is not specifically a transportation agency, but people can access a number of resources to help them meet gaps in their transportation needs. This happens in both a formal and informal way - including direct coordination of services to provide medical transportation.”
- “Work with local communities to support local funding of public transportation.”
- “The District Mobility Managers in Idaho write the coordinated transportation plans for the local networks in their respective areas (there are 17 rural networks).”
- “Our Dial-A-Ride Program can provide two out-of-town medical trips per person, per month.”
- “One-call center, funding coordination across programs, convening planning and design meetings for new and existing services across agencies by target group.”
- “Social media outreach and promotion of transportation resources.”
- “We provide bus tickets and passes to families that we work with.”
- “Coordinate, loan vehicles, transport people, work with employers on transportation issues.”
- “We receive funds for Access to Recovery (ATR), which is designed to eliminate obstacles that prevent people from seeking or receiving substance abuse treatment. One of the items we can reimburse for clients through ATR funds is transportation costs.”
- “Own and manage an Intermodal Facility - one stop facility to access regional/national transportation options. Wrote grants, purchased buses for regional system and held discussions with local funders to attain match for regional project.”
- “We are part of a steering committee for an agency that provides mobility management.”
- “Our organization provides the money for X amount of clients to receive cab rides and shared rides.”

Challenges with Implementing Mobility Management Programs

- “Especially with veterans groups, there are turf issues that get in the way of expanding and streamlining services to riders. Too often coordination is personality-driven, and if a key player leaves, cooperation can languish.”
- “Time management in a small agency. Often requires a lot of extra communication.”
- “Funding for the MM position.”
- “Limited resources”
- “The public transit provider provides the staff member that leads the coordination process for the MPO. This coordination process documents the transportation needs and gaps within the community. However, this is not their full time job and other duties for the public transit provider have priority. This work speaks to the City's values of total city prospective, however the coordination and documentation of this coordination takes considerable time. Taking needs, developing projects and implementing these projects by attaining funding (federal/state grant funding as well as local match funding) takes much time and effort. Discussing needs is all great and wonderful but it takes someone to take those needs and push a project forward toward implementation for mobility management to work. Often times, solutions have nothing to do with the urban public transit system. However solutions in the end benefit city residents.
- “Difficulties when there aren't services to solve the issue for the customer and unwillingness to fund a need.”
- “Short notice trip requests, need for more volunteer drivers, need to efficiently track trip and client data, and lack of staff time.”
- “Obtaining and maintaining competent providers and providing the necessary training to properly transport this specialized group of clients.”
- “Educating the public and/or Human Service agencies about what Mobility Management is and how it can assist them.”
- “Not enough transportation programs to meet the need. Transportation providers that are territorial and not familiar with collaborative model.”
- “The challenges are simple - we do not have enough money to help all the citizens that need our help.”
- “Ambassador turnover. Problematic after investing in extensive training.”
- “Funding”
- “The geography is large and there is not a regional system in place. There are several cities that have their own Dial-a-Ride in addition to the areas served by Valley Metro.”
- “The only challenge I can think of is finding sustainable funding.”
- “Providers planning/managing their systems to their grants and not to their ridership goals. They haven't typically developed a system in response to a community need and then gone out to figure out how to fund it. They find funding and figure out how to deliver a service that maintains their eligibility at most advantageous match rates. It's a different orientation and leads to suboptimal outcomes in terms of ridership performance. Changing that orientation is challenging.”

- “The sheer amount of work done by a small group of people is daunting.”
- “Lack of leadership at the state level, resentment by urban MPOs, local option taxes not allowed by state code.”
- “Lack of clarity about expectations for the contract for services and reporting requirements. Payment for services after service has been provided. Misunderstanding about how a volunteer driving program works compared to a cab service.”
- “Lack of funding.”
- “The lack of leadership by the DOT when receiving push back on implementation of the rural mobility management program. The constant changing of direction by the DOT when implementing the rural mobility management program. The lack of cooperation by the MPOs and urban transportation providers to coordinate with the rural mobility management program.”
- “Funding”
- “Never enough funding.”
- “There are challenges in finding good quality, cost effective service that meets the needs of our clients and our own reporting needs.”

Comments Regarding the Benefits of Coordination and Mobility Management

- “Our program provides the benefit of a more personal connection for riders, as they are matched with the same driver over a period of time. The benefits of this extend beyond the transportation needs of clients, providing a more personal service. At times we are able to combine routes to create efficiencies in service and cost of service provided.”
- “Increased private/public partnerships. And increased communities with access to transportation options.”
- “We have started up several new services, including commuter services in Challis (22,000 rides in first year from a town with population of 1,000), to after-hours service in Salmon, and a seasonal skier/employee shuttle in Driggs that did 15,000 rides Dec-March from a town of 3,000. All of these rely on 'non-traditional' match partners; private companies, not govt. bodies. Challis receives \$7,000/month cash match from TC Metals, Driggs receives \$45k/season from Grand Targhee Resort, and Salmon relies on LCEDA and ad revenue for the extended hours. We also saw the discontinuation of a poorly used service from Salmon-Idaho Falls. This service did 120 rides in its last year, a route segment that was costing about \$50k/year. While service reductions are usually viewed as a bad thing, this was the opposite. It freed up resources to be used for much more productive uses. We also saw the elimination of a service duplication. TRPTA and Salt Lake Express were both running Hwy 20 from Rexburg-Idaho Falls. TRPTA was receiving 5311 money to run this service when a private provider was doing it. TRPTA no longer runs that, SLE continues to, and actually charges less/trip than they did 3 years ago.”
- “Expansion of carshare program to minority/low income neighborhoods. Expansion of paratransit service to ADA paratransit-certified individuals, beyond the minimum requirements of ADA paratransit service. Expansion of commuter demand response service for people with disabilities to get to work. Expansion of carsharing membership for low income individuals & families. Creation of individual trip plans for anyone in county. Creation of One-Call/One-Click service with 24/7 phone coverage. Training of 600+ staff of human service agencies in mobility education. Creation of retiring-from-driving and AAA car-fit workshops for seniors. Developed Streets Alive Ithaca! - cycloviva going into its third year. Increase of 1 million passenger trips on public transit since 2010. Growth in volunteer driver program to access medical services. Purchased one MV-1 wheelchair accessible taxi. Operating assistance for travel training. Operating assistance for night taxi vouchers for low income commuters. Replaced JARC Program with Special Community Mobility Program, funded with FTA Sec 5307. Expend \$525K in Federal funds per year for mobility management and operating assistance for projects created through coordinated planning.”
- “Coordination among publically funded agencies whose service include transportation; higher degree of professionalism in drivers; safer vehicles being used; recognition that local governments should support mobility financially to augment limited fiscal support from the state level.”
- “Our program provides transportation to rural dialysis patients in Dane County. The options for transportation in the rural areas of Dane County are very limited, and the needs for transportation for medical dialysis are frequent (three times per week - a ride each way). We are able to provide rides in lieu of cab transportation, which is very costly on routes that cover 30-50 miles at times. We are able to relieve family members of numerous stressful trips and provide help with rides when no other options exist. Riders and drivers often times build a personal connection, which helps to break the social isolation that some of our clients experience. Drivers, who are volunteers,

have helped with additional tasks such as shoveling a long drive for elderly patients and stopped on the way home to pick up food for clients (for example). When we are able to combine routes, we create efficiencies in service that cut the cost of transportation for riders considerably (by half, typically)."

- "The Town of Manchester provides free ADA paratransit tickets to eligible residents. This provides Senior/Disabled residents with far more options than the Town's limited Dial-a-Ride program. All of the benefits can be attributed to the arrangement with the local ADA paratransit program."
- "The growth in the older adult population has been such that it is difficult to see the benefits. It is quite possible that the growth in this population is outrunning the benefits at this point."
- "It gives Dane County's elderly, veterans and younger disabled more options for transportation services and makes it more cost effective."
- "Access to an extended variety of destinations."
- "Combining resources (funds) with another town enables us (and them) to offer more service to our seniors and persons with disabilities."
- "By partnering with Senior Resource we provide cars and volunteers and they do all the intake and screening of clients as they have a larger staff."
- "Access issues are discussed leading to prioritized solutions as funding resources are located."
- "We have been able to get more service for my clients, get more of them using the service and getting Jaunt to expand their hours."
- "Increased and improved socialization, daily activities and help to maintain independence."
- "Our residents are able to be more independent by using Jaunt to go into Charlottesville for reasons other than appointments. They really enjoy getting out more."
- "We piloted a dialysis transportation program with our local TimeBank, and are working on a regional rideshare project in conjunction with the Am Cancer Soc Navigator Program. We coordinated rides to adult daycare with public paratransit, county aging unit and a local non-profit to reduce duplication of service. County DHS provides Bus Buddies and travel training for the Metro transit service, and they provide free bus passes to graduates of either, even if not referred by Metro. Meetings with local taxi companies resulted in 18 hour/7 day coverage of bilingual dispatching in both Spanish and Hmong."
- "Networking with multiple human service organizations has allowed us to increase awareness of existing transportation resources and helped us to identify other transportation barriers faced by their consumers."
- "By blending funds from several sources, avoiding funds that don't cover per trip costs or isolate a ride (no one from another funding source can share the trip) - thus co-mingling trips, able to create increased usage and reduce per trip cost."
- "As federal programs have fallen aside, increased communication has helped riders find options. We were missing a significant option to Iowa City (25 miles) for medical transport needs and that is now being filled."
- "Improved teamwork and resource sharing."

- “Provision of over 300,000 trips region-wide for elderly, low income individuals, immigrants, and people with disabilities over a 250,000 km squared region. Our transit paratransit services collectively are cited by some individuals with disabilities as THE reason they chose to relocate from regions with high capacity and flexible transit systems like NYC to our region. Rural residents receive door-to-door service facilitating life-changing benefits--jobs, access to loved ones in other parts of the region, access to medical care, etc.”
- “Biggest benefits are learning to understand each other's perspectives, get past the rock throwing, and agree that we can improve once we agree we are all working hard to make life better for those we serve.”
- “Coordination has improved communication to make sure that they use a vehicle large enough to accommodate our group. This has improved but more improvement is needed.”
- “Meetings allow networking and put a face to the organization that agencies can call up if they have questions. Other human service agencies are making transportation their focal point for needs and realize that if transportation is lacking, all other services will be lacking as people can't get there. If residents do not know about their transportation options, they will cancel their appointments with service providers. If they know their options, they will be less likely to cancel. Getting individuals to their medical appointments is vital to ensure good health for city/county residents. The transportation collaborative group put together a brochure that all human service agencies can reference or give out to their clients that may need transportation that rely on others for rides to their appointments. This was huge for the human service agencies as before, they just knew to call public transit. Now they have more options available.”
- “Working together, we not only have a greater awareness of the transportation services available to residents, we have a greater capacity to address unmet transportation needs in our communities. We are better able to identify gaps in services and work together to create solutions.”
- “We have worked with Human Service agencies as well as local senior living and service centers, schools, local Y's, etc. to educate them on how transportation works and the benefits of coordinating days, times, etc for groups to go at one time instead of individual trips. This is a more efficient way to operate for both agencies, and it allows a social and support aspect that isn't always present when doing one trip at a time.”
- “There are still gaps in service, and there is a concerted effort being put forth to address these gaps. We are in the process of evaluating the service coverage from our local public transit provider, and how we can better leverage our current resources.”
- “Ensures clients remain independent in the community. The program provides flexibility and clients can travel when they need to travel 24/7. Provides consumer choices, they can travel either by shared ride van services or taxi service. Our agency monitors providers, and ensures all trips are based on the same rate structure.

“Trips are discounted to the client or agency by 50% which provides more efficiency of our grant dollars and the agencies’ transportation dollars. HHS agencies or non-profits can use RIDES coordinated program rather than starting and managing their own van services, it is more efficient and cost effective with the headaches and costly overhead.”

- “Coordinating with another transportation provider has saved time and money.”

- “Provide more services to more people with at a lower cost is a great tool to promote the agency's success as well as the success of funding partners (DOT and others) and elected officials supporting the project.”
- “For persons in the Katy area, affordable transportation across county lines is now possible through our organization. Funding is still an issue.”

Other Comments on Mobility Management or Human Service Transportation Coordination

Accomplishments

- “We have provided a brokerage model for over 12 years and use a volunteer program to augment service. We have the lowest cost per trip in the area for specialized transportation and others are beginning to understand how to accomplish the same.”
- “Having a mobility manager in our community is a valuable asset. The availability of the mobility manager to focus on human service transportation issues has helped us fill some critical gaps in service (i.e.: Corridor Medical Shuttle).”
- “I have worked on a Transportation Committee within this county for the last year and we have accomplished one night a week for extended transportation hours after 4 p.m.”
- “When you're in transportation, the ultimate goal is to serve the customer and get them to where they want to go. As a transit provider, if we have knowledge of how someone should get to point B, it is our obligation to let them know even though we can't get them there but another provider can. If that is mobility management, then we do that well. We point the individual to another service that will get them to their destination.
- “Mobility Management has afforded us, as the RTA, to expand education and marketing of transportation services by having one person completely dedicated to outreach. Unfortunately, funding for this position is only available for another year. The FTA and/or State transportation should see the value in continuing to fund these positions that are so instrumental, especially for rural transit agencies that are operating with minimal staff.”
- “The local mobility manager has done an excellent job trying to reach all aspects of life. Transportation has always been an issue or barrier for our clients seeking routine medical visits, simply due to lack of reliable transportation. The Mobility Manager has come to our office and really outlined what is available to our clients, and we supplied him with further assistance and proper contacts in each county.”
- “Our agency provides funds to help support client access to services through transportation services vouchers, gas cards or referral to mobility management services. We have also provided matching funds to help other nonprofit agencies access government grant funds (JARC and NFF). We have worked with existing transportation planning organizations and transit providers to facilitate conversations with health and human services organizations that are trying to help clients navigate transportation issues.”
- “In one year, we quadrupled the number of rides we provide per month. Some of our volunteer drivers have maintained regular routes for over 18 months (since the program began) - and generally turn-over among drivers has been low. With excellent coordination among partners, we have been able to combine routes and create numerous efficiencies in service.”
- “The mobility management and/or human service coordination activities is very successful in Dane County. Through the Mobility Manager's efforts, all groups of passengers approved by Dane County's Transportation Manager and Mobility Manager have one phone number to call to get services that RSVP's Driver Services program and other transportation service providers may

not be able to provide. This is a godsend to potential passengers we or other providers can't help. This improves the quality of life for many people and makes all transportation services more cost effective, which is extremely important in this day and age."

- "Not all states are implementing mobility management in the same way. Idaho is implementing a systems mobility management program and not an individual agency mobility management program. It is vastly different. Yet it is highly successful in our rural state which has very limited state funding for capital purchases and no local option tax ability so communities cannot tax themselves for public transportation services."
- "We just launched the 'Anyone, Anywhere, Any Time on Any Service' transportation study, in support of improving transportation options for lowans with transportation challenges living in an eight-county region, a project that will work toward addressing the transportation needs of persons with disabilities, seniors, refugees, low-income, job seekers, homeless, minorities, youth-in-transition and formally incarcerated individuals."
- "Our system in our rural state is new and the lead agency-ITD is just now becoming aware of this effort. Our Inter-agency Working group is based in Idaho Code but has never been staffed by ITD. Hence the coordination among agencies at the state level has been non-existent and misunderstood. We have begun to rework this critical group so that agency heads begin to realize that coordination will result in cost-savings; safer services for all riders; and increased accessibility for all."

Communication and Partnerships

- "Coordination occurs through our community through already established human service agency meetings. One is a Human Service Council that meets monthly between September-May of each year. Then there is also a Transportation Collaboration meeting that the United Way hosts to talk about transportation issues exclusively. The rest of Iowa MPO's put together their own individual Transit Advisory Groups and forced human service agencies to come to their meeting. The collaboration/networking was already occurring, and I just needed to bring transportation issues to the table."
- "As the MPO for the Des Moines Region, we facilitate committee meetings that bring together human service agencies and transit providers in the region. This assists in building a network of people in the industry that can work together to solve problems related to transportation for those in need of it."
- "In the past five years since I came to this rural community, I have seen JAUNT expand the transportation to my VIEW because of the personal relationship that JAUNT and I have established."
- "We developed a recognition program to convey meaningfulness to the community for Ambassadors. We have an advisory council consisting of transportation providers, Independent living centers, United Way (represents non-profits) and other agencies such as Harris County Mental health agency."

Needs and Barriers

- “We are still in need of providing the capability of individuals to access the community on other nights and especially on weekends.”
- “Due to budget constraints imposed by elected officials, the services to my clients have lessened.”
- “We still have a ways to go. It would be good to have a central mobility management agency that knows each agency's strengths and weaknesses. This would coordinate between public and private agencies and enable us to have seamless fares throughout the region. That is where I would like to see us go. Eliminate the silos and concentrate on the end result, which is providing transportation to the mobility challenged.”
- “While services for persons with disabilities and the elderly have improved in the last 6-8 years through increased programs provided under New Freedoms funding, the accessibility for low income individuals is still poor. It is especially difficult for individuals that work in the service industry or shift workers in plants since non-traditional transit options (shared ride, demand /response) typically operates during daytime hours and there are few options available for weekend or early morning/late night trips. In our community, biking or walking are limited options for safety and distance reasons.”
- “I believe that transportation is one of the biggest (if not the biggest) issue facing Harris County and surrounding counties today. Major med centers are in Houston. Many of our clients cannot get to doctor appointments. A one-way trip in a cab can be upward of \$50 because of the distance. The other issues involve jobs. People in the outlying areas cannot get to jobs because of lack of adequate transportation.”
- “We need to hire a regional mobility management for the area, so they can cross reference counties in the region.”
- “The greatest lack of effort on coordination is at the state level. Future federal transportation reauthorization laws should mandate state interagency coordination.”
- “Our agency used to employ a mobility manager through a partnership with several other agencies, but an inconsistent funding stream and unclear expectations for the position resulted in its elimination. Also, it was nearly impossible to measure the value of the position without clear objectives and outcomes associated with the job. It eventually evolved into more of a transit management position based on needs of the agency, and unwillingness to fund the position from outside agencies.”
- “We have a good relationship with our local provider but their funding is limited. There have been some barriers to developing alternative types of transportation- using volunteers, affordable rates, community members often state that one rider on a large bus seems economically and environmentally unsound.