

Meeting the Employment Transportation Needs of People with Disabilities in New Jersey

Final Report Executive Summary

prepared by:

Alan M. Voorhees Transportation Center

Edward J. Bloustein School of Planning and Public Policy Rutgers, The State University of New Jersey

prepared for:

New Jersey Department of Human Services Division of Disability Services

2005



(Cover Art: Images 1 & 3 reproduced with permission of NJ TRANSIT/Michael Rosenthal-Photographer)

Meeting the Employment Transportation Needs of People with Disabilities in New Jersey

Executive Summary

2005

Prepared by:

Alan M. Voorhees Transportation Center Edward J. Bloustein School of Planning and Public Policy Rutgers, The State University of New Jersey 33 Livingston Avenue – 5th Floor New Brunswick, New Jersey 08901

Prepared for:

New Jersey Department of Human Services
Division of Disability Services
P.O. Box 700
Trenton, New Jersey 08625

Meeting	the Em	plovmen	t Trans	portation	Needs /	of Peor	ole with	Disabilitie	es in	New	Jerse

This publication was made possible by funding from the Centers for Medicare and Medicaid Services (CMS)

Medicaid Infrastructure Grant Number CODA 93.779

Legal Notice and Disclaimer

CMS (including its employees and agents) assumes no responsibility for consequences resulting from the use of the information herein, (or from use of the information obtained at linked Internet addresses,) or in any respect for the content of such information including (but not limited to) error or omissions, the accuracy or reasonableness of factual or scientific assumptions, studies or conclusions, the defamatory nature of statements, ownership of copyright or other intellectual property rights, and the violation of property, privacy, or personal rights of others. CMS is not responsible for, and expressly disclaims all liability for, damages of any kind arising out of use reference to, or reliance on such information. No guarantees or warranties, including (but not limited to) any express or implied warranties of merchantability or fitness for a particular use or purpose, are made by CMS with respect to such information.

ABOUT THE RESEARCH TEAM

The Alan M. Voorhees Transportation Center was established in the Edward J. Bloustein School of Planning and Public Policy at Rutgers, the State University of New Jersey in 1998. Since that time, the center has become a national leader in the research and development of innovative transportation policy. VTC is one of 13 research centers within the Bloustein School, and includes the National Transit Institute, which was created by Congress in 1992 to design and deliver training and education programs for the nation's transit industry. The center's primary activities include a blend of applied and academic research, education and training and service to the state and region on a variety of transportation planning and policy topics. The research team assembled to conduct this study included the following researchers:

Jon A. Carnegie, AICP/PP is assistant director of the Voorhees Transportation Center. He served as the principal investigator for this study with responsibility for overall research design and project management. Mr. Carnegie has 15 years of experience in the fields of land use and transportation planning and policy at the municipal, county and regional level. He is the principal investigator for a variety of research and planning projects involving a range of transportation policy topics. His experience includes managing research projects involving transit-oriented development, the relationship between land use and transportation, long-range vision planning, watershed planning, transportation capital finance, transportation equity, driver's licensing, workforce transportation options for low-income individuals and persons with disabilities, and senior mobility.

Dr. Richard Brail is a research professor in the Urban Planning and Policy Development program at the Edward J. Bloustein School of Planning and Public Policy at Rutgers, The State University of New Jersey. His teaching and research interests focus on urban transportation planning and the use of computer and information technology, particularly geographic information systems, urban databases, and spatial models. He has authored and co-authored numerous books and articles on these subjects. His publications include: Planning Support Systems: Integrating Geographic Information Systems, Models and Visualization Tools, Using GIS in Urban Planning Analysis and Assessment of Public Transportation Opportunities for WorkFirst New Jersey Participants. Dr. Brail received his B.A. from Rutgers University and M.C.R.P. and Ph.D. from the University of North Carolina.

Andrea Lubin joined the Voorhees Transportation Center in 2001 and has served as a project manager and contributing researcher on a number of transportation planning and policy studies. In addition to this study, Ms. Lubin's recent efforts have involved working on several studies investigating transportation equity issues, including transportation options for older New Jersey residents and two studies for the NJ Motor Vehicle Commission examining the impacts of driver's license suspension and the effects of plea bargaining on highway safety. Ms. Lubin received a Bachelor of Arts degree in political science from Tufts University in 1997 and a Master of Science degree in public policy from Rutgers University in 1999.

Pippa Woods is a project development specialist at the Voorhees Transportation Center. She has over 23 years of transportation program development and management experience. Ms. Woods has held senior positions in transit agencies in the United States and Canada and was Assistant Commissioner of Transportation for Planning, Research and Local Government Services in the State of New Jersey from 1997 to 2002. She has developed, directed and managed a variety of research, funding and operations management programs involving multi-modal transportation, freight and ports development, human services and welfare reform, senior and disabled transportation, local aid, highway research and mass transit system development. Ms. Woods holds a Bachelor of Arts in Sociology and a Diploma of Public Sector Management from the University of Victoria in British Colombia.

Graduate and Research Assistants: Jianye Chen, Aaron Cardon, Jeffrey Perlman, Richard Rabinowitz and Ginna Smith.

EXECUTIVE SUMMARY

Background

Getting and keeping a job can be a challenge for anyone, regardless of disability status. For people with disabilities in New Jersey, the challenge can be even greater. Although the state has a large and extensive public transportation network, many suburban and rural areas have little or no public transportation. In addition, in areas where transportation options are available, they are not always accessible and affordable.

In an effort to address transportation and other barriers to work for people with disabilities wishing to work in a competitive work environment, in 2000, the New Jersey Department of Human Services, Division of Disability Services (DDS) applied for and was awarded a *Ticket to Work and Work Incentives Improvement Act of 1999 Medicaid Infrastructure Grant* from the federal Health Care Financing Administration. The goal of the project, is to design and implement services that support individuals with disabilities as they secure and sustain competitive employment in an integrated setting.

As part of the project, DDS contracted with the Alan M. Voorhees Transportation Center at Rutgers, The State University of New Jersey (VTC) to develop a five-year transportation plan intended to identify and document transportation barriers to work for people with disabilities and make recommendations related to addressing the identified barriers and providing enhanced transportation services in a variety of settings throughout the state. The following report is the culmination of that work.

The Geography of Disability and Employment in New Jersey

Critical to addressing transportation barriers to work for people with disabilities in New Jersey is identifying where the state's disabled residents live. In order to understand better the geographic relationship between transportation services and where the disabled population resides, an analysis of census data was conducted. Chapter 2 presents the results of this analysis at the state and county level and presents a more detailed analysis for Essex, Middlesex and Cumberland counties to illustrate the extent to which there is municipal variation.

The following is a summary of key findings from the analysis:

- According to the 2000 Census, Essex County has the highest number of residents (140,551) reporting a disability. Hunterdon County has the lowest (12,130). Densities of people with disabilities range from a low of twenty six persons per square mile in Salem County to a high of 2,292 in Hudson County.
- Statewide, almost one in five residents (17 percent) report having a disability. Hudson County has the greatest proportion of disabled residents. Nearly one in four or 24 percent report being disabled. At nine percent, Hunterdon County has the lowest rate of disability. Morris, Sussex, and Somerset Counties have disability rates at least 5 percentage points lower than the statewide average. Essex and Passaic Counties have rates 5 or more percentage points higher than the average. The four counties with the

lowest rates of disability (Hunterdon, Morris, Sussex and Somerset) are either rural or suburban in character, while the three counties with the highest rates of disability (Hudson, Essex and Passaic) are more urbanized.

- Similarly, patterns of disability by type vary across the state. In some cases however the variation is more pronounced. For example, two in five working age disabled New Jersey residents (39%) report having a condition that makes it difficult to go outside the home. At the county level, five counties (Burlington, Cape May, Gloucester, Hunterdon, and Sussex) have go outside the home disability rates ten or more percentage points lower than the statewide average. At the same time, Hudson and Passaic Counties have rates more than ten percentage points higher than average. Once again, the counties with lower rates of disability are rural and suburban in character, while those with higher rates are more urbanized.
- In the case of employment disability, more than two-thirds or 68 percent of the state's working age disabled population reported having a condition that makes it difficult to work at a job or business. Bergen County has the highest rate of employment disability (73 percent). Hunterdon County has the lowest (61 percent).
- In New Jersey, rates of employment for working age people with no disability average 74 percent and range from a high of 80 percent in Hunterdon County to a low of 67 percent in Essex and Hudson Counties. Nearly 3 out of every 4 working age adults are employed.
- For working age people with disabilities in New Jersey, the statistics are dramatically different. Statewide, the percent of working age people with disabilities employed is approximately 58 percent, 15 percentage points lower than the statewide average for those without a disability. Variation between counties is also more pronounced than was evident among those with no disability. The county with the lowest proportion of employed residents with a disability is Cumberland County, where only 50 percent are employed. The county with the highest proportion of employed disabled residents is Hunterdon, where two thirds (67 percent) of disabled working age adults are employed.
- Just as patterns of disability and employment at the county level vary widely throughout the state, so do patterns at the sub-county level. As such, it is important to examine municipal level data when considering interventions to improve transportation options and services for people with disabilities.

Transportation options for people with disabilities in New Jersey

The National Council on Disability reports that "[f]or many Americans with disabilities who cannot drive or who, if they could drive, do not have the resources for the adaptive driving controls, lifts, telescopic systems, or other assistive technology that may be necessary, accessible transportation represents one of the chief barriers to participation in economic and community life" (2002). A important component of this study was to inventory the range of transportation

options available to people with disabilities in each of New Jersey's twenty one counties and to document the service characteristics of available travel options.

Chapter 3 briefly reviews different types of accessible transportation; describes the range of mobility options offered in New Jersey by public, nongovernmental and private sector transportation providers; and highlights a variety of service characteristics, including coverage area, hours of operation, available vehicles and seats, as well as fare and funding policies for many of the services inventoried.

The following is a summary of key findings from the transportation inventory and survey:

NJ TRANSIT bus and rail service and Access Link

- A range of accessible transportation services are available in New Jersey, including: traditional bus and rail services; Access Link, NJ TRANSIT's ADA paratransit service; community transportation services operated by counties, nongovernmental organizations and municipal government; as well as medical transport vehicles, taxis and livery services.
- NJ TRANSIT currently operates approximately 150 bus routes and contracts with private companies to operate an additional 24 public bus routes. These routes are divided into two major types local and commuter. According to NJ TRANSIT's Guide to Accessible Services, 99 percent of all its local bus routes are accessible to passengers with mobility limitations. Commuter routes, which travel to New York, Philadelphia or Newark, require advance reservations for an accessible vehicle to be provided (NJ TRANSIT 2004).
- NJ TRANSIT also operates a *regional rail system* consisting of eight commuter routes, two light rail systems and the Newark City subway. The combined system has 161 rail stations. According to NJ TRANSIT's Guide to Accessible Services, 60 of its passenger rail stations are accessible to individuals with disabilities. In addition, its Hudson-Bergen Light Rail line and the Riverline light rail operating in Mercer, Burlington and Camden counties are fully accessible (NJ TRANSIT 2004).
- Compliant with requirements of the Americans with Disabilities Act, NJ TRANSIT operates *Access Link*, a statewide paratransit service that "shadows" its fixed-route bus system within a ¾ mile buffer of existing bus routes. The system operates on a paid basis, with routes, hours of operation, and fares comparable to the standard bus network. Eligibility for Access Link is restricted and requires an in-person interview at a designated "Assessment Agency" office. To be eligible passengers must have a disability of a nature that precludes use of the public bus network (Palladino 2004).
- Although information provided by NJ TRANSIT indicates compliance with ADA requirements, numerous consumer focus group and survey participants reported that that stop announcements are frequently not made or are inaudible; equipment such as wheelchair lifts, bridge plates and elevators are not always operable; and accessible station facilities are not well marked.

• Access Link operates on an appointment basis, with reservations required at least one day in advance. Vehicles may arrive at a pick-up point as much as twenty minutes before or after the desired pick-up time, creating a forty-minute window within which the vehicle might arrive (see Figure 3.2). There is no restriction or prioritization on the types of trips that can be made as long as they are within a ¾ mile radius of regular bus routes. Passengers are charged fares based on the standard local bus fare and number of fare zones traveled. Access Link services are organized into 5 service regions and all services are performed by third-party contractors (Palladino 2004).

County-operated community transportation services

- Each county in New Jersey operates its own community transportation system providing a variety of transit and/or paratransit services to passengers with disabilities. In some counties transportation services are provided by one office or agency, in others, multiple offices, departments or agencies operate transport services. The extent and nature of service varies widely across counties in terms of the agency operating services, area covered, hours of service, types of service offered and reservation requirements.
- Much of the county-to-county variation in community transportation service relates to the type and amount of funding counties receive. Counties use a variety of funding methods.
 - The most common source of funding is casino revenue also known as the Senior Citizen & Disabled Transportation Assistance Program (SCDRTAP). The second most common source of funding used by county agencies to support community transportation services is county funds.
 - In 2005, the state administered Casino Revenue Fund is expected to receive \$384 million dollars from casino taxes. Over \$25 million dollars of that is set aside to fund transportation services for seniors and the disabled. Eighty-five percent of the funds are allocated to the counties. Ten percent of the remaining funds are used by NJ TRANSIT to administer the SCDRTAP program and the balance is set aside for NJ TRANSIT accessibility projects (Koska 2004).
 - County transportation spending levels vary widely. While most rely significantly on SCDRTP funds, many also use other sources of funding, including Federal grants, Title III, XIX and XX funds, Medicaid, Job Access Reverse Commute funds, Veterans funding, county funds, contributions from municipalities, foundation support, donations and fares.
- Demand-response services are available in all 21 counties. Most of these services require advance reservations, and trip purposes may be limited. All have pick-up and drop-off "windows" for when the transit vehicle may arrive and some do not allow and/or encourage scheduled work trips. Subscription service is available in all but two counties. Seven county paratransit providers and an additional five other county agencies offer fixed and/or flex-route services. Group services are available in ten counties.

- One of the major limitations of many community transportation services is the generally limited times in which they operate. County-based services operate an average of 80 hours per week.
- Every county paratransit provider operates during weekday business hours. Only a few provide service in the early evening, late at night or on weekends. Twenty one of the county agencies surveyed stated that, in general, they only provide service within their own county. All but two county paratransit providers (Somerset and Cape May) limit operations to the county of origin. This makes using county paratransit to travel to and from a work location in neighboring counties difficult.
- The average fleet size for all county providers surveyed was 36 vehicles. County paratransit providers maintain slightly larger fleets with an average size of 46 vehicles. Typical fleets are composed of a mix of vehicles including sedans, small vans, minibuses and buses. Somerset county has the largest fleet with more than 100 vehicles. Burlington has the smallest with less than 20 vehicles. Agencies reported that slightly less than half of the county paratransit vehicles are wheelchair accessible and about two-thirds of the overall 1,200 vehicles operated by county agencies surveyed are accessible.
- A total of 25 county agencies reported serving the disabled as a "main" customer group. These included all of the 21 county paratransit providers who also identified seniors as their "main" customers.
- More than half of the county agencies surveyed reported that the "main" purpose for their customers' trips if for employment. This included 18 of the county paratransit providers. Although all of the county paratransit providers that receive SCDRTAP funding are required to provide employment transportation when requested, Burlington, Hudson and Ocean Counties did not identify employment as a "main" trip purpose for their customers. In addition, it should be noted that consumer focus group participants reported that employment trips are often considered lower priority than trips for medical and other purposes when making advance reservations.
- Only 25 county agencies surveyed reported having eligibility criteria for people with disabilities wishing to use their services. Of those, 14 permitted self-evaluation of need, 11 require medical documentation (e.g., certification from a doctor) of a qualifying disability.
- Twenty one agencies surveyed provide training for drivers on how to operate assistive devices such as wheelchair tie-downs and lifts. Only seven agencies provide training related to handling emergency situation and first aid, and sixteen agencies provide sensitivity training related to serving the disabled population.

Community transportation services provided by NGOs

 A significant component of the transportation provider network is nongovernmental organizations (NGO) that provide a variety of social services including in places transportation for a variety of clients.

- One third of the NGOs surveyed reported the state as a "main" source of funding. Twenty seven percent reported receiving funding from private foundations and 20 percent receive funding from county government. Other less significant sources include: fares and program fees, federal grants, Medicaid funding, and support from municipal government.
- About half (56 percent) of the NGO providers surveyed operate demand response services. Somewhat fewer (42 percent) offer subscription services. Only 14 organizations offer fixed route or group services.
- Service hours and areas reported by NGO providers were very similar to those reported by county providers. As was the case with county providers, the vast majority of NGO service providers operate during the morning commute (6-10 am), midday (10-3 pm) and evening commute (3-7 pm) periods. Only about 1 in ten provides early morning, late night or weekend service. Eight NGOs reported providing service seven days a week, 24 hours per day. On average, NGO providers operate about 45 hours per week.
- In terms of area served, 47 NGOs or 48 percent reported serving only one county. This is a pattern similar to that reported by county providers. Another 28 NGO providers reported serving a multi-county service area. Twelve reported serving customers in a defined local (less than county) service area; and only 5 reported having no designated service boundary.
- The average fleet size for NGO providers is small, only 8 vehicles. Most (86 percent) have fewer than 20 vehicles. The average fleet includes a mix of sedans, vans, and minibuses. None of the NGO providers operate ambulances and only a few of the larger fleets include buses. Surprisingly, less than one quarter (187) of the total 854 vehicles operated by the NGOs surveyed was identified as being wheelchair accessible. This appears to be largely due in part to the reliance of some NGOs on sedans and small vans, which are generally not considered wheelchair accessible.
- The overwhelming majority of NGO providers surveyed reported that their "main" customers were seniors and people with disabilities. Sixty one NGOs (77 percent) reported serving a single group as their "main" customers. Of these, 21 (34 percent) identified the disabled as the customer group they served. An additional 24 NGOs identified the disabled as one of the main customer groups served.
- Only twenty two of the 98 NGO providers surveyed identified employment trips as a "main" trip purpose for their clients. Almost 60 percent of the NGO providers surveyed reported non-emergency medical trips as the "main" purpose.
- Forty five NGO service providers indicated that they have some type of eligibility criteria for service. Sixteen organizations reported allowing disabled customers to self identify need for service, 24 require some form of medical documentation, and five require an interview or other agency evaluation for eligibility determination.
- Fifty two NGO's (53 percent) surveyed report requiring drivers to undergo training related to assisting passengers with mobility impairments. Thirty six require their drivers

to be trained to deal with emergency situations and/or to administer first aid, and 39 stated that their drivers receive sensitivity training.

Private Medical Access Vehicle (MAV) services

- There are 189 private medical access vehicle (MAV) service providers registered to operate in New Jersey. A review of business addresses indicates that MAV providers are more likely to be located in urban and suburban counties than in rural counties. This could be partially a reflection of the market-driven nature of MAV providers. They operate in densely populated areas where the need and demand for services is greater and the cost per mile of operation is lower.
- Medicaid funds provide the large majority (66%) of the financial support for MAV providers.
- The vast majority (92 percent) of the MAV agencies surveyed provide demand-response services. In addition, 39 agencies (64 percent) offer subscription services to their clients. Very few provide fixed-route or group services. Twenty-five of the providers surveyed offer only one type of transportation service. Of these, 20 (80 percent) provide only demand-response service, four offer subscription services and one agency operates a fixed-route service.
- MAV providers have much more extensive hours of service than either the county-based or NGO operated services. Twenty-five providers or 41 percent operate 24 hours per day, seven days a week. The average MAV provider operates 121 hours per week. The minimum schedule of service is Monday through Friday, 8 am to 5 pm. However, all but one agency operates more than 45 hours per week. Fifty MAV agencies (83 percent) operate on Saturdays, and 28 (46%) operate on Sundays.
- In general, MAV providers have a larger service area than either county or NGO service providers; however, MAV providers are not located in every county. More than half (62%) of the MAV agencies surveyed will transport clients within an area greater than one county. Nine agencies have no designated service area and will travel anywhere requested. Twelve operate within a single county, one is restricted to a defined set of municipalities and one agency operates within a single municipality.
- The average fleet size for MAV providers is 16 vehicles, which include a mix of sedans, vans mini-buses and ambulances. As might be expected, most of the MAV providers surveyed operate ambulances.
- More than half, 34 of the 61 providers surveyed, serve only one type of customer. Of this group, 24 agencies (71 percent) provide services exclusively to Medicaid recipients. Those agencies that provide service to more than one customer group most commonly transport Medicaid recipients and disabled clients. Twenty-six of the 61 MAV agencies (43 percent) interviewed serve the disabled population, and 17 of them (28 percent) provide transportation for the elderly.

- Forty-eight agencies or 79 percent of those surveyed provide only trips for medical purposes. Thirteen agencies provide trips for more than one trip purpose. Only five agencies reported offering transportation for either employment or educational purposes, two stated that they will transport for recreation and one for shopping. As stated above, medical trips make up the vast majority of all trips provided by MAV agencies.
- The MAV providers that make trips for a more diverse set of purposes, appear to be the smaller operators that build a close relationship with their clients over a period of time. Although it may not be part of their policy or business plan, some smaller providers reported transporting regular medical trip clients to other purposes on occasion.
- Of the 52 (85 percent) MAV agencies that reported never providing work trips, 46 of them offered an explanation. Thirty-four claimed that it was a result of the rules of their funding. This is a function of the high numbers of agencies heavily supported by Medicaid funds which can only be used to pay for medical trips. In addition, four agencies stated that it was due to the rules of their operation, two said they did not have the demand for employment trip service, and six agencies would not offer an explanation.
- Twenty MAV agencies surveyed require medical documentation, reflecting the large number of agencies that transport Medicaid recipients. Two agencies only require that the passengers self-report their disability. Four MAV operators require either medical documentation, or a self-report, depending upon how the fare will be paid (e.g. Medicaid reimbursement or out-of-pocket payment). None of the MAV providers included in this survey conduct their own evaluation to determine eligibility. All 61 agencies surveyed operate their own vehicles.
- All but one of the agencies surveyed stated that they require their drivers to be certified in First Aid. In addition, 59 reported that their drivers are trained to assist passengers with mobility impairments, and 54 stated that their drivers receive sensitivity training. These high numbers of trained drivers may be due to the fact that many of the MAV agencies operate ambulances as well as other types of vehicles.

Transportation Needs Analysis

Personal mobility is an important component of quality of life for everyone. For the general population, personal mobility is largely defined by the ability to drive and access to a private automobile. While public transportation is a consideration for some, the vast majority of all trips made in the United States are made by car. For people with disabilities, the concept of personal mobility is more complex, especially for those who are sight impaired or who have mobility impairment(s) that require the use of a wheelchair or other assistive device.

National statistics indicate that more than half of non-working adults with disabilities studied encountered difficulties looking for work. Twenty-nine percent cited lack of transportation as a reason why they were discouraged from seeking work. Nineteen percent reported needing an accommodation in the form of accessible parking or an accessible transit stop nearby to take and keep a job (Loprest 2001).

In order to document and understand better the transportation barriers to work faced by people with disabilities in New Jersey, the research team convened and facilitated a series of focus groups, designed and administered a consumer survey and conducted an access and work "opportunity" analysis exploring the relationship between consumer residence data, data on available transportation services and employment data. Chapter 4 documents the focus group and consumer survey findings as well as the results of the spatial data analyses used to identify patterns of access and work "opportunity" for people with disabilities living in the state. The following is a summary of key findings from the focus groups, consumer survey and access and work opportunity analysis:

Focus Groups

- The mode of transportation most frequently cited by participants as their means to get to/from work was driving. Other frequent responses included Access Link, taxi/car service, county paratransit and traditional bus and rail transit services. Participants reported that a variety of factors, including their disability, affect their choice of transportation mode to/from work. For those not driving, factors considered included service schedules, cost, reliability, ease of access and prescribed wait times, as well as personal safety (both during a trip and at trip locations).
- Residential location and accessibility to different transportation options can greatly influence individual decisions to seek employment. Furthermore, the often overwhelming task of trip planning within the current system and the uncertainty and irregularity of service can affect an individual's work experience as well as their decision to remain employed.
- Many people with disabilities and their service providers believe that the fragmented nature of the current transportation system makes it challenging to find an appropriate means of getting to/from work. Furthermore, the availability and quality of transportation services often varies depending on geographic location and transportation needs often vary depending on client disability.
- From a consumer's perspective, there are a number of problems with county paratransit services, including: advance reservation requirements, changing schedules and varied routing, various service restrictions (e.g. age requirements for travel) and unwillingness of most county-operated services to cross county lines, making demand response services not conducive to daily commute trips. This conflicts with the expectations of consumers who don't understand how the system works.
- There is no central source for transportation information and/or trip planning assistance. Issues related to trip planning, scheduling and personal safety often hinders employment options. There was strong support for the idea of developing a website for disabled persons which includes information related to transportation options.
- There are differing and often conflicting expectations related to the level of service offered and possible from county paratransit systems. This creates problems for clients, drivers and managers. For example, drivers explained that many disabled clients want services similar to a door-to-door taxi service, whereas existing paratransit services are

required by law or regulation to operate curb-to curb service. As such, some clients expect drivers to provide assistance in getting to and boarding the vehicle. However, due to liability issues, drivers are not permitted to provide such assistance.

- Travel behavior of persons with disabilities is highly dependant on the nature and extent of their disability as well as the transportation environment. Both of these factors may influence whether or not a disabled person is working or able to retain employment.
- Specific characteristics of the transportation environment that pose challenges to disabled persons include: eligibility requirements; multiple pick-ups and long routes; lack of advance notice or communication regarding schedule delays and arrival times; policies regarding boarding and alighting assistance; driver rudeness, impatience, insensitivity; policies related to scheduling, including advance reservation requirements and cancellation consequences; Access Link's 3/4 mile service area; pick-up/drop-off window (e.g., 20 minutes before and 20 minutes after scheduled time); lack of transportation options/alternatives in some areas; vehicle safety issues; and difficulty with making linked trips.

Consumer survey

- Most working age unemployed survey respondents (74 percent) reported that they were not actively looking for work. Fourteen percent indicated that lack of transportation was a barrier to seeking employment. Regarding transportation as a barrier to work, respondents provided the following reasons:
 - 26 percent reported that service was not available at the right times;
 - 17 percent reported that they need assistance to get to a train or bus stop;
 - 15 percent reported that their disability prevented them from traveling;
 - 13 percent indicated that it was difficult to obtain transportation;
 - 11 percent reported that there were no accessible transportation options available in their area;
 - 7 percent indicated that transportation was not accessible based on their disability type; and
 - 11 percent indicated that transportation was a barrier for other reasons.
- Ten percent of all employed working age survey respondents reported owning a private car or van they used regularly for transportation. Interestingly, a slightly larger percentage (16 percent) of unemployed working age respondents own a vehicle. Less than one quarter of employed working age respondents (18 percent) reported needing a wheelchair accessible or specially equipped vehicle to travel. In contrast, almost two in five unemployed working age respondents or 38 percent reported needing an accessible vehicle.
- More than one-third of survey respondents (35 percent) reported using Access Link most often for non-work travel. Traveling as a passenger in a private automobile was the second most frequent means of travel for non-work purposes. Interestingly, only seven

percent of survey respondents reported using county paratransit "most often" for non-work travel.

- Among employed survey respondents, Access Link was the most frequently reported means of traveling from home to work. More than two-thirds (69 percent) indicated they use Access Link at least once per week for commuting purposes. Very few respondents traveled by taxi, worked from home, walked or biked to work.
- Approximately 23 percent of employed survey respondents reported that their job required travel during the business work day. Of those, almost half (43 percent) indicated they most often use Access Link for business travel during the day.
- Most (approximately 80 percent) of the survey respondents have some experience using Access Link. The same is not true for the other modes. Personal experience with other modes drops to approximately 65 percent for traditional bus and train, 62 percent for county paratransit and 37 percent for taxis. These rates of experience generally reflect perceptions of service availability as reported by survey respondents. For example, when asked if different types of transportation service were "available in their area," 84 percent reported that Access Link was available, while far fewer reported that bus and train service (36 percent), county paratransit (35 percent) or taxi service (38 percent) was available.
- Only half (53 percent) of those expressing an opinion agreed that *bus and train services* were "convenient." Less than half (46 percent) felt bus and train service was "easily accessible" for someone with their disability. Similarly, less than half (47 percent) felt that it was "flexible." Approximately two thirds felt that services were "safe" (64 percent) and "reliable" (66 percent). More than three quarters felt that the cost of service was "reasonable" (83 percent), that drivers were "friendly and helpful" (77 percent) and that vehicles were "clean and well maintained" (80 percent).
- Most survey respondents expressed a favorable opinion of Access Link service in every category. Approximately nine out of ten respondents reported that Access Link services were "convenient" (85 percent); priced reasonably (88 percent); "easily accessible" for someone with their disability (89 percent); and "safe" (94 percent). Similarly, the vast majority of respondents felt that Access Link vehicles were "clean and well maintained" (94 percent) and that drivers were "friendly and helpful" (91 percent). Somewhat less felt that Access Link services were "reliable" (75 percent) and "flexible" (69 percent).
- Only one third of survey respondents indicated having any experience using *county-operated community transportation* options. Of those expressing an opinion related to the quality of county paratransit, the vast majority expressed favorable opinions in most categories.
- About two in five (38 percent) survey respondents reported that *taxi services* were "available in their area." Of those with personal experience using taxi services, about half felt that taxis were "convenient" (54 percent) and "easily accessible" (55 percent) for

someone with their disability. Somewhat more felt that taxis were "reliable" (57 percent) and vehicles were "clean and well maintained (58 percent). Approximately two-thirds of those expressing an opinion felt that taxis were "flexible" (65 percent) and "safe" (64 percent). About three quarters felt that drivers were "friendly and helpful" (74 percent). Only 17 percent of survey respondents expressing an opinion felt that the cost of using a taxi was "reasonable."

- Fifty-eight percent of survey respondents felt they received "adequate information" regarding available transportation options. Most (52 percent) reported currently receiving information via direct mail. Twenty eight percent receive information through the newspaper or some other form of general media and 25 percent receive information from employment counselors or other social service providers. Less than one quarter (16 percent) receive information on transportation options by word-of-mouth and very few reported currently receiving information via the Internet (7 percent) or by telephone (4 percent).
- In terms of the future, both men and women are interested in receiving more information via the Internet (31 percent) and direct mail (85 percent). Both men and women would like to continue to receive information from employment counselors and other social service providers (40 percent and 23 percent respectively) and from newspapers or other media sources (37 percent and 36 percent respectively). Finally, survey respondents regardless of gender expressed the desire to depend less on friends, family and word-of-mouth to receive information on transportation options.

Access and work opportunity analysis

- Transit coverage varies dramatically by county. Essex and Hudson Counties have the most route miles of bus services and the greatest land area within one quarter mile of bus routes and rail stations. More than two thirds of the counties' land area falls within a quarter mile of fixed route transit service. On the other end of the spectrum, five counties, Cumberland, Hunterdon, Salem, Somerset, Sussex and Warren, have very few route miles of bus service available; and less than 10 percent of each county's land area is located proximate to fixed route transit.
- Similar patterns can be seen when considering land area within Access Link's three quarter mile service area of fixed route bus lines. Once again, Essex and Hudson have the greatest proportion of total land area located within a three quarter mile buffer of existing bus routes. Ninety one percent of Essex County's land area and 79 percent of Hudson County's land area fall within the Access Link service boundary. Somerset, Sussex and Warren counties have the least coverage. Only eight percent of Somerset County is served by Access Link; and Sussex and Warren counties have virtually no land area within the Access Link service boundary.
- Bergen, Essex, Hudson, Mercer, Morris, Salem and Somerset counties all operate county paratransit services an average of 12 or more hours per day each work day. Bergen,

Ocean, and Somerset Counties operate the largest paratransit fleets in the state, both in terms of total vehicles and estimated available seats. The smallest systems are operated by Burlington and Essex Counties. Each have fleets with 25 or less vehicles and have an estimated 300 or fewer available seats. Salem and Somerset Counties have the highest ratios of available seats to residents, while Essex, Burlington, Hudson, and Union have the lowest ratios.

- Transit services are far more accessible to disabled residents living in the state's urbanized counties, than for those living in rural counties. For example, more than 90 percent of go outside the home disabled residents live within the Access Link service boundary in Bergen, Camden, Essex, Hudson, Passaic and Union Counties, while less than 50 percent of go outside the home disabled residents in Hunterdon, Salem, Somerset, Sussex, and Warren Counties are served by Access Link. Each of these counties can be characterized as mostly rural or low density suburban.
- When comparing proportion of land area within the Access Link service boundary with the proportion of go outside the home disabled living within the service boundary, the ratios are very different. In most counties a far greater proportion of disabled residents are served by Access Link than might otherwise be estimated if considering only the proportion of land area covered.
- The vast majority of jobs in most counties are located within the Access Link service area. The most notable exceptions are Hunterdon County, where only 27 percent of jobs are served by Access Link; Somerset County, where 49 percent of jobs are served; Sussex County, where only 14 percent of jobs are served; and Warren County, where 51 percent of jobs are located within the Access Link service boundary. With very few exceptions, patterns of job accessibility are very similar when considering jobs associated with large employers and key industry sectors.
- A comparison of the three key measures of *access and work opportunity* appears to indicate that the counties with the lowest levels of access to traditional public transit and Access Link, by necessity, have compensated by operating strong county paratransit systems. For example, Hunterdon, Salem, Somerset, and Warren counties have among the lowest rates of transit and Access Link coverage. At the same time, they have the highest ratios of available paratransit seats per 1,000 residents. Similarly, the counties with the highest rates of transit and Access Link coverage (Camden, Essex, Hudson, Passaic, and Union) are those with weaker paratransit systems in terms of available seats per 1,000 residents. The remaining counties, which are mostly suburban in nature have less access to traditional transit and Access Link services and because the capacity of existing paratransit systems are generally lower, there is greater competition for available paratransit seats.

Institutional Barriers, Best Practices and Model Programs

Chapter 5 considered institutional barriers to transportation reform and specifically the challenge of coordinating human services transportation. It also examines the prospects for better

coordination in New Jersey. Finally, it describes a series of best practices and model programs for expanding transportation options and enhancing transportation services.

The following is a summary of key findings related to coordinating better human services transportation in New Jersey and best practices and model programs for expanding transportation options and enhancing transportation services:

- Coordinating transportation services better for transportation disadvantaged persons has been on the public policy agenda for decades (GAO 2003). Transportation coordination, as defined by the Federal Transit Administration, involves providing specialized transportation through "...a process by which representatives of different agencies and client groups work together to achieve any one or all of the following goals: more cost-effective service delivery; increased capacity to serve unmet needs; improved quality of service; and services which are easily understood and accessed by riders" (FTA, 2004).
- According to the United States General Accounting Office, barriers to coordination include:
 - Unwillingness or inability to share vehicles due to the different needs and characteristics of client populations;
 - Perception of the high costs of coordination from the provider perspective;
 - Lack of feasibility for coordination in areas lacking a range of transportation services or options;
 - Inconsistency among programs with regard to rider eligibility, funding sources, reporting requirements, safety standards and programmatic goals and missions;
 - Lack of guidance from federal level officials on implementation strategies; and
 - Lack of leadership or commitment on the state level to guide coordination.
- According to the National Governor's Association, coordination among transportation providers and agencies can increase transportation availability and access to jobs, enhance service quality, eliminate duplicative efforts, and improve the cost effectiveness of transportation dollars (NGA, 2000).
- The most recent federal initiative designed to promote coordination of human services transportation is "United We Ride," an interagency collaboration designed to support states and local governments to deliver coordinated human services transportation. United We Ride grew out of Executive Order 13330 signed by President Bush in February 2004. The Executive Order established the Interagency Transportation Coordinating Council on Access and Mobility (CCAM), chaired by the Secretary of Transportation. The council includes representation from eleven Federal departments, including the Departments of Transportation, Health and Human Services, Labor, Education, Housing and Urban Affairs, Agriculture, Justice, Interior, the Veterans Administration, the Social Security Administration, and the National Council on Disabilities. According to the executive order, "the purpose of the council is to

coordinate 62 different Federal programs across 9 Federal departments that provide funding to be used in support of human services transportation" (EO 13330 2004).

- The most recent evolution of New Jersey's interest and on-going effort to coordinate human services transportation was catalyzed by the federal United We Ride effort. New Jersey has formed a state level Coordinating Council on Access and Mobility (NJCCAM) that mirrors the membership of the federal body. The council has been meeting monthly since 2004 and has sponsored a series of statewide forums as well as an effort to inventory the range and amount of funding used to provide and support human services transportation in the state.
- There are many examples of best practices and model programs from around the country related to coordinating human services transportation and providing accessible transportation services. These include but are not limited to:
 - Coordinating paratransit and fixed route transit;
 - Using taxi coupon and voucher programs to expand transportation options;
 - Providing travel training for people with disabilities;
 - One-stop transportation centers;
 - Using Job Access Reverse Commute funds to support employment transportation for people with disabilities;
 - Providing emergency ride home programs for people with disabilities commuting to work by transit or paratransit;
 - Using a brokerage model to coordinate human services transportation; and
 - Using flex-route services to enhance mobility and paratransit system efficiency

Recommendations

The continuing debate over how to best provide superior transport service to transportation disadvantaged persons points to the conclusion that the transportation system needs to provide a diverse set of accessible service options, tailored to a specific region. New Jersey's past experience and the best practices and model programs highlighted in Chapter 5 show that unique and successful types of service result from creative thinking and a willingness to take the risk to try something new. This study suggests two broad based recommendations. First, mandated coordination between the public and private sector could enhance service and make use of available but underutilized or untapped resources. And second, a mechanism for implementing a variety of types and levels of service throughout the varied regions in the state would further the goal of improved employment transportation for the disabled population.

This study highlights the complexity of the problems facing human services agencies dealing with the provision of transportation services for people with disabilities. Even when users can use paratransit to travel to work, there are issues that limit the use and effectiveness of the systems. The variety of locations that can be reached is often constrained, and systems often stop at county boundaries. This causes critical physical and information disconnects in the overall system from a users' perspective. Often there is no single place users can go to get

information about all available transportation options. Unfortunately some service limitations are characteristics of the type of paratransit being offered. For example, any demand-responsive system requires a time window for pick up, and it is inevitable that sometimes the vehicle will not arrive in the given window. However, other issues affecting demand-responsive services are solvable. Problems such as the fear of being left stranded in case of a family emergency, or being unable to travel with children, can be mitigated by means of a guaranteed ride home program or changing the eligibility requirements.

For any system, there are choices to be made from a menu of types of service options, such as fixed route, door-to-door, etc., as well as days and hours of operation, service areas, and integration levels with other providers. There are a variety of user needs in terms of mobility limitations, trip purposes and destinations, and times of travel. Early paratransit systems often were ad hoc, created in isolation with corollary inefficiencies. Today increased coordination among systems is essential. Beyond coordination there is also the need to focus on more traditional transportation planning endeavors, such as revising transit routes and scheduling and assessing vehicle needs. Finally, the central focus must be on the consumers of transportation services, providing the highest level of care possible.

There are a variety of actions or policy initiatives that can be explored to better assist people with disabilities in meeting their mobility needs. Some actions or initiatives will involve coordination across agencies and entities that currently operate independently, some will involve changes in current practices in the delivery of existing services, and some will involve sensitizing the public and service providers to the mobility needs and expectations of the disabled population. Other actions or initiatives will involve educating the disabled population on their mobility options, how to effectively advocate for change, and creating a forum to encourage communication and sharing of ideas, opinions and feelings among the disabled and other interested parties.

Personal mobility is a sensitive and powerful issue for persons with disabilities. The absence or presence of mobility affects perceptions of esteem, worthiness, capability, freedom, comfort, independence and significance and can impact employment options and healthcare choices.

The following are a series of recommendations intended to help meet the employment transportation needs and improve/enhance overall mobility for people with disabilities living in New Jersey:

- Foster awareness and understanding regarding the employment transportation needs of people with disabilities in New Jersey, the range of transportation options currently available and the benefits of coordinating transportation services at the state and local level, especially among elected officials, business leaders, and transportation providers.
 - The Division of Disability Services (DDS) should convene a statewide conference to provide consumers, employers, elected officials, employment counselors, social service providers and transportation providers with a venue to discuss consumer needs and expectations related to transportation, service delivery limitations and paratransit resource needs as well as opportunities for coordinating existing services. The conference should highlight best practices and model programs for enhanced coordination and service delivery.
 - DDS, working with NJ TRANSIT and county paratransit providers, should develop informational materials and training programs for consumers on the range of

- transportation options currently available throughout the State and how to access and use those services.
- DDS, working with the Department of Labor and other partners, should develop and
 disseminate informational materials for employment counselors, vocational
 rehabilitation specialists and employers regarding the range of transportation options
 available, the unique transportation needs of people with disabilities and how those
 needs can be accommodated to support employment in a competitive work
 environment.
- Participate fully in the *United we Ride* initiative, which is designed to improve and enhance the coordination of human services transportation at the Federal, State and local level.
 - State agencies should continue to advance coordination efforts related to human services transportation in New Jersey. Currently, the most effective means to do this appears to be the New Jersey Coordinating Council on Access and Mobility (NJCCAM) formed in 2004. NJCCAM's success thus far in advancing a coordination agenda has been hampered by what appears to be too little commitment and interagency support at the cabinet level. Agency staff engaged in the NJCCAM process and disability advocates should strongly urge the Governor to sign a draft Executive Order prepared by NJCCAM. The Executive Order would require cabinet level commitment and participation in the coordination process.
 - NJ TRANSIT and the NJ Department of Human Services, through the NJCCAM process, should undertake a statewide human services transportation planning process designed to update the county community transportation plans developed in 1999-2000 as part of the Workfirst New Jersey initiative. These plans provide a solid foundation on which to build a more comprehensive inventory of services and action agenda to address gaps in available transportation services for people with disabilities. It is anticipated that such plans will be required for New Jersey to be eligible to receive New Freedom Initiative grant funds from the Federal Transit Administration beginning in Federal fiscal year 2006. The data collected as part of this study should be a valuable contribution to the planning process.
- Expand the resources available to improve and enhance transportation services for people with disabilities.
 - The State should reexamine the current formula used to allocate funds distributed as part of the Senior Citizen & Disabled Transportation Assistance Program (SCDRTAP) administered by NJ TRANSIT. Revenue from the SCDRTAP is the most common source of funding used by county paratransit providers. Currently the funding distribution formula is based on the percentage of county population over the age of sixty. This formula generally favors urban counties and does not fully account for the population of people with disabilities. In addition, it does not consider access to traditional public transit services which are generally more available in urban counties. Modifications to the funding allocation formula should be considered to

- account for these additional factors and to ensure that funds are being allocated based on the needs of the consumers intended to be served by the program.
- County paratransit providers and other transportation operators should consider
 making greater use of fares. Currently, very few collect fare revenue. Fare policies
 should be based on a riders ability to pay and fare collection could be facilitated
 through the use of smart card technology. The collection of additional fare revenue
 could support the expansion of services.
- As additional resources become available, county paratransit and other service providers should expand their hours of operation to accommodate work-related commutation and shift employment.
- Work cooperatively to create a more seamless community transportation system and consistently work toward improving and expanding travel options available to people with disabilities.
 - NJ TRANSIT and county paratransit providers should expand the use of flex-route transit services where feasible and appropriate. Carefully planned and implemented flex-route services have the potential to increase the efficiency of existing paratransit operations and offer expanded service options to people with disabilities.
 - County paratransit providers and NGO service providers should explore partnership opportunities and examine ways to link better their services with existing fixed route transit operated by NJ TRANSIT and others. By making better connections and providing coordinated transfers, paratransit systems can "feed" riders to accessible fixed route services that are less expensive to operate, serve multiple jurisdictions, and operate on regular schedules with reasonable frequencies.
 - County paratransit providers should develop ways to facilitate and or provide service
 to and from origins and destinations that cross county boundaries. This could be
 accomplished by changing policies that restrict operation to in-county locations,
 entering into inter-local agreements with neighboring counties and through other
 appropriate means.
 - Transportation providers should employ technology, such as real-time and/or centralized dispatching, to better meet consumer needs and service expectations, especially with regard to advance scheduling, wait time "windows," general service reliability and timeliness.
 - To the maximum extent feasible, NJ TRANSIT, county paratransit providers, and other service providers should work toward creating more uniform policies and procedures concerning eligibility determination, passenger assistance practices, scheduling and fare/payment policies. Surveys, interviews and focus groups conducted for this study confirm that there is wide variation regarding the policies and procedures followed by different services providers. This variation causes confusion among consumers and contributes to a significant expectation gap between what consumers expect from the transportation system and what the transportation system can and does provide throughout the state. Further, inconsistent policies and procedures complicate and discourage service coordination.

Transportation management associations (TMAs) that offer emergency ride home (ERH) programs serving commuters traveling by carpool, vanpool and public transportation should ensure that those services can accommodate people with disabilities traveling to and from work by similar means. The NJ Department of Transportation, which provides support funding to TMAs, should work with them to establish fully accessible ERH programs in every county.

Increase the number of accessible vehicles and facilities available from all public, private and NGO service providers.

- Ensure that NJ TRANSIT is complying with the requirements of the Americans with Disabilities Act. Although information provided by NJ TRANSIT indicates compliance with the law, numerous consumer reports received as part of this study's focus groups and surveys indicate that stop announcements are frequently not made or are inaudible; equipment such as wheel chair lifts, bridge plates and elevators are not always operable; and station facilities are not well marked. NJ TRANSIT should strive toward a goal of universal accessibility for all of its services.
- Reform the State's taxi and livery license laws to require that a minimum portion of each operator's fleet is wheelchair accessible. The State should provide incentives to encourage compliance and facilitate the retrofitting of existing fleets over time.
- Establish minimum accessibility requirements for county paratransit fleets and NGO providers receiving State and Federal funds. Information collected for this study indicates that less than half of the county paratransit fleet statewide is wheelchair accessible. Less than one quarter of the NGO fleet inventoried for the study was wheelchair accessible.
- Develop a concierge/brokerage service demonstration project that would offer coordinated, seamless trip planning and scheduling assistance to disabled individuals throughout the state.
 - DDS should work with NJ TRANSIT to create a *Regional Travel Concierge* service as a three year demonstration project designed to address transportation barriers to work for people with disabilities and other transportation disadvantaged populations. The demonstration project should build on the significant body of research already conducted for this study regarding the transportation needs of people with disabilities in New Jersey and the transportation services available in each of state's twenty-one counties. The project should be implemented in two phases. The first phase which should focus on planning activities would occur over the first year of the three year demonstration period. Significant components of phase one should include but not be limited to:
 - a) Developing a request for proposals and managing the procurement process for selecting a local implementation partner (e.g., county government, transportation management association or other nongovernmental organization);

- b) Supplementing existing databases as needed to ensure an accurate and up to date inventory of transportation services, providers and eligibility requirements in the demonstration region;
- c) Developing model policies and procedures to guide implementation of the regional concierge services and monitor and evaluate its success;
- Negotiating memoranda of agreement with various transportation and social service providers to ensure cooperation relative to brokering their services; and
- e) Developing public relations and marketing strategies to get the word out about the service.

Phase two should focus on implementation, monitoring and evaluation over the remaining two years of the demonstration period.

- Create an Internet-based one-stop for information on available transportation options and services for disabled persons.
 - DDS should seek out partners to create a one-stop Internet "web portal" to improve access to information on transportation options for people with disabilities. The web portal should contain information related to: the types of services available in each of New Jersey's 21 counties, contact information for existing service providers, use and eligibility requirements for existing services, hours of operation, reservation procedures, fare policies, and other relevant information with an emphasis on those service characteristics relevant to employment travel needs. To the extent feasible and appropriate, the "web portal" should incorporate Internet mapping technology to communicate service information and to facilitate trip planning. This effort should build upon the extensive database of transportation service information collected as part of this study. In addition, DDS should explore making the one-stop information available via an 800 telephone number.
- Increase driver education and training on a variety of topics, including the use of wheelchair tie-downs and lifts, bridge plate operation; emergency preparedness and first aid as well as driver sensitivity.
 - NJ TRANSIT and county paratransit providers should expand the availability of driver training programs and require drivers to participate in skill enhancement training on a regular basis. Only half of the 40 county providers surveyed for this study require training related to operating wheelchair tie-downs and lifts. Fewer than one quarter required emergency training and less than half required sensitivity training related to serving disabled consumers.
- Expand the quality and availability of travel training programs for people with disabilities and the employment/social service counselors that serve them.

DDS should work with NJ TRANSIT, county paratransit providers, and other related agencies to develop travel training curricula for people with disabilities. The travel training programs should include modules on what services are available and how to use them. The training should be available as a component of workforce development services. In addition, employment counselors and vocational rehabilitation specialist should be required to complete the training program so they can more effectively advise their clients.

• Ensure transportation service planning at all levels incorporates and addresses the transportation needs of people with disabilities.

- All agencies and organizations involved in the transportation planning process should ensure that the needs of people with disabilities are considered as part of all planning activities. Input from the disabled community should be solicited on an on-going and regular basis. Planning efforts should recognize the diverse mobility needs of persons with disabilities which can vary significantly based on disability type, severity and employment status. Agencies should seek to create non-traditional opportunities for input and take extraordinary steps to include consumers in the planning and policymaking process so that service changes and enhancements best meet their needs.

Implementation

Implementing the above recommendations will require the participation and sustained commitment of many organizations, agencies and individuals. The recommendations represent an aggressive but achievable action agenda of legislative, regulatory, programmatic and policy changes necessary to ensure improved mobility options for people with disabilities living in New Jersey, with a special emphasis on those working in or seeking employment in a competitive work environment.

Potential implementation partners include members of the New Jersey Legislature; state agencies, including: New Jersey Department of Transportation (NJDOT), NJ TRANSIT, New Jersey Department of Human Services (NJDHS); the NJDHS Division of Disability Services; counties; and a variety of nonprofit service and advocacy organizations. In addition, for its part, the Alan M. Voorhees Transportation Center is committed to focusing attention on transportation equity and the mobility needs of transportation disadvantaged populations as critical public policy issues facing New Jersey. Toward that end, we will continue to work with the Division of Disability Services and its partners to facilitate and monitor implementation of the recommendations.

Table 6.1 provides a framework for implementation by identifying which potential partners could take a leadership and/or supporting role in advancing specific recommendations.

Table 6.1: Implementation Matrix

		Potential Leadership/Supporting Partners						ing Partners
	Recommendation	NJDHS - DDS	SHQIN	NJ TRANSIT	NJDOT	Counties	NJ Legislature	Other
ro no Jo av	Coster Awareness and understanding egarding the employment transportation leeds of people with disabilities in New ersey, the range of transportation options vailable and the benefits of coordinating ervices.	*		+		+		NJ Dept. of Labor
ir ei	Participate fully in United We Ride nitiative, which is designed to improve and nhance the coordination of human service ransportation.	+	*	*	*	+		Other state agencies providing transportation services
a	Expand the resources available to improve nd enhance transportation services for ecople with disabilities.			*		*	*	
tr w	Create a more seamless community ransportation system and consistently work toward improving and expanding ravel options for people with disabilities.			*		*		NGO transportation providers
a	ncrease the number of accessible vehicles nd facilities available from public, private nd NGO service providers		+	*		*	*	NGO service providers, private taxi and livery companies
	Develop a concierge/brokerage service emonstration project	*		*		+		NGO transportation providers, TMAs
	Create and Internet-based one-stop for ransportation information.	*		*		+		
8. Iı	ncrease driver education and training.	+		*		*		NGO Service providers
	Expand the quality and availability of ravel training for people with disabilities.	*		+		+		NJ Dept. of Labor, TMAs
al tr	Ensure transportation service planning at levels incorporates and addresses the ransportation needs of people with lisabilities	*	*	*	*	*		

NOTE: ★ = potential leadership partner

+ = potential supporting partner

REFERENCES

- Adams, Moss. "The Coordination Challenge." Community Transportation Association of America. Washington, D.C. June 2000.
- Allen, Judy Stein and Paul M. Muchinsky. "Assessing Raters' Policies in Evaluating Proposed Services for Transporting the Physically Handicapped." *Journal of Applied Psychology* Vol. 69, No. 1 (1984): 3-11.
- American Public Human Services Association. "Designing and Operating Cost-Effective Medicaid Non-Emergency Transportation Systems: A Guide for State Medicaid Agencies." Washington, D.C. 1998. Available at http://www.aphsa.org/hotnews/NET.pdf
- ATR Institute. "At The Crossroads: Disability and Transportation in New Mexico." ATR December 2002.
- Bogren, Scott. "Getting SMART." *Community Transportation Reporter*. (November 1995). Available http://www.ctaa.org/ct/nov95/smart
- Burkhardt, Jon E. "Coordinated Transportation Systems." AARP. Washington, D.C. 2000. Available: http://research.aarp.org/consume/2000_16_transport.pdf
- Burkhardt, Jon E. et al. "Coordinated Transportation Demonstration Results: Evaluation of the Office of Human Development Services Transportation Demonstration Program." U.S. Department of Health, Education, and Welfare. Washington, D.C. February 1980.
- Burkhauser, Richard V., Mary C. Daly, Andrew J. Houtenville, and Nigar Nargis. 2001. "The Employment of Working-Age People with Disabilities in the 1980s and 1990s: What Current Data Can and Cannot Tell Us." Accessed online: www.frbsf.org/publications/economics/papers/2001/wp01-20bk.pdf (7-14-2004)
- Bush, President George. "Executive Order Human Service Transportation Coordination." Washington, D.C. February 2004.
- Cervero, Robert. *Paratransit in America: Redefining Mass Transportation*. Connecticut: Praeger Publishers, 1997.
- Chen, Iris Wan Hui, Francis Gross, Kelley Pecheux and Paul P. Jovanis. "Estimating Modal Preferences between ITS-Enhanced and Existing Paratransit Services." *TRB 2004 Annual Meeting CD-ROM*.
- Community Transportation Association of America (CTAA) website. Internet (2004). Available http://www.ctaa.org
- Community Transportation Association of America. "Best Practices." Washington, D.C. Available http://www.ctaa.org/adaview.asp?pageid=916

- Community Transportation Association of America. "Coordinating Community Transportation Services: A Planning and Implementation Handbook." U.S. Department of Health and Human Services. Washington, D.C. May 1992.
- Community Transportation Association of America. "Employment Transportation Practices: Michigan." Washington, D.C. 2001. Available http://www.ctaa.org/ntrc/atj/practices/mi_smart_first.html
- Community Transportation Association of America. "Innovations for Seniors: Public and Community Transit Services Respond to Special Needs." Washington, D.C. February 2004. Available: www.ctaa.org/ntrc/senior/innovations.pdf
- Crain & Associates, Inc. Handbook for Rural Flexroute Implmentation: The Santee Wateree Regional Transportation Authority Experience. For Easter Seals Project ACTION: Document No. 20-0200. Accessed online: http://projectaction.easterseals.com/site/DocServer/00FLEX.pdf?docID=3437 (12-1-04)
- Creative Action, Inc. "Coordinating Transportation Services: Local Collaboration and Decision-Making." Project ACTION. Washington D.C. May 2001.
- Easter Seals Project ACTION. "Innovative Practices in Paratransit Services." Washington, D.C. 2002.
- Easter Seals Project ACTION. "Mobility Planning Services Toolkit." Available http://www.projectaction.org/
- Easter Seals Project ACTION. "Travel Training in Bridgeport, CT." *Project Action Magazine* May 2002. Available http://www.projectaction.org/
- European Conference of Ministers to Transport. "Access to Taxis: Support for People with Mobility Handicaps." ECMT, 1992.
- Federal Transit Administration (FTA). "Planning Guidelines for Coordinated State and Local Specialized Transportation Services." Internet (2004). Available www.fta.gov
- Fittante, Steve. April 2004. "Flexible Bus Routes: Designing Bus Services to Meet Senior Citizen and Transportation Dependent Needs." Presentation to Safe Mobility At Any Age Policy Forum No. 4. Alan M. Voorhees Transportation Center, Rutgers, The State University of New Jersey. New Brunswick, New Jersey.
- Gilbert, Gorman and Thomas J. Cook. "The Private-for-Hire Vehicle (PHV) Industry and Its Contracts with Public Transit Operators." *TRB 2003 Annual Meeting CD-ROM*.
- Gilderboom, John I. and Mark S. Rosentraub. "Creating the Accesible City: Proposals for Providing Housing and Transportation for Low Income, Elderly and Disabled People." *American Journal of Economics and Sociology* Vol. 49, No. 3 (July 1990): 271-282.
- Healthcare Financing Administration. "Designing and Operating Cost-Effective Medicaid Non-Emergency Transportation Systems: A Guide for State Medicaid Agencies." August 1998.

- Honeycutt, Todd and Carol Harvey. "The New Jersey Workability Evaluation." Program for Disability Research at Rutgers, the State University of New Jersey. New Brunswick, NJ February 2005.
- Institute for Community Inclusion, Children's Hospital Boston and The University of Massachusetts Boston. "Access for All: A Resource Manual for Meeting the Needs of One-Stop Customers with Disabilities." Internet 2002. Available: http://www.childrenshospital.org/
- Institute for Transportation Research and Education, Transit Operations Group. "Community Transportation Services Alternatives Analysis." ITRE, North Carolina State University April 1997.
- Ireys, Henry T., Justin S. White, Craig Thorton. October 2003. The Medicaid Buy-in Program: Quantitative Measures of Enrollment Trends and Participant Characteristics in 2002. Mathmatica Policy Research, Inc. Washington, DC
- Jackson, Raymond. "The Cost and Quality of Paratransit Service for the Elderly and Handicapped." *Transportation Quarterly* Vol. 36, No. 4 (October 1982): 527-540.
- Kaye, Steven. 2001. "Improved Employment Opportunities for People with Disabilities." Mimeo, Disability Statistics Center, Institute for Health & Aging, University of California, San Francisco, CA.
- King, Joe Jr. "Adequacy of Transportation in Minority Communities for Handicapped, Low Income and Elderly Groups." *Transportation Quarterly* Vol. 41, No. 2 (April 1987): 247-261.
- Koska, Robert. April 2004. "NJ TRANSIT Local Community Transportation Programs" Presentation to Safe Mobility At Any Age Policy Forum No. 4. Alan M. Voorhees Transportation Center, Rutgers, The State University of New Jersey. New Brunswick, New Jersey.
- LaPlante, Kennedy, Kaye, & Wenger. "Disability and Employment." Disability Statistics Abstract, No. 11 January 1996. San Francisco, CA: Disability Statistics Rehabilitation Research and Training Center, Institute for Health & Aging, School of Nursing, University of California.
- London, Alice. "Transportation Services for the Disabled: A Complex Public Policy Issue." *GAO Review* (Spring 1986): 21-27.
- Loprest, Pamela and Elaine Maag. 2001. 'Barriers to and Supports for Work among Adults with Disabilities: Results from the NHIS-D." Washington, DC: Urban Institute
- Marsico, Dale J. "Linking People to the Workplace." Community Transportation Association of America. Washington, D.C. January 2001. Available: http://www.ctaa.org/data/toolkit_full.pdf
- McNeil, J.M. 1997. Americans with disabilities: 1994-95. US Bureau of the Census Current Population Reports, Washington, DC: US Government Printing Office.
- McNeil, J.M. 2000. "Employment, Earnings and Disability." Prepared for the 75th Annual Conference of the Western Economic Association International. June 29-July 3, 2000. Vancouver, British Columbia.
- McKnight, Claire, Marcia Walsh, Leonard Robins and Ashish Sen. "Transportation for the Mobility-Limited: An Analysis of Current Options." *Policy Analysis* 6 (1980): 441-65.

- Middendorf, D.P., K.W. Heathington, F.J. Wegmann, M.W. Redford, A. Chatterjee and T.L. Bell. "Cost Effectiveness of Transportation Services for the Handicapped." *Ekistics* 306 (May/June 1984): 230-237.
- National Council on Disability. 2002. National Disability Policy: A Progress Report, December 2000-December 2001. Accessed online: www.ncd.gov/newsroom/publications/progressreport_07-26-02.html (12-1-04)
- National Governor's Association (NGA). "Improving Public Transportation Services through Effective Statewide Coordination." Washington, D.C. 2000. Available: http://www.nga.org
- National Transportation Consortium of States, Esometrics Incorporated & American Public Works Association. "Working Together: A Directory of State Coordination Programs, Policies, and Contacts: 1999-2000." Coordinating Council on Access and Mobility. February, 2000.
- New Jersey Department of Human Services. *TANJ State Plan Amendments*. Trenton, NJ. 2002. Available at http://www.state.nj.us/humanservices/dfd/tanf1.html
- NJ TRANSIT Guide to Accessible Services. Available at: http://www.njtransit.com/as.shtml. Accessed online 2004.
- O'Connell, Lenahan, Bruce Siria and Ted Grossardt. "Bringing Fixed-Route Transit Service to Small Cities and Towns: The Potential Contribution of Existing Demand-Response Brokerages." *TRB* 2003 Annual Meeting CD-ROM.
- Odutola, Adeniji A. and Addis C. Taylor. "Services and Longevity of Paratransit Operation." *Transportation Quarterly* Vol. 44, No. 1 (January 1990): 151-162.
- Olason, Robert Alan. "ART: A Paratransit System Based on City Ordinance, Using Trip-by-Trip Eligibility Determination and A Two-Tiered, User-Side Subsidy." *TRB 2003 Annual Meeting CD-ROM*.
- Pagano, Anthony M., Paul Metaxatos and Alicia Morreale. "State Strategies for Implementing Computer Assisted Scheduling and Dispatching Systems for Paratransit Brokerage and Coordination." *TRB* 2004 Annual Meeting CD-ROM.
- Palladino, RJ. "NJ TRANSIT's Access Link Paratransit Service." A report for Richard K. Brail. December 2004.
- Pfeiffer, David. "Public Transit Access for Disabled Persons in the United States." *Disability, Handicap & Society*, Vol. 5, No. 2 (1990): 153-166.
- Pfeiffer, David. "MBTA Call-a-Lift Bus Program." *Transportation Quarterly* Vol. 45, No. 2 (April 1991): 243-258.
- Research Results Digest. "Integrating Americans with Disabilities Act Paratransit Services and Human Services Transportation." Number 10, Transit Cooperative Research Program. (April 1997). Available at http://nationalacademies.org/trb/publications/tcrp/tcrp_rrd_10.pdf
- RLS & Associates. "A Guide for Implementing Coordinating Transportation Systems." A report for the Ohio Department of Transportation. Columbus, OH. October 1997.

- Transit Cooperative Research Program. "ADA Paratransit Eligibility Certification Practices." *TCRP Synthesis 30* (1998).
- Transit Cooperative Research Program. "Economic Benefits of Coordinating Human Service Transportation and Transit Services." *TCRP Report 91* (2003).
- Transit Cooperative Research Program. "Guidebook for Attracting Paratransit Patrons to Fixed-Route Services." *TCRP Report 24* (1997).
- Transit Cooperative Research Program. "Integrating Americans with Disabilities Act Paratransit Services and Health and Human Services Transportation." *Research Results Digest*, No. 10 (April 1997).
- Transit Cooperative Research Program. "Paratransit Contracting and Service Delivery Methods." Transportation Research Board, Report 75, National Academy Press (1998).
- Transit Cooperative Research Program. "The Role of the Private-for-Hire Vehicle Industry in Public Transit." Transportation Research Board, Report 75, National Academy Press (2002).
- Transit Cooperative Research Program. "Transit Operations for Individuals with Disabilities." Transportation Research Board, Report 9, National Academy Press (1995).
- Transportation Research Board (TRB) of the National Academies. "Transit Cooperative Research Board Report 91: Economic Benefits of Coordinating Human Services Transportation and Transit Services." Washington, D.C. 2003. Available: http://trb.org/publications/tcrp/tcrp_rpt_91.pdf
- United We Ride Coordinating Council on Access and Mobility. 2005. Report to the President: Human Service Transportation Coordination. Accessed online: http://www.unitedweride.gov/0216_LAYOUT_1.3F_v6.pdf
- U.S. Census Bureau. Disability Definitions. Washington, D.C. Accessed March 1, 2005. Available www.census.gov/hhes/www/disability/disab_defn.htm
- U.S. Census Bureau. "Selected Appendixes: 2000 Summary Social, Economic, and Housing Characteristics." Washington, D.C. June 2003.
- U.S. Department of Education (US Dept. of Ed.), ADA & IT Technical Assistance Centers website. Internet (September 2003). http://www.adata.org/whatsada-history.html
- U.S. Department of Labor. One-Stop Career Centers. Washington, D.C. Accessed March 1, 2005. Available www.dol.gov/dol/topic/training/onestop.htm
- U.S. General Accounting Office. June 2003. Transportation Disadvantaged Populations: Some Coordination Efforts Among Programs Providing Transportation Services, but Obstacles Persist. GAO-03-697. Washington, DC. http://www.gao.gov/new.items/d03697.pdf (12-1-04)
- Venter, Christoffel. "Towards Estimating the User Impacts of Next-Day Reservation Policies in ADA Paratransit Systems." *TRB 2003 Annual Meeting CD-ROM*.

Vermont Public Transportation Association. "Medicaid/Reach Up Program." White River Junction, VT. Accessed April 2, 2005. Available http://vpta.net/publicservice_medical.cfm

Washington State Agency Council on Coordinated Transportation. "Improving Transportation for People with Special Transportation Needs through Coordination." Olympia, WA. August 1999.