

Transportation for Adults with an Intellectual and/or Developmental Disability

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CHAPTER 1: REVIEW OF THE LITERATURE

It has been established in the research that in addition to living, working, and utilizing community amenities, community inclusion also includes movement in and around public settings using public transportation (e.g., Mechling & O'Brien, 2010; Taber, Alberto, Hughes, & Seltzer, 2002). The skill to move about one's community in a safe manner can increase independence for individuals with disabilities by offering more employment opportunities, as well as accessing community facilities, such as grocery stores, restaurants, and recreational centers. Because some are unable to obtain a drivers license and drive a car, individuals with an intellectual and/or developmental disability (I/DD) are often limited to walking, riding a bicycle, or being transported by others if they do not learn to access transportation (Mechling & O'Brien, 2010). This limitation in accessing transportation poses a barrier to individuals with an I/DD, as it severely limits opportunities for employment, medical care, as well as community inclusion. Community inclusion is an important goal for most individuals with an I/DD and their families (Davies, Stock, Holloway, & Wehmeyer, 2010). This chapter includes a review of the literature related to the joint position statement issued by AAIDD and The Arc, transportation and ADA, transportation options, and training for individuals with an I/DD.

Joint Position Statement of AAIDD and The Arc

The American Association on Intellectual and Developmental Disabilities (AAIDD) and the Arc of the United States are the two leading organizations in the field of I/DD. In 2008, AAIDD and The Arc adopted the statement that individuals with an I/DD must have access to both public and private transportation to lead full, independent lives. In addition, they offered the following position related to transportation for individuals with an I/DD:

Transportation agencies, service providers, and advocacy organizations must ensure that:

- There is an increasing flexibility and growth in available transportation options throughout the U.S. for our constituents, including those in rural areas.
- Public transportation is adequately funded and available
- Existing public transportation is accessible, available in a timely manner, and equipped to suit the physical and/or cognitive needs of all people.
- Paratransit systems for those who need them must be available at comparable cost and funded as an alternative to mass transportation
- Our constituents have the option of owning and operating their vehicles.

There is much research and subsequent best practices to be implemented for this position statement to become a reality for individuals with an I/DD. The AAIDD and The Arc indicated that individuals with an I/DD lack adequate access to mass transit, paratransit, trains, airplanes, vehicles, and other modes of transportation to accomplish everyday activities. Also, although state and federal legislation encourages more individuals with an I/DD to work, getting to work requires transportation (AAIDD & The Arc, 2008). Those residing in rural regions can face the greatest barriers due to lack of public transportation and longer distances between work and home. The following review of the literature will provide information about the different transportation options currently available for individuals with an I/DD and research-based practices that can be utilized to teach individuals with an I/DD to use transportation for successful independent living and community inclusion.

Transportation and the Americans with Disabilities Act

The Americans with Disabilities Act of 1990 (ADA), a civil rights law, addresses the rights of people with disabilities. Specifically, Title II of the ADA prohibits discrimination on the basis of disability with public transportation services, including city buses, subways, and trains,

among others. Under the ADA provisions, all new vehicles used in public transit must be accessible, existing rail stations and all new rail stations and facilities must be accessible; and paratransit services must be provided for those individuals who cannot access available mass transit.

Transportation Options

There are a variety of terms used to describe the options available on transportation options for individuals with an I/DD, such as ADA Paratransit Programs, Community Ride Programs and Workers Needing Transportation, Commuter Connections, Deviated Bus Routes, Medical Transportation Programs, Public Buses and Trains, Ride Programs for Individuals with Disabilities, Taxis, and Air Travel. In the sections that follow, each of these terms will be described.

ADA paratransit programs. The ADA requires curb-to-curb 'paratransit' service for people whose disabilities prevent them from using accessible, non-commuter, fixed route bus service. Paratransit service is intended to offer a comparable level of service to that provided by regular bus service. Paratransit service is not required nor intended to meet all the transportation needs of persons with disabilities. Rather, it is intended to provide public transportation in a more specialized form. ADA Paratransit Programs are for individuals with disabilities who are not able to use local fixed-route bus systems. The individual usually has to pay for each ride.

Community ride programs and workers needing transportation. Community Ride Programs recruit volunteer drivers to provide rides for residents that have limited or no public transportation. Individuals may or may not have to pay for each ride. Volunteer driver programs can save money for both organizations and consumers; thus increasing the capacity of an organization to help individuals access transportation despite limited funds. Virtually all

volunteer driver programs provide transportation to individuals with disabilities and charge little to no fee to the person using the service, which is particularly useful to people living on low incomes. Many communities have programs that assist workers with low incomes to get to and from work. The local Department of Vocational Rehabilitation can assist with transportation to and from employment.

Commuter connections. Many communities have organized carpool and vanpool options. For example, a vanpool is a group of 8 to 12 commuters who share the ride in a van provided by the vanpool organization. The driver, who is one of the commuters, rides for free and the other passengers pay a monthly rate to cover expenses. The group of commuters set the schedule and route for their van.

Deviated bus routes. Some public buses may deviate or go off the “fixed-route” between stops to pick up a rider. These routes typically operate on a regular schedule and can also deviate within a $\frac{3}{4}$ mile corridor along the route by request. Route deviations can cost more and require at least an hour advanced notice. When boarding, the individual tells the bus driver his/her name and that a deviation was requested. The driver then verifies the deviation information issued by dispatch and the individual boards and pays the fare.

Medical transportation programs. Medical Transportation Programs give rides to people with disabilities or individuals with limited incomes to medical appointments. The programs are run by community service organizations, medical or nursing agencies and cities/towns to take individuals to medical appointments at clinics, hospitals or medical centers. Some programs will take people to out-of-town locations for medical treatment, when needed. Advance notice for medical appointments and registration is usually required.

Public buses and trains. These transportation types typically offer reduced fares for people with disabilities. For most people using public transportation, the most convenient and flexible way to travel is by bus or train. It costs less and requires less planning than paratransit. Below are some of the features individuals will find on most transportation systems:

- Buses and trains equipped with wheelchair lifts or low floor ramps to allow easy access for people with disabilities
- Priority seating for those who need it
- Drivers trained to provide assistance in securing wheelchairs in designated spaces
- Bus drivers trained to allow passengers time to be seated, and to get on and off the vehicle
- Announcement of stops at major intersections, transfer points and, at the request of passengers, specific destinations
- Stations with elevators to the boarding platforms - once on the platform, it is easy to board the train
- Route and schedule information provided by transit agencies, including the best way to reach the destination. This information is available in accessible formats if needed.
- If an individual is unfamiliar with using public transit, travel training may be available to teach him/her how to travel safely on a bus or train.

Ride programs for people with disabilities. Some cities and towns fund weekly ride programs to grocery stores, banks, medical buildings and other local destinations for people with disabilities. These programs typically provide curb-to-curb transportation within local communities. This service is particularly helpful in rural communities.

Taxis. Taxis can be an affordable option in communities that have a subsidized taxi coupon program for low-income people with disabilities of all ages. The coupons are used to “pay for” a one-way door-to-door trip in a taxi. Coupons typically can only be used for rides anywhere within city limits.

Air travel. The Air Carrier Access Act (ACAA) of 1986 was reauthorized in 2009 and ensures that individuals with disabilities can use aircraft travel. Airlines are required to provide help with boarding, deplaning and making connections. The reauthorization in May 2009 included a provision to apply the ACAA to foreign carriers, making international travel easier for passengers with disabilities.

Teaching Transportation Skills

Groce (1996b) described travel training as a short term, comprehensive, intensive instruction designed to teach individuals with disabilities to independently and safely travel using public transportation. There have been a handful of studies that have focused on teaching transportation skills to individuals with an I/DD (e.g., Coon, Vogelsberg, & Williams, 1981; LaDuke & LaGrow, 1984). To independently access and use transportation, individuals with an I/DD must have certain prerequisite skills, such as time management, literacy skills, and problem-solving skills. In addition, families and other caregivers may limit the individual’s access to public transportation due to fear for the individual’s safety (Davies et al., 2010). The following section will briefly describe some of the studies related to transportation skills and recommendations made to enhance the quality of instruction for individuals with an I/DD. Studies that focused on pedestrian navigation were not included in this review.

Laus (1974) examined a program designed for the students with moderate I/DD. Thirty-five students from an inner city with a mean age of 16 years participated in the study. Orientation

in the classroom and both classroom and outdoor mobility instruction were taught. Results demonstrated that the students were able to safely and independently travel within their community after receiving instruction. Maintenance measures indicated that after one school year of instruction, students were traveling independently to and from school by public transportation. Students who previously were transported daily from their doorstep by leased vans were initiating their own travel to and from school. The authors suggested that orientation and mobility instruction should be considered an important part of the total curriculum for students with a moderate I/DD in the public schools.

In one of the earlier studies on teaching individuals with an I/DD to use transportation, Neef, Iwata, and Page (1978) examined the effects of a classroom program to teach public transportation usage (bus-riding skills) to five participants (age range of 18-24) with an I/DD. Using a task analysis of predetermined skills, these five participants were taught each of the components of locating, signaling, boarding, riding, and exiting a bus. These skills were taught sequentially, using role playing, manipulating the actions of a doll on a simulated model, and responding to questions about slide sequences. Before, during, and after training, participants were assessed on generalizing learned skills to the classroom and the natural environment. Results indicated that up to one year after training had ended, each participant exhibited appropriate bus-riding skills on city buses. Two other participants were trained on each skill component in vivo (on city buses), in order to determine the comparative effects of the effectiveness and efficiency of classroom versus in vivo training in the natural environment. Both of these participants learned appropriate bus-riding skills; however, the in vivo training procedure was both more time consuming and expensive than classroom training. These results

demonstrated the effectiveness and practicality of classroom training procedures for teaching transportation skills to individuals with an I/DD.

In 1985, Welch, Nietupski, and Hamre-Nietupski taught six young adults with a moderate I/DD to use a prosthetic picture-prompt card to determine whether they were on time to catch a city bus to their vocational training site and a problem-solving procedure to follow in the event that they had missed their bus. Training was conducted in both simulated and in vivo environments and consisted of total task presentation, with a least-to-most prompt correction procedure hierarchy. Results indicated that all six students reached the 100% criterion preference level under simulated training conditions. Also, three of the students immediately generalized to the actual community environment. In addition, although the remaining three students did not transfer immediately to the actual community the skills that were acquired in the simulated environment, fewer in vivo training trials were needed to reach mastery criterion. Finally, all students demonstrated 100% correct task-step performance up to four months after training ended.

Davies et al. (2010) determined the effects of a PDA-based software system with integrated GPS technology for providing location-aware visual and auditory prompts on the ability of individuals with an I/DD to successfully navigate a downtown bus route. Participants included 23 adolescents and adults who received services through a public school transition program or a community-based developmental disability agency. Results demonstrated that participants using the system were significantly more successful at completing a bus route than were people in a control group, who used a map and verbal directions. In addition, when using the GPS-based system, 73% of participants successfully rang the bell and exited the bus at the right stop compared to only 8% of the control group. Finally, it was observed that these

participants attempted to follow a new bus route for the first time and get off the bus at a previously unknown location.

Mechling and O'Brien (2010) examined the effects of computer-based video instruction (CBVI) with constant time delay procedures on three young adults with a moderate I/DD's ability to push a "request to stop bus signal" and exit a city bus in response to target landmarks. All instructional sessions occurred in simulation in a classroom or office area, and generalization and maintenance measures were conducted in-vivo on a public bus route. The instructor sat beside the participant on the bus and another data collector sat two rows behind them. Equipment used included video recordings with voice over and still photographs. Results indicated that CBVI was an effective means for creating a simulation to teach the bus route to all three participants. In addition, participants were able to generalize the skill to the actual bus route with no in-vivo instruction. Maintenance measures further indicated that participants were able to maintain the skill across time.

In a large study conducted by Haveman, Tillmann, Stoppler, Kvas, and Monninger (2013), the effects of The Nordhorn Public Transportation Intervention Study in Germany on the independent use of public transportation by 124 students with an I/DD through interventions in the social and physical environment. The multicenter study included various types of interventions: assessment of mobility/traffic competency, mobility integrated individual educational plans, mobility and traffic curriculum, information for teachers and parents, training for bus drivers, real-life traffic training, support by mobility trainers and trip coaches, adaptations to streets and buses, and incident management including the use of communication devices. At the beginning of the project, <1% of student participants with an I/DD used public transport to get to school; three years later, this number increased to 65.3%. On 19 of 29 items, student

participants demonstrated improvement of skills in public transport use and traffic wayfinding behavior compared to before training.

Summary

The large majority of travel training studies were implemented in the 1970s and 1980s when individuals with an I/DD were leaving institutions and being integrated into the community (Kelley, Test, & Cooke, 2013). In addition, the majority of these studies have focused on bus riding instruction. Much more research is warranted on travel training using bus riding, as well as train and air travel. However, what has been established in the research on transportation training is that effective instruction includes a combination of:

- assessment of mobility/traffic competency,
- mobility and traffic curriculum,
- real-life traffic training,
- travel simulations (e.g., CBVI),
- support by instructors,
- picture prompts,
- audio directions, and
- incident management, including the use of communication devices (e.g., GPS, iPod)

References

- Coon, M. E., Vogelsberg, R. T., & Williams, W. (1981). Effects of classroom public transportation instruction on generalization to the natural environment. *Journal of the Association for the Severely Handicapped*, 6, 46-53.
- Davies, D. K., Stock, S. E., Holloway, S., & Wehmeyer, M. L. (2010). Evaluating a GPS-based transportation device to support independent bus travel by people with intellectual disability. *Intellectual and Developmental Disabilities*, 48, 454-463.
- Groce, M. (1996b). An introduction to travel training. *NICHY: Transition Summary*, 9, 2-5.
- Haveman, M., Tillmann, V., Stoppler, R., Kvas, S., & Monninger, D. (2013). Mobility and public transport use abilities of children and young adults with intellectual disabilities: Results from the 3-year Nordhorn Public Transportation intervention study. *Journal of Policy & Practice in Intellectual Disabilities*, 10, 289-299.
- Kelley, K. R., Test, D. W., & Cooke, N. L. (2013). Effects of picture prompts delivered by a video iPod on pedestrian navigation. *Exceptional Children*, 79, 459-474.
- Laus, M. D. (1974). Orientation and mobility instruction for the sighted trainable mentally retarded. *Education & Training of the Mentally Retarded*, 9(2), 70-73.
- LaDuke, R. O., & LaGrow, S. J. (1984). Photo-bus-route-map: An intervention to produce independence in bus travel for mentally retarded adults. *Mental Retardation and Learning Disability Bulletin*, 12, 71-75.
- Mechling, L. G., & O'Brien, E. (2010). Computer- based video instruction to teach students with intellectual disabilities to use public bus transportation. *Education and Training in Autism and Developmental Disabilities*, 45, 230-241.

- Neef, N. A., Iwata, B. A., & Page, T. J. (1978). Public transportation training: In vivo versus classroom instruction. *Journal of Applied Behavior Analysis, 11*, 331-344.
- Taber, T. A., Alberto, P. A., Hughes, M., & Seltzer, A. (2002). A strategy for students with moderate disabilities when lost in the community. *Research and Practice for Persons with Severe Disabilities, 27*, 141-152.
- Welch, J., Nietupski, J., & Hamre-Nietupski, S. (1985). Teaching public transportation problem solving skills to young adults with moderate handicaps. *Education & Training of the Mentally Retarded, 20*(4), 287-295.

CHAPTER 2: COMMON BARRIERS TO TRANSPORTATION ACCESS FOR INDIVIDUALS WITH DISABILITIES

Twenty-five years after the ADA was enacted, people with disabilities still face barriers when accessing transportation. Fortunately, the ADA has led to major improvements in transit systems across the United States. However, there are still gaps in compliance with requirements. Also, because the ADA only addresses public transportation, few transportation options exist for people with disabilities where no public transportation is available. In some areas (e.g., rural communities), inadequate funding has left individuals with disabilities with little or no transportation options. In addition, a lack of requirements has meant inconsistent progress in urban regions. This chapter will report on barriers to accessibility; specifically related to paratransit services, fixed route public transit, taxis, and financial issues..

Paratransit Services

The ADA requires a provision of paratransit services in areas where mass transit is available to provide people with disabilities who could not use mass transit with another option. Paratransit is an alternate mode of transportation that is most often provided by minibuses. Paratransit provides door-to-door shared rides upon the request by eligible users. Unfortunately, users in many cities experience significant problems with their paratransit systems, including problems with service quality and capacity limitations. The American Association of People with Disabilities (AAPD, 2011) indicated that specific problems include: restrictive eligibility criteria; unfair trip denials; tardiness or failure to show; slow service en route; inefficient and unfriendly telephone reservation systems; inaccurate information; failure to respond to complaints; lack of training for drivers; drivers' lack of respect for users; and punitive cancellation policies.

Paratransit service is critical for those individuals who rely on it to get around their community. Failure of paratransit to show up or to provide effective service causes frustration. More importantly, it can also cause missed health appointments and employment issues for those who need to get to work.

Fixed-route public transit is the ultimate goal of the ADA for those individuals who are able to use it. Paratransit was intended for people with disabilities who are unable to use mass transit systems, and not for those who merely choose paratransit. In the context of limited federal funding, agencies have found ways to control the increasing costs of paratransit. These include removing barriers to fixed transit (e.g., adding curb cuts to make streets more accessible); making fixed-route service ADA compliant; implementing fare incentive programs on fixed-route transit; and adding disincentives such as charging premium fares for special services. Some agencies have also offered travel training to teach individuals with disabilities to use fixed route systems and also to shift riders from using paratransit to using fixed routes. Sometimes the largest barrier to increased use of mass transit by an individual with a disability is fear or inexperience. Increased training (beginning in school for students with disabilities) could greatly reduce reliance on paratransit by individuals who are otherwise able to use mass transit.

Fixed Route Public Transit

Buses. Although services for people with disabilities on public buses and rail systems have expanded considerably, there are still important issues that need to be addressed. For example, bus services have greatly improved under the ADA. Universal design features (e.g., low-floor buses with ramps, larger destination signs, floor markings, additional grab bars, audible stop announcements, and monitors that show upcoming stops) have greatly improved accessibility for individuals with disabilities. Unfortunately, many transit agencies still fail to

comply with the ADA requirement to announce bus stops, which greatly affects individuals with visual and intellectual disabilities (AAPD, 2011). Also, in some cases, drivers do not stop for individuals with disabilities. Drivers need more training on securing equipment, calling out stops, and following procedures regarding passengers with disabilities.

Over-the-road buses (large buses elevated over a luggage compartment), which are often used for travel, can also be problematic for individuals with disabilities. These types of buses frequently pick up passengers at curb stops rather than at stations. Most large companies comply with accessibility requirements; however, smaller companies often ignore these requirements.

Trains. Train travel has also improved, but still contains certain obstacles. With previously existing rail systems, the ADA only requires that key stations be made accessible. Key stations include transfer rail stations, major interchange points, and stations serving major activity centers. In cities that have subways, commuter rails, or other systems built before the ADA took effect, there are few accessible stations. Requiring only key stations to be made accessible, rather than making all existing rail stations accessible, has led to gaps in accessibility.

Some of the biggest issues with ADA compliance involve Amtrak. Under the ADA, Amtrak was supposed to have been 100 % ADA compliant (i.e. accessible) by July 2010. In reality, only about 20 % of its stations are compliant. Several court cases have addressed the various issues that people with disabilities face with accessibility at Amtrak stations and on its trains.

Taxis

Private transportation is an important alternative that should be considered to increase access for people with disabilities (AAPD, 2011). One concern is the lack of accessible taxis. Many people with disabilities who cannot drive or afford to purchase and/or maintain a car use

taxi services. Taxis can provide greater flexibility and independence than relying on public transportation systems.

Also, taxis can provide a cost-effective alternative to paratransit service. Taxi fare is less expensive than providing paratransit services. In addition, health care-related travel needs could be provided more cheaply and effectively by using accessible taxis than by using privately operated ambulettes or public paratransit systems (AAPD, 2011).

Unfortunately, only a very small percentage of taxis nationwide are accessible, and individuals with disabilities still face a huge amount of discrimination from taxi services. Some cities have accessible taxi programs (e.g., Boston, Chicago, Las Vegas, San Francisco, Seattle, Portland). The ADA requires accessibility only in van-style taxis, not for sedan-style taxis.

The American Association of People with Disabilities' Recommendations

The AAPD (2011) made the following recommendations (see <http://www.aapd.com/resources/publications/transportation-disabilities.pdf>) to address these barriers:

Funding

- Dedicated funding for public transit is critical—most federal funding currently favors cars and highways, missing a whole segment of the nation.
- Funding should support the state of good repair—letting our infrastructure fall apart impedes the mobility of millions of people in the U.S.
- Funding should allow for operating assistance in addition to capital expenses to assist in paying the operating and administration costs of providing transit service.

Programs

- The Transportation for the Elderly and People with Disabilities Program (Section

5310), the New Freedom Program (Section 5317), and the Job Access Reverse Commute Program (JARC) (Section 5316) are critical in providing transportation options for people with disabilities.

- Adequate funding must be provided for transportation programs and for innovative private and public sector models.
- Programs need greater coordination to be effective. If consolidated, they should allow for coordination and give transportation providers the flexibility they need to serve all groups.
- In consolidating programs, it is imperative to ensure that funds continue to go specifically to programs that benefit people with disabilities, and are not diverted to larger entities or used for other purposes.

Livability Provisions

- Complete streets provisions—which ensure that the entire roadway is designed with all users in mind—are important in making streets and public rights-of-way safe and accessible for everyone, including people with disabilities.
- All modes of transportation should be accessible to all people at all times—systems designed to meet the needs of people with disabilities will meet the needs of everyone.

Enforcement

- Vigorous oversight and compliance with ADA requirements is crucial. The FTA should reinstate its compliance assessments to hold transit agencies accountable.
- Policies should be implemented that support the availability of accessible taxis, buses, trains, and other transportation.

- Taxis should be made accessible and considered as cost-effective alternatives to paratransit.
- Amtrak must be funded to improve station accessibility and held accountable for achieving full accessibility.

Voucher Programs – An Answer to Transportation Barriers in Rural Communities

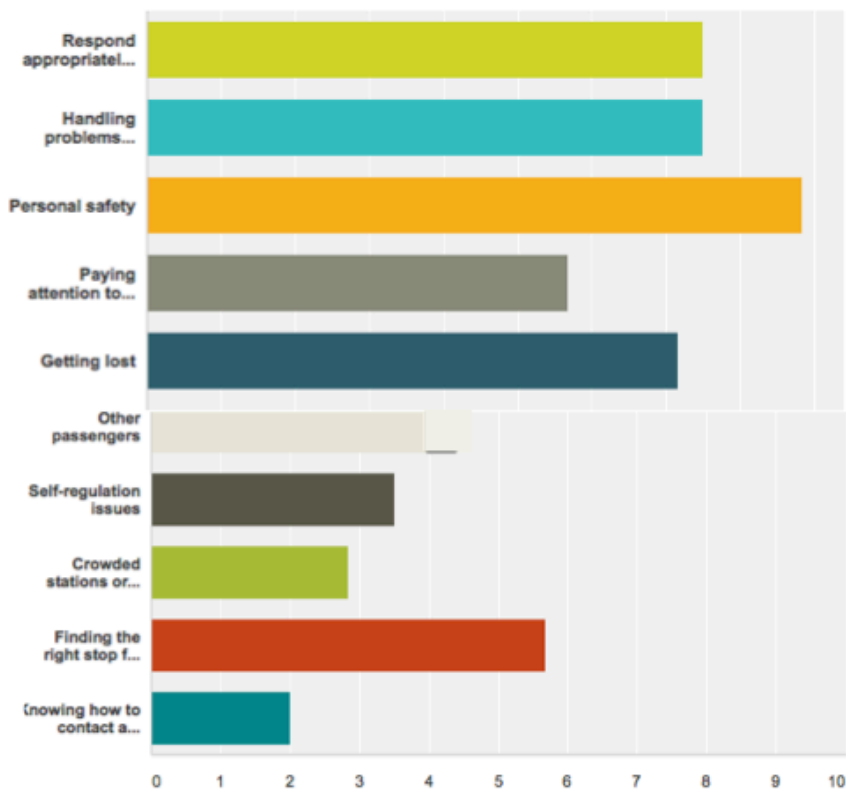
As mentioned previously, access to transportation is a considerable barrier to community participation and an improved quality of life for individuals with disabilities. One of these barriers can be financial. Luckily, transportation voucher programs represent a cost-effective way to provide access to transportation for people with disabilities, but few studies have studied the effectiveness of these programs. Transportation voucher programs are operated by agencies that negotiate with public and private transportation providers to accept vouchers, recruit and train eligible participants, and help riders identify volunteers and transportation providers who will accept vouchers. Riders are provided a voucher book (similar to a checkbook) with an provision of miles or dollars from the agency, and are responsible for scheduling and securing rides. The agency reimburses transportation providers who submit the vouchers. According to Haarstad (2008), transportation voucher programs have been introduced in at least 12 states throughout the United States, primarily in rural communities.

Samuel, Lacey, Giertz, Hobden, and LeRoy (2013) determined the benefits of participating in a transportation voucher program in Michigan, a state with limited public transportation. Seventy-three individuals participated in the transportation voucher program, funded by the state's Developmental Disabilities Council from 2005 to 2008. More than two-thirds (70%) of participants reported that their emotional well-being and community participation had improved, and 54% of participants responded that participation in the voucher

program had resulted in increased quality of life. Results suggest that resources spent on developing voucher programs have the potential to enhance the lives of individuals with disabilities and their families. However, the authors suggested that future longitudinal research along with a comparison group is essential in validating these preliminary findings on the benefits of vouchers.

Survey on Areas of Crisis During Independent Travel

A survey was conducted in 2014 with nine parents and guardians of students in a postsecondary option for individuals with an I/DD at a university in South Carolina. The focus of the survey was to identify areas of crisis during independent travel. Parents and guardians were asked: What worries or concerns do you have for your child with a disability when using public transportation?



Note: Survey was adapted from Feeley, C., Feeley Consulting, & Shannon, L. (Easter Seals Project ACTION)

Seven of nine respondents indicated worry that their child would not respond appropriately to an emergency. Eight respondents indicated concern that their child would not handle problems appropriately. Eight respondents were worried for their child's personal safety. Six respondents indicated worry over not paying attention to the environment. Seven respondents indicated concern over their child getting lost. Four respondents were worried over other passengers' behavior. Four respondents also expressed concern over self-regulation issues (e.g., loud noises) and crowded stations or vehicles. Six respondents worried that their child might not find the right stop for a bus or train, and two respondents indicated concern over their child knowing how to contact a transportation company (e.g., taxi, van service). Although certainly not representative of all parents and guardians of individuals with an I/DD, these results provide an interesting perspective on common concerns relating to transportation and can provide areas of focus during travel training.

References

- The American Association of People with Disabilities (2011). *Equity in transportation for people with disabilities*. Retrieved from <http://www.aapd.com/resources/publications/transportation-disabilities.pdf>
- Haarstad, C. (2008). *Transportation voucher programs: Facilitating mobility in rural areas*. Retrieved from http://web1.ctaa.org/webmodules/webarticles/articlefiles/Rural_Voucher_Programs.pdf
- Samuel, P. S., Lacey, K. K., Giertz, C., Hobden, K., & LeRoy, B. W. (2013). Benefits and quality of life outcomes from transportation voucher use by adults with disabilities. *Journal of Policy and Practice in Intellectual Disabilities, 10*, 277-288.

CHAPTER 3: TRAVEL ASSESSMENT AND TRAINING RESOURCES

This chapter provides an overview of travel assessment and training resources that can be used with adults with an I/DD. These resources have important implications for teaching travel skills that can be used by secondary level public school programs as well as postsecondary education programs. Based on previous research, travel instruction should focus on:

- Assessing the person’s skills and needs
- Teaching the person how to plan a trip
- Developing a training plan with the person
- Teaching the person how to:
 - safely cross the street
 - board, ride, and exit a vehicle
 - Use vehicle features
- Working with the person to design/follow an emergency plan
- Providing social and survival skills instruction (i.e., recognizing numbers, reading schedules, telling time, talking to strangers, understanding body language)

Easter Seals Project ACTION

According to the Easter Seals Project ACTION (ESPA) website, “Congress originally commissioned Easter Seals Project ACTION (ESPA) in 1988 as a research and demonstration project administered by Easter Seals to improve access to public transportation for people with disabilities. Funding for ESPA is derived through a cooperative agreement with the U.S. Department of Transportation, Federal Transit Administration.” However, with the passage of the ADA, ESPA’s goal was expanded to assist the disability community and the transportation industry to achieve one goal – ensure accessible community transportation in our nation. Below

are some interesting facts and figures reported by ESPA (see

<http://www.projectaction.org/TransportationtheADA/FactsandFigures.aspx>):

- The United States has 308 million citizens, and approximately 54 million people are living with the disabilities in the United States. (Source: 2010 U.S Census, U.S. Census Bureau)
- 36 million people with disabilities in the U.S. live in non-institutionalized environments. (Source: 2008 U.S. Census Bureau American Community Survey, U.S. Census Bureau)
- 15.1% of the civilian non-institutionalized population 5 years and over in the United States, or about 41.3 million people reported a disability. Approximately 4.3 percent reported a sensory disability, 9.4 percent reported a physical disability, 5.8 percent reported a mental disability, and 3.0 percent reported a self-care disability. Of the civilian non-institutionalized population 16 years and over, 5.5 percent reported a go-outside home disability, and of those 16 to 64 years old, 7.1 reported an employment disability. Disability prevalence was highest among the 65 years and older population at 41.0 percent, compared to rates for the 16 to 64 years age group (12.3 percent) and 5 to 15 years age group (6.3 percent). (Source: "Disability Status and the Characteristics of People in Group Quarters," U.S. Census Bureau, February 2008)
- 20.1% of people with disabilities are participating in the labor force as compared to 69.3% of people without disabilities. (Source: March 2012 Disability Employment Statistics, U.S. Department of Labor Office of Disability Employment Policy)
- The unemployment rate for people with disabilities is 15.2%; the unemployment rate for people without disabilities is 8.1%. (Source: March 2012 Disability Employment Statistics, U.S. Department of Labor Office of Disability Employment Policy)

- 6% of workers age 16 and over with disabilities use public transportation to commute to work.
- Approximately 7,900 organizations provide transportation services that range from large multi-modal systems to single-vehicle paratransit service providers. There are approximately 6,668 paratransit providers. Public transportation spent \$55.2 billion for service and capital investment in 2009. Passengers took 10.4 billion trips and rode transit vehicles for 55.2 billion miles. (Source: 2011 Public Transportation Factbook, American Public Transportation Association, April 2011, p. 7)

ESPA hosts training and technical assistance events throughout the year. Experience demonstrates that improved access for people with disabilities can equal improved access for everyone. Training opportunities include travel training and webinars.

Travel training. This training initiative is provided to increase the skills, knowledge and abilities of travel training professionals. For more information, contact [Kristi McLaughlin](#) or call 800-659-6428 toll free.

Online travel training community. ESPA hosts a Global Travel Training Community, providing a forum for members to pose questions, share answers, ideas and actual resources, and discuss issues.

Travel training for student success. This training program is a primer for school administrators interested in learning how high schools across the country are connecting students to travel training services, developing and adapting goals, and supporting local implementation of travel training programs.

In addition, ESPA offers a resource library that includes a wealth of information. Topics include Buses and Trains for Everyone, Competencies for the Practice of Travel Instruction and

Travel Training, GET Going! Guiding Everyday Travel, Public Transportation: The Route to Freedom, A Transportation Education Program for Students with Disabilities in Grades 8-12, Travel Training for Student Success: The Route to Achieving Post-secondary Student Outcomes, and You Can Ride.

Buses and Trains for Everyone. Serving as both a curriculum guide for teachers and as a workbook for students in grades 4-8, this resource documents lesson plans from different schools around the country and presents classroom activities for students. A dynamic resource for teachers, parents and human service professionals. This is provided as a booklet, a CD-ROM of PDF files, and a DVD (see

<http://www.projectaction.org/ResourcesPublications/BrowseOurResourceLibrary/ResourceSearchResults.aspx?org=a2GSpnDbruI=&query=Buses%20and%20Trains%20for%20Everyone>).

Competencies for the Practice of Travel Instruction and Travel Training. This booklet compiles key guidelines and outlines the fundamental abilities needed for effective travel training instruction, It includes sample job descriptions for easy reference, and is easily downloaded from the website (see

<http://www.projectaction.org/ResourcesPublications/BrowseOurResourceLibrary/ResourceSearchResults.aspx?org=a2GSpnDbruI=&query=Competencies%20for%20the%20Practice%20of%20Travel%20Instruction>).

GET Going! Guiding Everyday Travel. This personal pocket guide (3.5"x4" folded) provides transit riders with tips on what to do if they find themselves unsure of how to proceed with their trip. The guide includes spaces for writing destination, fare amount, contact numbers and contains suggestions on what travelers can do if they lose their fare; miss their stop, bus, or train; get lost; or feel unsafe. This guide is easily downloaded from the website (see

<http://www.projectaction.org/ResourcesPublications/BrowseOurResourceLibrary/ResourceSearchResults.aspx?org=a2GSpnDbruI=&query=Guiding>).

Public Transportation: The Route to Freedom, A Transportation Education Program for Students with Disabilities in Grades 8-12. This is a curriculum developed to teach students in secondary schools about the concepts, skills and behaviors necessary to use public transportation. The course is aligned with New York State standards while complementing the standards of other states. Included is a book containing teacher and resource guides, a book for students participating in standardized assessment of skills, and one for students participating in alternate assessments (see <http://www.projectaction.org/ResourcesPublications/BrowseOurResourceLibrary/ResourceSearchResults.aspx?org=a2GSpnDbruI=&query=Public%20Transportation:%20The%20Route%20to%20Freedom>).

Travel Training for Student Success: The Route to Achieving Post-secondary Student Outcomes. "Travel Training for Student Success: The Route to Achieving Post-Secondary Student Outcomes" is a primer for school administrators interested in learning how high schools across the country are connecting students to travel training services, developing and adapting goals, and supporting local implementation of travel training programs. This resource includes the following (see <http://www.projectaction.org/Training/TravelTraining/TravelTrainingforStudentSuccess.aspx>):

- **A Practical Guide for School Administrators**
 - Easter Seals Project ACTION developed this 23-page booklet with contributions from education, disability, and transportation professionals. It offers multiple examples from across the United States of how schools

are making travel training services available to their students. These initiatives range from offering travel training services directly through school district personnel, to enrolling students in travel training programs offered by the local transportation provider or a human service agency.

- **PowerPoint Shows – Travel Training for Student Success Part One: Benefits of Travel Training, and Part Two: Getting Started**
 - These PowerPoint shows are used to inform and enlist other education officials, colleagues and community partners in support of goals related to travel training for students. The PowerPoint presentations include talking points.

- **Rights Responsibilities of Transit Customers with Disabilities ADA Bookmark**
 - An easy-to-carry reference guide, this laminated bookmark details the rights guaranteed to paratransit customers under the American with Disabilities Act (ADA) and the responsibilities passengers have when using ADA paratransit. This guide is easily downloadable at <http://www.projectaction.org/ResourcesPublications/BrowseOurResourceLibrary/ResourceSearchResults.aspx?org=a2GSpnDbruI=&query=Rights%20&%20Responsibilities%20of%20Transit%20Customers%20with%20Disabilities>).

Easter Seals Project ACTION's Online Toolkits

ESPA offers online toolkits that allow learners to access information at their own pace. Below is a brief description of each of these toolkits, taken directly from the website (see <http://www.projectaction.org/Training/OnlineToolkits.aspx>):

A Curriculum to Build Knowledge of Educators, Human Services, Families, and Transit Regarding Transportation Education and Travel Instruction. This resource provides educators, transit professionals, families, and others with strategies for integrating transportation content, including travel instruction, into the educational experience for students, including those with disabilities. With nine, interactive, self-paced learning modules, learners are able to download and customize the curriculum to align with academic content, instructional activities, and unique learning opportunities available in their settings. The materials can help educators, pupil transporters and public transit professionals implement transportation education services.

Integrated Self-advocacy Curriculum for Transportation: Helping Students Develop Skills to Support Choice in Accessible Transportation. The decisions that students and their families make about the use of different transportation modes must be aligned with students' preferences, related to both social and sensory factors. These materials are part of the Integrated Self-Advocacy (ISA) Curriculum developed by Valerie Paradiz, Ph.D., an internationally recognized researcher and educator. Paradiz adapted the ISA Sensory Scan™ and ISA Social Scan™ for ESPA to help students understand and address sensory and social challenges related to transportation. Schools and school districts can use these materials as part of transportation education programs.

VTCLI Route to Community Engagement Toolkit. This eight-step process is designed to help transportation professionals and local military leaders reach out to veterans, military

family members and active duty service personnel to obtain information on their transportation needs and recommendations on how to meet those needs. Veterans Transportation and Community Living Initiative (VTCLI) grantees are invited to use this toolkit to reach out to the military community as they build or expand their local One-Call/One-Click Transportation Resource Centers. Communities that are not participating in the VTCLI program are also welcome to use these resources to accomplish similar results.

Easter Seals Project ACTION’s Resources and Publications

The following table provides a brief description of additional resources and publications provided by ESPA:

Resource/Publication	Descriptions/Link to Resource
ADA	Description of ADA as it relates to public transportation http://www.projectaction.org/ResourcesPublications/ADA.aspx
Assessment Tools and Resources	ESPA offers several assessment tools to measure the accessibility of pathways, wayfinding implements, bus stops, and transit vehicles and personnel. <ul style="list-style-type: none"> • Fixed route • Rural • Taxi • Community • Travel training

	<ul style="list-style-type: none"> • Student <p>http://www.projectaction.org/ResourcesPublications/AssessmentToolsandResources.aspx</p>
<p>Complaint Resolution</p>	<p>It is recommended that customers communicate their complaint to the local transit agency as soon as possible from the time of the issue of concern to them.</p> <ul style="list-style-type: none"> • Advocacy • FTA ADA Complaint <p>http://www.projectaction.org/ResourcesPublications/ComplaintResolution.aspx</p>
<p>Finding Accessible Transportation</p>	<p>When making travel plans within the United States or abroad it is helpful to know the level of accessibility one can expect, as well as information about the types of services that will be available in different cities.</p> <ul style="list-style-type: none"> • Accessible transportation options webpage template for tourism websites • Motorcoach operator’s ADA pocket guide • Barrier-free travel: A nuts and bolts guide for wheelers and slow walkers • Air travel information and assistance

	<ul style="list-style-type: none"> • New Horizons: Information for the air traveler with a disability • Hotline for disability-related air travel issues • Nationwide accessible van and equipment rentals <p>http://www.projectaction.org/ResourcesPublications/FindingAccessibleTransportation.aspx</p>
<p>Fixed-route Buses</p>	<p>See ESPA’s resources below for more information for operators, riders, and others interested in starting or improving existing fixed-route bus services.</p> <ul style="list-style-type: none"> • For operators: <ul style="list-style-type: none"> ○ A.C.C.E.S.S. Matters ○ ADA Essentials for Transit Board Members ○ FAQs about Service Animals ○ Transit Operator’s Pocket Guide • For riders: <ul style="list-style-type: none"> ○ GET Going! Guiding Everyday Travel ○ Transit Customer Rights and Responsibilities Bookmark ○ You Can Ride • Assessments: <ul style="list-style-type: none"> ○ Building Awareness in Accessible Transportation

	<ul style="list-style-type: none"> ○ Functional Assessment of Cognitive Transit Skills ○ Neighborhood Wayfinding Assessment Pocket Guide ○ Toolkit for the Assessment of Bus Stop Accessibility and Safety <p>http://www.projectaction.org/ResourcesPublications/FixedRouteBuses.aspx</p>
<p>Foreign Language Materials</p>	<p>Easter Seals Project ACTION currently offers resources only in English & in Spanish at this time.</p> <p>http://www.projectaction.org/ResourcesPublications/ForeignLanguageMaterials.aspx</p>
<p>Human Services Transportation Coordination</p>	<p>ESPA Publications:</p> <ul style="list-style-type: none"> • Including people with disabilities in coordinated transportation plan • Stories of changed lives – the personal impact of transportation access • The New Freedom Program: An introduction • Transit customer rights and responsibilities bookmark • You can really go places <p>Non-ESPA Publications:</p> <ul style="list-style-type: none"> • Building mobility partnerships for people with disabilities • Framework for ACTION

	<ul style="list-style-type: none"> • Report 101: Toolkit for rural community coordinated transportation services <p>http://www.projectaction.org/ResourcesPublications/HumanServicesTransportationCoordination.aspx</p>
<p>International Initiatives</p>	<p>Easter Seals Project ACTION (ESPA) supports specific international activities as requested by the Federal Transit Administration (FTA).</p> <ul style="list-style-type: none"> • School transportation conference – United Arab Emirates • International accessibility roundtable • Final report • 13th international conference on mobility and transport for elderly and disabled persons (TRANSED) • Increasing accessible transportation in Ethiopia <p>http://www.projectaction.org/ResourcesPublications/International.aspx</p>
<p>Livability</p>	<p>Easter Seals Project ACTION (ESPA) supports livable communities and the six livability principles of the U.S. Department of Transportation (DOT), U.S. Environmental Protection Agency (EPA) and U.S. Department of Housing and Urban Development’s (HUD) interagency Partnership for Sustainable Communities by offering training, technical assistance, research, and information on ways to make the paths to public transportation more accessible.</p>

	<p>The six livability principles are:</p> <ol style="list-style-type: none"> 1. Provide more transportation choices. 2. Promote equitable, affordable housing. 3. Enhance economic competitiveness. 4. Support existing communities. 5. Coordinate policies and leverage investment. 6. Value communities and neighborhoods. <p>http://www.projectaction.org/ResourcesPublications/Livability.aspx</p>
<p>Person-directed Mobility Management</p>	<p>Easter Seals Project ACTION supports innovative transportation strategies that enhance the ways in which transportation services are delivered and coordinated for people with disabilities. Person-directed mobility management offers a new approach for coordinating transportation services and maximizing efficiency in delivering transportation services for people with disabilities.</p> <ul style="list-style-type: none"> • Strategic plan • ESPA products and tools • United We Ride • Partnership for Mobility Management • Mobility Management Independent Living Program • Strengthening Inclusive Transportation Partnerships to Promote Community Living <p>http://www.projectaction.org/ResourcesPublications/MobilityManagement.aspx</p>

<p>Motorcoach Services</p>	<p>Motorcoach services are defined as intercity bus services, commuter bus services, and tourism or charter-oriented bus services. Motorcoach customers, including those with disabilities, desire good and safe service whether they are touring for leisure, making rail or air connections or traveling between communities.</p> <ul style="list-style-type: none"> • Background on motorcoach accessibility • Resources <p>http://www.projectaction.org/ResourcesPublications/MotorcoachServices.aspx</p>
<p>Planning and Public Participation</p>	<p>In 2003, United We Ride published Framework For Action, a tool that can help an individual or organizational representative of the disability community prepare to get involved in the planning process. Aside from detailed self-assessments, the tool includes a Four-Step Model for Change, a straightforward planning and action process. The steps include: (1) Process Planning, (2) Assessing, (3) Prioritizing, and (4) Action Planning.</p> <p>http://www.projectaction.org/ResourcesPublications/PlanningandPublicParticipation.aspx</p>
<p>Rail Services</p>	<p>ESPA has created a number of resources that include helpful information on requirements and policies for making rail accessible.</p> <ul style="list-style-type: none"> • Definitions • Commuter rail • Heavy rail • Intercity rail

	<ul style="list-style-type: none"> • Light rail <p>http://www.projectaction.org/ResourcesPublications/RailServices.aspx</p>
Rural Transportation	<p>The following are related resources for accessible transportation services in rural areas.</p> <ul style="list-style-type: none"> • Expanding mobility options for persons with disabilities: A practitioner’s guide to community based transportation planning • Rural transportation topic guide series introduction • Rural transportation topic guide series topic guide #1: Needs assessment – assessing the need for new accessible transportation service in rural communities • Supporting sustainable rural communities • Transportation services for people with disabilities in rural and small urban communities • The community inclusion driver strategy: Assisting People with Disabilities Living in Rural Areas in Finding Personal Transportation <p>http://www.projectaction.org/ResourcesPublications/RuralTransportation.aspx</p>
Taxi Services	<p>ESPA Resources:</p> <ul style="list-style-type: none"> • Greenville, NC increases inclusive transportation options with the purchase of an accessible taxi • Taxi toolkit • The taxicab pocket guide • Moving forward together: A workbook for initiating and increasing

	<p>accessible taxi services</p> <p>http://www.projectaction.org/ResourcesPublications/TaxiServices.aspx</p>
<p>Travel Training</p>	<p>Easter Seals Project ACTION offers training, an online community, and resources dedicated to the practice of travel training.</p> <ul style="list-style-type: none"> • Introduction to travel training course • Fundamentals of travel training administration • Join our online travel training community <p>http://www.projectaction.org/ResourcesPublications/TravelTraining.aspx</p>
<p>Enhancing Youth Mobility and Transportation Options</p>	<p>Easter Seals Project ACTION offers resources specifically designed to facilitate the use of transportation for students and young adults with and without disabilities, and build the resource capacity and knowledge of school and district personnel around coordinated inclusive transportation planning.</p> <ul style="list-style-type: none"> • Inclusive transportation service-learning program participants • Initial impact evaluation of the ESPA inclusive transportation service-learning program • ESPA accessible transportation for students (ATS) online • GET Going! Guiding everyday travel • Student transportation services: A review of data from the NLTS-2 • External publications (ESPA contributions to partner publications) • A collaborative interagency, interdisciplinary approach to transition from adolescence to adulthood • Customer service and travel training in special-needs busing <p>http://www.projectaction.org/ResourcesPublications/YouthTransportation.as</p>

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Other Important Resources

Association of Travel Instruction (ATI). ATI is a 501 (c) (3) nonprofit corporation providing continuing education and professional development opportunities for travel instructors and travel trainers. Members teach individuals with various types of disabilities and seniors to use public transportation safely and independently in their communities.

<http://www.travelinstruction.org/>

Community Transportation Association of America – Passengers with Disabilities.

The goal of any transportation system is to provide the mobility options that meet the travel needs of all community members; including those with disabilities. Within every community there are residents whose physical limitations may prevent full access to all transportation services. In many cases, these individuals are transit dependent.

<http://web1.ctaa.org/webmodules/webarticles/anmviewer.asp?a=22>

South Carolina Department of Disabilities and Special Needs – MAP-21. This program is intended to enhance mobility for seniors and persons with disabilities in South Carolina by providing funds for programs to serve the special needs of transit-dependent populations beyond traditional public transportation services and Americans with Disabilities (ADA) complimentary paratransit services.

http://ddsn.sc.gov/about/recentnews/Documents/MAP21_Fact_Sheet.pdf

South Carolina Assistive Technology Program. The South Carolina Assistive Technology Program (SCATP) is a federally funded program concerned with getting technology into the hands of people with disabilities so that they might live, work, learn and be a more

independent part of the community. As part of a national network of technology-related assistance programs, their goal is to enhance independence, productivity and quality of life for all South Carolinians through access to assistive technology devices and services.

<http://www.sc.edu/scatp/>

National Secondary Transition Technical Assistance Center (NSTTAC). NSTTAC's objectives are to assist State Education Agencies with collecting data on IDEA (2004) Part B State Performance Plan Indicator 13 and using these data to improve transition services; generate knowledge that provides a foundation for states to improve transition services that enhance post-school outcomes; build capacity of states and local educational agencies to implement effective transition education and services that improve post-school outcomes; and disseminate information to state personnel, practitioners, researchers, parents, and students regarding effective transition education and services that improve post-school outcomes. The website includes a wealth of information on transportation accessibility issues. <http://nstattac.org>