

An Annotated Bibliography of Human Services Coordination Transportation Research

Building Mobility Partnerships for People with Disabilities: Opportunities for Federal Funding. (2007). Easter Seals Project Action, Washington, D.C.

Link:

http://projectaction.easterseals.com/site/DocServer/building_mobility_partnerships_update.pdf?docID=38803

This document serves as a compendium of federal sources of funding for transportation of individuals with disabilities. For each program a general description, how the program funds may be used, and contact information was provided. The need for coordination by program was presented when applicable. The document can serve as a tool to identify additional sources of funding, as well as to identify where other community programs receive their federal share.

U.S. Government Accountability Office. (2007). *Transportation Accessibility: Lack of Data and Limited Enforcement Options Limit Federal Oversight.* (Publication No. GAO-07-1126). Retrieved November 5, 2007, from GAO Reports: <http://www.gao.gov/new.items/d071126.pdf>.

The GAO found that increased coordination can result in improved access to transportation. Coordination among federal agencies including DOT modal administrations and the Department of Justice would aid in mitigating gaps in oversight and enforcement, and reduce duplication of effort. The study recommends that the DOT and DOJ come to formal agreement assigning responsibility for sections of the ADA that involve transportation.

U.S. Government Accountability Office. (2007). *Transportation Disadvantaged: Progress in Implementing the New Freedom Program Has Been Limited, and Better Monitoring Procedures Would Help Ensure Program Funds Are Used as Intended.* (Publication No. GAO-07-999). Retrieved November 5, 2007, from GAO Reports: <http://www.gao.gov/new.items/d07999r.pdf>.

The GAO found that the implementation of the New Freedom Program has been limited with few grants receiving approval and only a small portion of program funds being committed. The development of local coordinated plans has been limited and the designation of official recipients of program funds has occurred in a handful of states. FTA has not fully developed the processes for monitoring and oversight of the program. However, the development of coordinated plans at the local level and oversight processes by FTA are necessary for the program's success.

Case Studies of State, MPO, and Tribal Coordination in Transportation Planning. (2006). U.S. Federal High Administration Office of Planning, Environment, and Realty, Washington, D.C.

Link: <http://www.fhwa.dot.gov/hep/tribaltrans/ttpcs/index.htm>

This report presented six case studies on coordinated transportation efforts involving Native American tribes are presented. One case study reported the efforts to develop the North Central Regional Transit District in New Mexico that involved all five area Indian pueblos. To address challenges related to equitable representation on the authority board, weighted voting based on population which gave additional power to the pueblos was introduced.

Hosen, Kenneth, and Elisabeth Fetting. (2006). *Transit Agency Participation in Medicaid Transportation Programs.* Transit Cooperative Research Program (TCRP) Synthesis 65, National Academies, Washington, D.C.

Link: http://www.trb.org/news/blurb_detail.asp?id=6603

Hosen and Fetting combined findings from a survey and five case studies to identify the components necessary to ensure that public transportation-non-emergency medical transportation partnerships are successful. Operational coordination is needed the local level. The type of service delivered has a large impact on the degree of coordination. The study found that, in general, rural communities are further along in addressing this issue than their urban counterparts.

ITS Applications for Coordinating and Improving Human Services Transportation: A Cross-Cutting Study. (2006). U.S. Department of Transportation, Washington, D.C.

Link: http://www.itsdocs.fhwa.dot.gov/jpodocs/REPTS_TE/14140_files/14140.pdf

This study identified best practices for improving human service transportation service through increased coordination made possible by technology. Six case studies were completed. The study found that (1) buy-in by stakeholders is necessary for technology adoption to be successful; (2) system users need to be educated; (3) technology should be adopted incrementally; (4) quality data is needed; and (5) agencies need to understand and assess the technology they are purchasing.

Carter, M., Mathias, R., Newton, D., Timpone, K., Schweiger, C., and J. Burkhardt. (2005). *Mobility Services for All Americans Phase 2: Foundation Research Final Report*. U.S. Department of Transportation ITS Joint Program Office, Washington, D.C.

Link: <http://www.its.dot.gov/msaa/msaa2/index.htm>

Carter, Mathias, Newtown, Timpone, Schweiger, and Burkhardt synthesized findings from the literature and discussion groups to develop an ideal transportation system. The study began with a review of the concepts of mobility, accessibility, and coordination as well as the role of technology in improving service. This was followed by a summary of recent work in the area of ITS/coordination. Next, findings from a series of discussion groups were presented. Mobility needs were defined as the need for service, need for information, need for access, need for reliability, and the need for flexibility. These needs can be addressed with additional resources or increased productivity including those resulting from the implementation of technology. Finally, the study developed an ideal, replicable, scalable travel management coordination center that would meet the mobility needs identified.

Ripplinger, D., and D.1 Peterson. (2005). *ITS Case Studies: Making a Case for Coordination of Community Transportation Services Using ITS*. Upper Great Plains Transportation Institute Department Paper 171. Fargo, N.D.

Link: <http://www.ugpti.org/pubs/pdf/DP171.pdf>

Ripplinger and Peterson described the experiences of three organizations as they planned, implemented, and operated intelligent system (ITS) to meet the mobility needs of the communities they serve through improved coordination. These agencies were the Suburban Mobility Authority for Regional Transportation (SMART) in Michigan; Reach Your Destination Easily (R.Y.D.E.) in Nebraska; and NDinfo.org in North Dakota. The objective was to provide parties considering or currently involved with the planning and operation of intelligent transportation systems with additional insight gained from knowledge of the unique experience of each organization. Technical and institutional issues, requirements, benefits and costs, lessons learned and agreements among transportation providers and funding agencies for each agency was described.

Trimble, F. (2005). *Embracing Paratransit Transportation: A Coordinated, Community Approach*. 2005 Bus & Paratransit Conference Proceedings.

Link: <http://www.bettertransport.info/cascadia/Trimble-EmbracingParatransit.pdf>

Trimble investigated the efforts of Sound Transit, a regional transit authority serving the central Puget Sound area in Washington, to improve the mobility of transportation-disadvantaged populations. The study framed mobility as a community responsibility as opposed to a response to federal requirements. Trimble identified travel training, applying more strict eligibility requirements, reducing service areas, and minimal promotion as cost-containment strategies. Sound Transit was proactive in its efforts to better serve the community and to position itself to meet the increased coordination requirements. Sound Transit's plan included identifying and prioritizing mobility needs, utilizing technology to improve booking process among five area transit providers, developing a database of customer needs, and development of a marketing plan for regional transportation service providers.

Burkhardt, Jon E., Nelson, Charles A., Murray, Gail, and David Koffman. (2004). *Toolkit for Rural Community Coordinated Transportation Services*. Transit Cooperative Research Program (TCRP) Report 101, National Academies, Washington, D.C.

Link: http://www.trb.org/news/blurb_detail.asp?id=4042

Burkhardt, Nelson, Murray, and Koffman described basic coordination concepts, describe the process for initiating new coordinated transportation efforts, present techniques for improving the effectiveness of existing efforts, and provide a number of case studies for demonstrative purposes.

Link. G. (2004). *Developing Coordinated Transportation Systems for Older Persons: The Leadership Role of State Units on Aging*. Community Transportation Association of America, Washington, D.C.

Link: <http://www.ctaa.org/ntrc/Senior/MeetingtheChallengesofTransFinal5.pdf>

Link began by defining coordination and motivating its need as well as obstacles to its successful implementation. The study recommended the adoption of criteria that ensure the ability of transportation programs to meet the needs of seniors in five areas: availability, accessibility, acceptability, affordability, and adaptability. It also recommended the measurement of coordinated transportation programs and the use of federal policy initiatives to reaffirm the role of state units on aging in such programs.

Human Service Transportation Coordination. (2004). Executive Order 13330.

Link:

<http://a257.g.akamaitech.net/7/257/2422/14mar20010800/edocket.access.gpo.gov/2004/pdf/04-4451.pdf>

Executive Order 13330 renewed focus on coordination among human services transportation providers. The executive order recognized: the critical role of transportation; the negative impact of many federal and state rules and restrictions on service; the fragmented, underutilized, or unavailability of many community transportation systems; and the need for a responsible, seamless, comprehensive, and accessible community transportation system for mobility dependent populations. The Order mandated the creation of the Interagency Transportation Coordination Council on Access and Mobility which included nine cabinet members and the Commissioner of Social Security.

Koffman, D., Raphael, D., and R. Weiner. (2004). *The Impact of Federal Programs on Transportation for Older Adults.* AARP Public Policy Institute, Washington, D.C.

Link: http://assets.aarp.org/rgcenter/post-import/2004_17_transport.pdf

Koffman, Raphael, and Weiner investigated the impacts of federal transportation programs and regulations on accessible transportation for seniors. For each program, relevant background information, state and local impacts, and issues and options were presented. The study recognized potential benefits resulting from coordinated efforts and the key role that states played in the implementation of certain programs. They recommended that increased funding be made available to Section 5310 and 5311 and OAA programs, in addition to providing financial incentives to states.

Transystems Corporation, Center for Urban Transportation Research, Institute for Transportation Research and Education, and Planners Collaborative. (2004). *Strategies to Increase Coordination of Transportation Services for the Transportation Disadvantaged.* Transit Cooperative Research Program (TCRP) Report 105, National Academies, Washington, D.C.

Link: http://www.trb.org/news/blurbs_detail.asp?id=4470

This report serves as a resource guide for public, private, and human services organizations that transport transportation-disadvantaged individuals. The study was built on the findings of 22 case studies that focus on coordination strategies. The study identified the importance of coalition building; the need for leadership at the local and state levels; for a coordination champion which need not be the local transit agency; and the role of federal programs and state-level initiatives for encouraging increased coordination. It also noted the importance of planning and the potential benefits from utilizing nontraditional funding sources and implementing technology.

U.S. Government Accountability Office. (2004). *Transportation Disadvantaged Seniors — Efforts to Enhance Senior Mobility Could Benefit from Additional Guidance and Information*. (Publication No. GAO-04-971). Retrieved November 5, 2007, from GAO Reports:
<http://www.gao.gov/new.items/d04971.pdf>.

The GAO identified improved coordination as a strategy to address funding constraints facing local providers of senior transportation especially by improving access. The study found that there is no national coordinated senior transportation policy. Consequently, there is no federal funding for demonstration projects; there is no agency responsible for compiling best practices; and there is limited coordination among federal programs that impact senior transportation.

U.S. Government Accountability Office. (2004). *Transportation-Disadvantaged Populations: Federal Agencies Are Taking Steps to Assist States and Local Agencies in Coordinating Transportation Services*. (Publication No. GAO-04-420). Retrieved November 5, 2007, from GAO Reports:
<http://www.gao.gov/new.items/d04420r.pdf>.

The GAO found that the Departments of Transportation, Health and Human Services, Labor, and Education were making progress to address recommendations made by GAO-03-697. However, the Federal Transit Administration was the only agency to have adopted performance based measures in its strategic plan. The Departments of Labor and Education have joined the Coordinating Council on Access and Mobility. Guidance on coordinated efforts has been developed by three of the four departments, the exception being the Department of Education. Together, the four Departments initiated the “United We Ride” program to provide assistance to states and communities to address coordination challenges.

Anderle, S., Kroeger, D. and J. Mascarello. (2003). *Coordination of Transit and School Busing in Iowa*. Center for Transportation Research and Education, Ames, Iowa.

Link: http://www.ctre.iastate.edu/reports/bus_coordination.pdf

Anderle, Kroeger, and Mascarello looked at the efficiencies resulting from coordination between pupil and public transportation providers in Iowa. They also considered safety, vehicle configuration, and driver training implications. The researchers found 23 examples of coordination between schools and public transportation providers involving 45 of the state’s 371 school districts. However, nearly all of the examples of coordination involved the transporting of students on public transportation vehicles, including all but one of the eight case studies provided. The report identified three sources of savings: taking advantage of excess capacity, making use of specialized vehicles (specifically those with lifts), and sharing infrastructure.

Burckhardt, Jon E., Koffman, David, and Gail Murray. (2003). *Economic Benefits of Coordinating Human Service Transportation and Transit Services*. Transit Cooperative Research Program (TCRP) Report 91, National Academies, Washington, D.C.

Link: http://www.trb.org/news/blurbs_detail.asp?id=1804

Burckhardt, Koffman, and Murray identified how coordination can result in economic benefits in the form of decreased cost, increased service, or levels of funding. They present general coordination concepts, strategies for increasing coordination, and the benefits and industry-wide impacts of coordination. Strategies for coordination include generating new revenues by providing services to new markets, contracting with other agencies to provide services to their current clientele, and coordinated dispatching. Local benefits include increased sources of funding, increased efficiency, increased mobility, and secondary economic benefits.

Conklin, J., Schweiger, C., Marks, B., Gross, Y., Wiggins, W., and K. Timpone. (2003). *Rural ITS Best Practices*. United States Department of Transportation ITS Joint Program Office, Washington, D.C.

Link: http://www.itsdocs.fhwa.dot.gov/JPODOCS/REPTS_TE/13784.html

Conklin, Schweiger, Marks, Gross, Wiggins, and Timpone identified rural transit ITS best practices from five on-site case studies. Findings were organized by use of ITS, organizational issues, applications, finance, benefits, and adoption considerations. The study found that agency need and resource availability impacted the use of ITS. Many agencies experienced unforeseen changes in day-to-day operations following the adoption of technology.

Schlossberg, M. (2003). Developing Coordination Policies for Paratransit and the Transportation Disadvantaged. *Transportation Research Record*, No. 1841, 73-80.

Schlossberg develops a new model of service delivery, the Community Support Organization (CSO), based on his findings of coordinated services efforts in three states. A CSO is an entity that exists to facilitate and support coordinated service efforts in a community. Forms of existing CSOs include state mandated county coordination organizations in Florida, and Ohio's support of coordination through grants and technical assistance.

U.S. Government Accountability Office. (2003). *Transportation-Disadvantaged Populations-Some Coordination Efforts Among Programs Providing Transportation Services, but Obstacles Persist*. (Publication No. GAO-03-697). Retrieved November 5, 2007, from GAO Reports: <http://www.gao.gov/new.items/d03697.pdf>.

The GAO identified 62 federal programs that provide transportation funding. Together these programs annually expend billions of dollars in funding from federal, state, and local sources. The impacts of coordinated transportation have varied by community; many have experienced positive benefits. Communities with programs that have not coordinated often suffer from duplicated or fragmented services. The goals and objectives of the Coordinated Council on Access and Management have not been presented in measurable terms and are not linked to its activities. The strategic and annual plans of the Departments of Transportation, Health and Human Services, Labor, and Education contain few, if any references to coordinated transportation services. The study identifies three obstacles to coordination: reluctance to coordinate due to concerns about client needs; program requirements; and lack of leadership including federal guidance. Potential solutions include uniform standards, e.g. driver training and safety belts; the holding of interagency forums to share information on guidance; and the presence of financial incentives or requirements for coordinated efforts.

Burkhardt, Jon E., McGavock, Adam T., and Charles A Nelson. (2002). *Improving Transit Options for Older Persons*. Transit Cooperative Research Program (TCRP) Report 82, National Academies, Washington, D.C.

Link: http://trb.org/news/blurbs_detail.asp?id=1162

Using information gained through focus groups and case studies, Burkhardt, McGavock, and Nelson identified the mobility needs and transit preferences of older individuals, as well as possible changes in service that might appeal to senior riders. Senior ridership would benefit from increased reliability, travel training, minimal physical barriers, and better service information. The study states that public transportation will need to focus more on client needs in the future including the provision of different types of services.

Rubel, T.; Psilos, P.; Kalomiris, P.; and J. Mueller. (2002). *Improving Public Transportation Services through Effective Statewide Coordination*. NGA Center for Best Practices, Washington, D.C.

Link: www.nga.org/Files/pdf/011503IMPROVINGTRANS.pdf

Rubel, Psilos, Kalomiris, and Mueller noted that governors can improve the efficiency and effectiveness of transportation services in their states through coordination. Coordination can increase the level and quality of service, eliminate duplication, and make transportation more cost effective. Three key factors: leadership, participation, and continuity have been present in successful statewide coordination efforts. Establishment of formal coordination arrangements provide access to additional resources at the federal, state, and local level. Best practices in coordinated transportation in seven states and performance measurement techniques were included as appendices.

Volpe National Transportation Systems Center. (2002). *Innovative State and Local Planning for Coordinated Transportation*. Federal Transit Administration, Washington, D.C.

Link: http://www.fta.dot.gov/planning/metro/planning_environment_3950.html

This study presented the finding of 15 case studies on coordinated transportation. The case studies provided real world examples through a seven stage coordination planning process. The process includes: (1) forming partnerships; (2) sharing resources; (3) identifying needs; (4) identifying services, costs, and revenues; (5) cost sharing; (6) measuring performance; and (7) measuring savings and benefits.

Baltes, M. R. (2001). *Opportunities for the Coordination of General Public Transit and School Bus Transportation*. National Center for Transit Research, Tampa, Florida.

Baltes focused on public transportation agencies that provide service to students with tripper service under either a formal or informal arrangement. The report noted a change in sentiment among transit and pupil transportation system managers which have traditionally been negative. The challenges and opportunities varied by location. Student safety remains a top priority for educational authorities and is a primary barrier to coordination.

Burkhardt, J. E. (2000). *Coordinated Transportation Systems*. AARP Public Policy Institute, Washington, D.C.

Link: http://assets.aarp.org/rgcenter/consume/2000_16_transport.pdf

Burkhardt identified methods to improve transportation provision using findings from eight case studies which varied by geographic location, urban/rural nature, and approaches to coordination. He found that coordination of transportation services can result in a high-quality, cost-effective service where all parties involved benefit. Burkhardt recommended that government at all levels increase support for coordination to achieve higher levels of service.

Coordinating Council on Access and Mobility. (2000). *Planning Guidelines for Coordinated State and Local Specialized Transportation Services*. U.S. Department of Health and Human Services, and Federal Transit Administration, Washington, D.C.

Link: http://www.fta.dot.gov/planning/metro/planning_environment_4016.html

This study serves as a guide to effectively plan for increased coordination of specialized transportation services. Following an introduction to coordination concepts and benefits, relevant DOT and DHHS programs were described. Finally, an eleven step planning process was presented.

Multisystems, Inc., Ecosometrics, Inc., Mundle & Associates, Inc., and Simon & Simon Research Associates. (2000). *Guidebook for Developing Welfare-to-Work Transportation Services*. Transit Cooperative Research Program (TCRP) Report 64, National Academies, Washington, D.C.

Link: http://www.trb.org/news/blurbs_detail.asp?id=2554

This study relied on 14 case studies to identify and provide solutions for transportation programs designed to meet the mobility needs and provide access to job opportunities for welfare-to-work recipients. They found that opportunities aligned with five categories: collaboration among human service agencies, transportation providers and others; leadership to bridge gaps between agencies; communication among coordinating organizations; creativity; and sustainable services.

Crain & Associates, Byrd, Ricardo, and Omniversed International. (1999). *Using Public Transportation to Reduce the Economic, Social, and Human Costs of Personal Immobility*. Transit Cooperative Research Program (TCRP) Report 49, National Academies, Washington, D.C.

Link: http://trb.org/news/blurb_detail.asp?id=2569

Eleven case studies in six regions of the country were conducted to develop a method for quantifying the costs of immobility. The study found that public transportation is an economically beneficial way of addressing personal immobility, and that partnerships between public transit and other agencies produce the best results in addressing welfare-to-work, employment and health care trip needs. Public transportation can also lead economic development efforts which reduce the cost of immobility. Many mobility issues demand regional solutions, and that simple ideas and programs can be successful in addressing mobility needs.

Multisystems, Inc., Transit Plus, Inc., Martin, Kyle, Tull, Ted, and IBI Group. (1999). *Integrating School Bus and Public Transportation Services in Non-Urban Communities*. Transit Cooperative Research Program (TCRP) Report 56, National Academies, Washington, D.C.

Link: http://www.trb.org/news/blurb_detail.asp?id=2562

Multisystems, Transit Plus, Martin, Tull, and IBI Group identified key factors that affect coordination of pupil and public transportation: lack of public transportation; presence of human services transportation; as well as funding, operational, legal, regulatory, and safety issues. Their findings were based on 13 case studies involving public and pupil transportation. Operational issues including administration, labor agreements, vehicle availability, maintenance, liability, and insurance are identified. Transporting individuals with disabilities and unique state requirements are regulatory issues of note. Safety issues such as vehicle standards and design; driver qualifications, screening, and training; and commingling of passengers also require consideration.

U.S. Government Accountability Office. (1999). *Transportation Coordination- Benefits and Barriers Exist, and Planning Efforts Progress Slowly*. Retrieved November 5, 2007, from GAO Reports: <http://www.gao.gov/new.items/rc00001.pdf>.

The GAO described potential efficiencies resulting from coordination. Barriers to coordination were identified and addressed by a Coordinating Council in the 1980's and 1990's. However, in many cases, overcoming barriers required legislation, additional study, or were otherwise outside of the control of the member Departments. Joint planning guidelines initiated in 1997 were still under development at the time of study publication. GAO recommended that a strategic plan be adopted by a specific date and that achievements be included in an annual report.

Simon, Rosalyn M. (1998). *Integrating Public Transportation with Other Federal Programs*. Transit Cooperative Research Program (TCRP) Research Results Digest 23, National Academies, Washington, D.C.

Link: http://www.trb.org/news/blurbs_detail.asp?id=2501

Simon identified federal sources of transportation funding, examples of successful local coordination efforts, and made recommendations for further research. It was recommended that a methodology to conduct a cost-benefit analysis of coordinated community transportation be developed.

Multisystems, Inc., Apogee Research, Inc. and Oram Associates. (1997). *Coordinated Intermodal Transportation Pricing and Funding Strategies*. Transit Cooperative Research Program (TCRP) Research Results Digest 14, National Academies, Washington, D.C.

Link: http://www.trb.org/news/blurbs_detail.asp?id=2510

This TCRP digest article provided a summary of the framework for pricing numerous transportation services, (i.e. transit trips, parking, and tolls) to meet community wide goals such as reduced congestion or improved air quality. In order to be successful in implementing coordinated pricing, goals must be identified, responses to changes in prices must be quantified, and a plan made for the distribution of revenues.

Simon, Rosalyn M. (1997). *Integrating Americans with Disabilities Act Paratransit Services and Health and Human Services Transportation*. Transit Cooperative Research Program (TCRP) Research Results Digest 10, National Academies, Washington, D.C.

Link: http://www.trb.org/news/blurbs_detail.asp?id=2514

Simon reported on the efforts of federal, state, and local agencies as they prepared for compliance with the Americans with Disabilities Act. Limited financial resources are a strong motivation for coordination of transportation services. Unfortunately, the absence of federal mandates to coordinate transportation has limited its occurrence.