

Economic Benefits of Coordinating Human Service Transportation and Transit Services

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Introduction

Significant economic benefits — including increased funding, decreased costs, and increased productivity — can be obtained by coordinating human service transportation and transit services. Implementing successful coordination programs, such as those described in this brochure, could generate combined economic impacts of about \$700 million per year to human service and transit agencies in the United States. Particularly successful coordination strategies could include

- Transit agencies providing trips for Medicaid clients: industry benefits of up to \$50 million per year;
- Nontransit agencies providing Americans with Disabilities Act (ADA) and other paratransit services: up to \$148 million;
- Transportation providers shifting paratransit riders to fixed route services: up to \$300 million;
- Local human service agencies coordinating their trips: up to \$60 million; and
- Communities expanding transportation services to areas not now served: up to \$132 million.

This brochure describes basic coordination concepts, typical economic benefits of coordination, strategies that enable transportation operators to achieve significant economic benefits from coordinating their operations, and potential overall industry impacts. Additional details are found in *TCRP Report 91* (available late fall 2003).



What Is Coordination?

Coordination is often touted but often misunderstood, thus lessening its potential benefits. **Coordination is a technique for better resource management.** It means working together with people from different agencies and backgrounds. It requires **shared power: shared responsibility, management, and funding.** Many transportation functions, including planning, purchasing, vehicle operations, maintenance, and marketing, can be coordinated.

Typical goals for coordinated transportation services are reduced unit costs, increased ridership, and improved cost effectiveness. Coordination is

effective in reducing service duplication and improving resource utilization. Coordinating transportation services has been called “the best way to stretch scarce resources and improve mobility for everyone.”

Coordinating transportation services offers substantial benefits to many communities, but significant investments of time and energy may be required before the desired results are achieved. Coordinating transportation functions is best understood as a **political process**, which, like many other political processes, may involve changing environments, conflicts regarding power and control over

resources, and competing goals or personalities. Effective transportation coordination requires a focus on the entire community (even on multiple communities and levels of government). Individuals who may not be used to talking to or working with each other will need to develop the increased levels of trust, respect, and confidence that will permit them to share responsibilities. A willingness to be open-minded about changing long-standing operating procedures is often needed. Once these conditions are met, a wide range of coordinated transportation benefits is then possible.

Expected Benefits of Coordination

The largest and most frequent economic benefits of coordinating human service transportation and regular fixed route transit services often include

- **Additional funding:** more total funding and a greater number of funding sources;
- **Increased efficiency:** reduced cost per vehicle hour or per mile;
- **Increased productivity:** more trips per month or passengers per vehicle hour;
- **Enhanced mobility:** increased access to jobs or health care, or trips provided to passengers at a lower cost per trip; and
- **Additional economic benefits:** increased levels of economic development in the community or employment benefits for those persons associated with the transportation service.

Other impacts of coordinating transportation services, not usually expressed in monetary terms but still important in their own right, include

- Improving service quality (more on-time services, drivers with better training, better vehicles, and more safety equipment);
- Making transportation services available to more people (serving more than just one client group);
- Having transportation services available to larger service areas (by expanding services to areas that previously had insufficient services);
- Centralizing oversight and management (having one central mobility management office instead of many offices); and
- Reporting costs and outputs more accurately (for better systems management and funding accountability).



Coordinating transportation services has been called “the best way to stretch scarce resources and improve mobility for everyone.”

— Ohio Department of Transportation



Strategies for Achieving the Benefits

Serving more areas



The first step in achieving the potential benefits of coordinated transportation services is to analyze existing conditions in your own community to see if problems such as low vehicle utilization and high trip costs exist. If such problems are evident, the second step is to establish specific goals and strategies for achieving improvements. Having specific goals and strategies greatly enhances the probability of realizing significant results. Specific coordination goals and strategies that could provide significant economic benefits include

- **Generate new revenues:** The transit authority provides Medicaid or other human service agency trips under contract to human service agencies.
- **Generate new revenues:** The transit authority provides trips to students under contracts with local school districts.
- **Save costs:** Human service agencies (or other low-cost operators) provide ADA or other paratransit

services under contract to the transit authority.

- **Save costs:** Incentives or travel training programs are offered to shift paratransit riders to fixed route services.
- **Save costs:** Human service agencies coordinate some or all functions of their transportation programs.
- **Increase efficiency and productivity:** Transportation providers coordinate dispatching and promote ridesharing among cooperating agencies.
- **Increase mobility:** Cost savings from coordinated operations are used to expand transportation services to additional places, times, and persons.

Many communities have applied these and other coordination strategies; illustrative examples are shown below. Quite often, specific strategies generate many kinds of benefits. Additional information describing these cases and their benefits is available in *TCRP Report 91*.

Generate New Revenues: Transit Agencies Provide Trips for Human Service Agency Clients

Large annual transportation cost increases have created concerns for human service program administrators, who have begun to find ways of shifting Medicaid and other human service clients away from expensive paratransit service in favor of less costly fixed route transit. Agencies may purchase bus passes to be distributed to clients, or the transit operator may bill agencies directly for services to designated, eligible clients. The potential benefits to the transit agency include increased ridership and revenues with few, if any, additional costs. The primary benefit to human service agencies is decreased cost. (Note that this strategy may reduce revenues for

demand-responsive services, and some passengers may prefer demand-responsive to fixed route services.)

Florida's **Miami-Dade Transit (MDT)** instituted a "bus pass" approach to moving about 1 percent of the region's Medicaid clients to less expensive fixed route trips from more expensive paratransit trips. This program saved the Medicaid program more than \$9,285,000 per year, and MDT received more than \$1,900,000 per year from the sale of bus passes. Under **Tri-Met's** Medical Transportation Program (MTP) in Portland, Oregon, Tri-Met became the single point of access for non-emergency transportation for Medicaid program

participants in Tri-Met's three-county service area. Through MTP, Medicaid non-emergency trips are now made more often than before on transit. The state of Oregon estimated total savings from this program of more than \$2,670,000 in 2001-02 and 2002-03. The **Lane Transit District (LTD)** in Eugene, Oregon, benefits from Oregon's Medicaid-funded supportive services program, which pays 60 percent of the trip costs of clients whose trip costs would otherwise be incurred by the transit agency's ADA program. Through this program, LTD is paying \$112,100 for \$280,000 worth of trips.

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Generate New Revenues: Transit Agencies Establish Contracts with Local School Districts

Although public transit agencies and school districts operate distinct and separate services in many communities, coordinating their services can be beneficial to all. Potential savings include savings from eliminating duplication in operating, capital, or administrative costs, as well as increased transportation through ridesharing and the use of savings to expand services to previously unserved areas or populations.

People for People (PfP) of Yakima, Washington, operated a successful School to Work program in Mabton, Washington. When not transporting students to and from various industry sites, the vehicle was made available to PfP for other trips, such as senior and Medicaid transportation. The program covered all its costs; the school district saved more than

\$15,000 per year in driver wages paid by PfP. The **Mason County Transportation Authority** in rural Mason County, Washington, coordinates school district and public transit resources, saving Mason Transit and the Mason County School Bus Transportation Co-op over \$20,000 per year in annual operating expenses, \$120,000 in vehicle purchase costs, and \$84,000 in annual fuel costs in 2001. The **Dodger Area Rapid Transit System (DART)** in Fort Dodge, Iowa, operates the small urban transit system in Fort Dodge, the regional transit service in the six counties, and the school bus service. Being able to spread staff costs over multiple contracts reduces staff needs by about three-fourths of a full-time staff member (saving approximately \$20,000 per year).



Save Costs: Nontransit Agencies Provide ADA and Other Paratransit Services

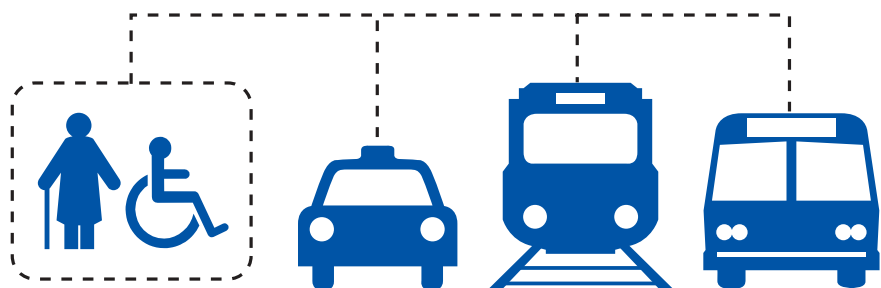
Transit authorities can contract with human service agencies or others to provide ADA paratransit and demand-responsive transit service. These other agencies may have more freedom to combine trips or to use volunteers and may provide service at lower cost. The primary benefits to the transit agency are reduced costs. The primary benefits to the other transportation providers are increased revenues. This strategy may require increased quality control and monitoring by the transit agency. Detailed strategies include using brokers to coordinate services, using taxis for ADA trips, and contracting with volunteer organizations.

ACCESS is the name of the private nonprofit county-wide paratransit service brokerage in Allegheny County, Pennsylvania (including the city of Pittsburgh). Services are open to the

public, but riders are primarily seniors and persons with disabilities. Providers are chosen through a competitive bidding process. Uncoordinated services would have cost about \$26 million more for the trips the ACCESS coordinated brokerage provided in 2001. ACCESS has also made great improvements in service quality in Allegheny County. The **Specialized Transit for Arlington Residents (STAR)** program in Arlington, Virginia, uses taxi services

to provide a less costly demand-responsive service alternative to ADA paratransit service. STAR operates as a brokerage and provides annual benefits of at least \$450,000 for its 60,000 annual trips. **Tri-Met**, in Portland, Oregon, contracts with **Ride Connection, Inc.** to provide ADA paratransit and demand-responsive transportation service with volunteers as a supplement to Tri-Met's own ADA paratransit

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Nontransit Agencies continued

program. It would cost Tri-Met about \$2,885,000 to take over all of the transportation now provided under the Ride Connection umbrella at the current cost per trip on Tri-Met's ADA paratransit system, about \$2 million more than the amount paid to Ride Connection. **Dakota Area Resources and Transportation for Seniors (DARTS)** in Dakota County, Minnesota, combines ADA trips with those provided for seniors and eliminates the need for the regional ADA paratransit provider (Metro Mobility) to extend its service to Dakota County. DARTS provides ADA paratransit trips and trips for seniors for approximately \$230,000 a year less than Metro Mobility could; cost savings from reduced capital needs, centralized dispatching, and centralized maintenance total about \$150,000 more.

Save Costs: Transportation Providers Shift Paratransit Riders to Fixed Route Services

From a transit agency perspective, the principal benefit of shifting paratransit riders to fixed route services is reducing the demand for ADA complementary paratransit (which is expensive) and increasing fixed route ridership (which can often be accomplished for little or no additional cost). For human service agencies that provide or contract for transporting clients to their programs, or pay a portion of the cost of those trips on ADA paratransit, shifting clients to fixed route services can reduce their cost of transportation too. For human service agencies, using regular buses can help meet a mandate to help their clients become more independent.

The **Charlottesville Transit System (CTS)** in Charlottesville, Virginia, provides free rides on fixed route transit for all paratransit-eligible

persons. The annual cost of trips on the free ride program would have approached \$1,000,000 if they had been made on paratransit services. This free ride program also allows an elderly or disabled passenger to take a spontaneous trip without advance notice. **Paratransit, Inc. (PI)** is a nonprofit corporation that provides paratransit and other related services to a variety of agencies in its area, including ADA complementary paratransit service under contract to **Sacramento Regional Transit (RT)**. Depending on their abilities, people with disabilities and seniors are taught to ride transit to and from particular destinations or to ride throughout the community. In Sacramento, the trips shifted away from ADA paratransit services saved about \$1,050,000 per year.

Save Costs: Human Service Agencies Coordinate Transportation Programs

Human service agencies can coordinate or consolidate their separate transportation services to create larger transportation services, which form a "critical mass" of service that can qualify for general public transit funding and offer real travel options throughout the entire community. The coordination/consolidation process can be accomplished by a lead agency operating coordinated transportation services, by establishing a local transit body, or by establishing a brokerage system using current agency resources. (Many examples exist of combinations of the above administrative options, such as a lead agency acting as a broker.) Typical benefits to human service agencies include reduced unit costs, improved quality of service, and increased efficiency, effectiveness, and cost effectiveness. The potential for cost reduction depends heavily on the existing transportation infrastructure.

Martin County Transit in North Carolina employs a brokerage system with centralized dispatching and vehicle ownership. The 44,000 trips that Martin County Transit provided in 1999 for \$156,000 would have cost an additional \$178,000 if provided at the precoordination cost per trip of \$7.60. **R.Y.D.E. (Reach Your Destination Easily)** Transit in Buffalo County is the first brokered transit system to operate in Nebraska. R.Y.D.E. has expanded operating hours, abolished the waiting time requirements, and expanded transportation access in rural Buffalo County. Prior to coordination, public transportation provided 11,000 annual rides in Buffalo County; R.Y.D.E. planned to provide about 70,000 rides in 2002. R.Y.D.E.'s current operations cost Buffalo County \$400,000 less than the same number of trips would have cost if provided at the precoordination costs.



no



yes

Increase Efficiency and Productivity: Transportation Providers Coordinate Dispatching and Vehicle Sharing

Community-wide coordinated dispatching systems and vehicle sharing arrangements allow for all vehicles in use to accommodate all types of passengers at all times. Often referred to as “ridesharing,” this technique ensures a highly cost-effective application of driver and vehicle resources. When properly applied, it can solve a number of the problems associated with noncoordinated transportation systems, such as overlapping routes, duplication of service, inefficient route design, and poorly timed schedules. In particular, a major benefit of providing trips for ADA paratransit clients at the same time and on the same vehicle as other human service clients is a much lower

per trip cost. The primary benefit to transportation providers is increased productivity, which may lead to cost savings. The primary benefit to local communities is better service. Note that this strategy may require increased quality control and monitoring by the lead agency.

People for People (PFP) in Yakima and Moses Lake, Washington, generates economic benefits through coordination and ridesharing with Goodwill Industries. Using a PFP vehicle, Goodwill transports 10 people with developmental disabilities from their homes to a Goodwill job site. This arrangement costs PFP \$9,360 per year less than the alternative of inner city bus service and

saves the riders more than \$2,000. Vehicle sharing with a local hospital saves nearly \$3,700 per year in capital costs avoided. PFP’s volunteer Medicaid program drivers generate cost savings of about \$500,000 per year. **King County Metro** (headquartered in Seattle, Washington) and the **Department of Social and Health Services (DSHS)** conducted a demonstration of sharing vehicles to save money on ADA and Medicaid transportation. DSHS brokered nearly 35,200 Metro ADA trips, Metro ACCESS brokered almost 5,100 DSHS Medicaid trips, and the overall annual program benefit from ridesharing was nearly \$101,000.

Increase Mobility: Communities Expand Transportation Services

Many communities need more transportation services than they now have but find it difficult to fund additional public transit services. Service expansions can be accomplished by coordinating with other agencies with different cost structures. By reducing per trip costs, coordinated transportation services can provide more trips for the same level of expenses.

The **Transportation Reimbursement and Information Project (TRIP)** complements public transportation services in Riverside County, California (east of Los Angeles), by reimbursing volunteers to transport individuals where no transit service exists or when the individual is too frail to use other transportation. Public transit services would cost at least \$1,500,000 more than

transportation provided by TRIP’s volunteers actually costs. **Enabling Transportation (ET)** is a mileage reimbursement and taxi subsidy program for seniors and adults with disabilities in Mesa, Arizona. If the ET program were not available, the city would pay East Valley Dial-a-Ride for ADA paratransit trips now provided by the volunteer drivers. ET saved the city of Mesa more than \$300,000 in FY 2001-02 while providing increased mobility to a transportation-dependent segment of the city’s population. **Mountain Empire Transit** in southwest Virginia is a private, nonprofit corporation that provides demand-responsive transportation to clients of multiple agencies and the general public in a large rural area. The system uses contract revenues from human service contracts to generate matching funds needed to establish and pay for general

Service expansions can be accomplished by coordinating with other agencies with different cost structures.

Expand Transportation Services continued

public transportation service. By coordinating funding, Mountain Empire has significantly expanded service; local governments could not support public transportation's costs. Alternative methods of providing Mountain Empire's transportation services would cost at least \$854,000, plus the \$30,000

in local matching funds. The **Suburban Mobility Authority for Regional Transportation (SMART)** is the transit operator for three counties in southeast Michigan near Detroit. SMART helps fund transportation in 50 local communities through its Community Partnership Program; localities aid regional

transportation by supporting tax referenda and working together for coordinated services. The \$7,000,000 annual program would cost at least \$2,700,000 more if SMART were to provide it without local involvement.

Aggregate Potential Benefits



Coordination can offer great benefits to human service agencies and transit authorities. By coordinating transportation services, additional revenues can be generated, cost savings can be obtained, and other economic benefits can be created. Actual benefit levels will depend upon the numbers of communities applying different coordination strategies and the levels of effort that they put into these strategies. Still, order of magnitude estimates of overall impacts can be made for each strategy by considering the numbers of communities adopting these strategies [impacts were calculated for 10 percent and 33 percent of U.S. communities receiving Federal Transit Administration (FTA) funds], the number of rides involved, the costs or value of those rides, and the costs of the coordination efforts. (More details on benefit estimate methods are available in *TCRP Report 91*.)

Potential economic impacts are summarized in the table (to the right). Estimated benefits range from tens of millions to hundreds of millions of dollars per year, depending upon the strategy applied and conditions in the communities where the strategies are

AGGREGATE POTENTIAL INDUSTRY BENEFITS ASSOCIATED WITH VARIOUS TRANSPORTATION COORDINATION STRATEGIES

Strategy	Potential Aggregate Benefits
Additional revenues generated when transit authorities provide trips for Medicaid agency clients	\$15,000,000 to \$50,000,000
Cost savings realized when nontransit agencies provide ADA and other paratransit services	\$30,000,000 to \$148,000,000
Cost savings realized when paratransit riders are shifted to fixed route services	\$90,000,000 to \$300,000,000
Cost savings realized when local human service agencies coordinate their transportation services	\$35,000,000 to \$60,000,000
Economic benefits realized when transportation services are expanded to areas or populations not now served	\$40,000,000 to \$132,000,000

applied. These estimates have been conservatively generated: specific programs may have created more than one kind of benefit, but only the primary benefit was estimated. Also, these estimates do not include other important economic benefits (such as the value of increased mobility in terms of employment or

independent living, or the multiplier effects that transportation expenses generate in local areas).

Based on these estimates, transportation planners and operators should seriously consider

- Coordination strategies that involve shifting paratransit riders

Aggregate Potential Benefits, continued

to fixed route services and having ADA paratransit services provided by nontransit agencies;

- Partnership arrangements that expand transportation services into areas not now receiving public transit services;
- Coordination of the transportation functions of multiple human service agencies; and
- Generation of additional income for transit authorities through the provision of travel services to clients of human service agencies.

As shown in this brochure, benefits are often obtained from other coordination strategies as well.

Summary

Coordinating human service transportation services and public transit services can provide significant economic benefits.

The coordinating agencies, the riders of the services, and local communities all can receive measurable benefits, including additional funding, more cost-effective operations, and increased mobility.



Copies of the full report of this project, *Economic Benefits of Coordinating Human Service Transportation and Transit Services, TCRP Report 91*, will be available from the Transportation Research Board or the American Public Transportation Association in late fall 2003. On-line requests may be placed at www.tcrponline.org or at www.trb.org.

This work was sponsored by the Federal Transit Administration and was prepared by WESTAT for the Transit Cooperative Research Program, which is administered by the Transportation Research Board of the National Academies. Jon Burkhardt was the Project Director and Principal Investigator for this research effort; other key authors included David Koffman and Gail Murray of Nelson/Nygaard Consulting Associates, Inc.