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# **Chapter 5**

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## **REDUCING TRANSPORTATION SERVICE COSTS**

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There are many ways in which coordinating human service transportation and public transit services can save costs. 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 (see Chapter 7 for a discussion of using volunteers as a means of expanding transit services to previously unserved areas); sometimes they provide service at substantially lower costs. 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.

Another significant way of reducing costs is coordinating fixed route and ADA paratransit services to encourage more travelers to use the fixed route services. In some communities, persons eligible to receive ADA paratransit can ride fixed route services free. The shift from demand-responsive paratransit to fixed route transit service (both usually paid for by public transit operators) can save transit agencies millions of dollars per year. Providing travel training so that potential paratransit riders can use fixed route services is another significant way of shifting riders from a more expensive to a less expensive travel mode.

Human service agencies at the local, regional, or state level can coordinate or consolidate their separate transportation services to create larger transportation services, can qualify for general public transit funding, and can offer real travel options throughout the entire community. Typical benefits to human service agencies include reduced unit costs; improved quality of service; and increased efficiency, effectiveness, and cost effectiveness.

## **NONTRANSIT AGENCIES PROVIDE ADA AND OTHER PARATRANSIT SERVICES**

**ACCESS Transportation Systems, Inc.** brokers countywide paratransit services in Allegheny County, Pennsylvania (including the city of Pittsburgh), for the public, but riders are primarily seniors and persons with disabilities. Providers are chosen through a competitive bidding process. The ACCESS coordinated brokerage provided an estimated cost saving of \$26 million in 2001 and 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 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 **Ride Connection, Inc.** to provide ADA paratransit and demand-responsive transportation service with volunteers as a

supplement to Tri-Met's own ADA paratransit program. At the current cost per trip on Tri-Met's ADA paratransit system, it would cost Tri-Met about \$2,885,000 to take over all of the transportation now provided under the Ride Connection umbrella, about \$2 million more than the amount now 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 Metro Mobility to extend its service to Dakota County. Direct cost savings are estimated at approximately \$230,000 a year; indirect cost savings are about \$150,000 more.

## **ACCESS — PITTSBURGH, PENNSYLVANIA**

### ***Overview***

Pittsburgh's ACCESS program is one of the longest-running public paratransit programs in the country. Started in 1979, ACCESS Transportation Systems, Inc. (a contractor to the Port Authority of Allegheny County, the local transit authority) arranges paratransit transportation in Allegheny County, Pennsylvania (which includes the city of Pittsburgh). ACCESS is open to the general public, but it primarily serves persons with disabilities, clients of human service agencies, and older persons. Trips are provided through contracts with eight for-profit and nonprofit authorized carriers chosen through competitive bidding. For FY 2001, ACCESS had 121 local sponsors; nearly all of the human service agencies and organizations that fund or provide

transportation in the Pittsburgh area now voluntarily contract with ACCESS for trips for their clients.

Public transportation, state-funded transportation, human services paratransit, and paratransit for persons with disabilities come together under ACCESS.

Pennsylvania's DOT (PennDOT) requires coordinated shared-ride operations and designated ACCESS the shared-ride provider in Allegheny County. The Port Authority of Allegheny County sponsors ACCESS, which is operated through a contract with ACCESS Transportation Systems, Inc. The Port Authority designated ACCESS as the ADA complementary paratransit service. In addition, ACCESS provides its third-party human service agency sponsors (such as the Area Agency on Aging and the Medicaid program) with a wide variety of services, including eligibility screening, trip monitoring, and invoicing.

For FY 2001, total expenditures in the ACCESS program were \$29.5 million. More than 43 percent of the funding was from the Pennsylvania State Lottery Fund, and another 37 percent was from the Port Authority. Contracts with human service agencies provided 12 percent of the funding, and the remaining 7 percent came from fares. The minimum fare is \$12.00; the average fare is \$17.12, but the average out-of-pocket fare is \$2.15.

In FY 2001, 6 for-profit transportation companies and 2 nonprofit human service agencies, operating from 13 distinct facilities, provided ACCESS-administered services. These carriers are responsible to

ACCESS for providing service in designated service areas and for meeting service standards set forth in their contracts. ACCESS compensates these providers for their services. Service assignments are not exclusive; in many of the more densely populated areas, consumers have a choice of service provider. Most service is purchased by ACCESS on an hourly basis. About 475 vehicles are now actively used in hourly service, including a combination of lift-equipped vans, specially equipped ambulatory passenger vans, wheelchair accessible minivans, and sedans. Services are generally available between 6:00 a.m. and midnight, 6 days a week. Three carriers provide services 24 hours a day. Some trips can be requested with as little as 2 hours' notice, although 24-hour notice is still required for agency-sponsored trips.

ACCESS provided 2.059 million trips per year (about 7,500 trips per day) in a service area of 775 square miles in FY 2001. Statistics for that fiscal year include a vehicle productivity of about 2.35 passengers per hour, on-time performance of 94 percent, and a complaint rate of 50 per 100,000 trips, which are all high-performance measures in comparison with systems of similar size, according to ACCESS staff.

### ***Benefits***

ACCESS has reduced per trip costs over the years. This has been done through the active competition between service providers and the flexibility operators have in the types of vehicles, computer systems, and other components of operations used by

ACCESS. In 1980, ACCESS trips cost \$12.58. In FY 2001, an ACCESS trip cost \$14.34, or \$6.67 in 1980 dollars. Applying standard inflation rates, the \$12.58 1980 trip would have been expected to cost \$27.04 in 2001. In fact, this is approximately what ADA paratransit trips cost in many cities in 2001. At that inflated rate, ACCESS's 2,058,578 trips in 2001 would have cost \$55,663,949 instead of the \$29,527,883 actual cost. The difference is a savings of \$26,136,066 for the FY 2001. (Note that the number of trips provided by ACCESS in 2001 would, most likely, have been lower than the actual number of 2,058,578 trips had the trips actually cost \$27.04 instead of \$12.58; fewer trips would have made the total 2001 benefit lower than \$26 million.)

ACCESS has also contained administrative costs, which were 6.14 percent of the total costs for FY 2001. According to National Transit Database statistics, the national average for administrative costs incurred by public transit operators is 17 percent of total costs.

ACCESS staff report that a key to ACCESS's success in its brokerage efforts is its use of system performance and cost data in developing the annual contracts. ACCESS monitors on-time performance, vehicle condition, target revenue passengers per billable hour, complaints, and responsiveness for each individual provider. These data are developed into system performance and cost measures for each provider, and that information is then used to allocate trips. ACCESS will shift trips to less expensive providers away from expensive or lower quality systems. This

has had a twofold success: local providers have improved their service across the board in an effort to keep market share, and agencies have confidence that ACCESS is making the best use of their transportation funds. The system's success is illustrated by the fact that 110 of the 116 human service agencies in Allegheny County use the ACCESS system.

ACCESS has made substantial improvements to local transportation services since it started. Service hours have greatly expanded. (Prior to ACCESS, paratransit services were available only during regular agency working hours, Monday through Friday.) Performance and complaint monitoring have improved service quality (on-time performance and directness of the trip). Service has been extended to all parts of Allegheny County. More lift-equipped vehicles are now available. ACCESS now has one of the lowest complaint rates (0.5 per 1,000 trips) among the 15 largest paratransit systems in the country and an on-time performance rate of 94 percent (ACCESS, 2001). Over the years, increases in transportation costs to human service agencies have been controlled through ACCESS's competitive bidding procedures.

## **DAKOTA AREA RESOURCES AND TRANSPORTATION FOR SENIORS – DAKOTA COUNTY, MINNESOTA**

The Dakota Area Resources and Transportation for Seniors (DARTS) is a volunteer-based, nonprofit organization that provides senior and transportation services in Dakota County, Minnesota. Located in

the southern Minneapolis/St. Paul metropolitan area, Dakota County has an area of approximately 570 square miles and a population of over 350,000 people. Most of the population in the county is located in the northern suburban cities of Burnsville, Eagan, Inner Grove Heights, Mendota Heights, Apple Valley, Lakeville, West St. Paul, South St. Paul, and Rosemount. Although the communities in the north part of the county continue to grow and add new jobs, the southern part of the county remains mostly rural with several small towns scattered throughout.

### ***History of DARTS***

When DARTS first started in the early 1970s, it primarily provided supportive services for seniors. By the end of the 1970s and into the 1980s, DARTS began to branch out by providing transportation today training services for the developmentally disabled. By the mid-1980s and into the 1990s, DARTS was getting more involved in transportation. When the ADA was enacted in 1990, DARTS was seen as the natural choice to begin providing the required ADA paratransit service in Dakota County. The ADA service, which now makes up a large portion of the agency's transportation services, complements the fixed route services of the regional transit system, Metro Transit, and the Minnesota Valley Transit Authority (MVTA) fixed route service. It is provided only in northern Dakota County. Senior transportation services are provided throughout the county.

### ***Vehicles, Service Provided, and Maintenance***

The agency has approximately 35 vehicles that are stored and maintained at the DARTS Transportation Center in West St. Paul. To minimize deadhead in such a large county, DARTS also coordinates with the cities of Burnsville, Eagan, Farmington, and Lakeville to store some of their vehicles off site. In exchange for local use of these vehicles, the cities offer DARTS free fueling privileges and reserve parking spaces for the vehicles. The DARTS Transportation Center also has space available for training courses and on-site dispatch and administration. Also located at this facility is its maintenance facility and garage.

### ***Funding and Budget***

As the ADA provider for Dakota County, DARTS currently receives the large majority of its transportation funds from the Metropolitan Council, the regional planning agency that serves the seven-county Twin Cities area. When the agency first started out, most of the funding for the agency came from Title III of the Older American's Act. These funds support the senior services that continue to be a significant component of DARTS' activities. To supplement the state and Federal funding sources, DARTS covers about 10 percent of its operating expenses with fares and receives about 18 percent of its funding from various contracts with Dakota County.

## ***Coordination Efforts***

In addition to providing both senior and ADA paratransit in the county, DARTS is involved in a number of collaborative partnerships in the county. The following is a brief summary of the important coordinated transportation efforts DARTS currently has in place:

- **Metro Mobility** (the paratransit service for the Twin Cities) – DARTS provides the ADA paratransit services in Dakota County.
- **United Way of Minneapolis** – DARTS offers scheduling and dispatch services to United Way funded agencies.
- **Access to Work Initiative** – DARTS contracts with Dakota County to provide FTA Job Access van service and previously led the McKnight Access to Jobs initiative to get Welfare-to-Work clients to work.
- **Exurban Transit Services** – DARTS partners with the cities of Lakeville and Farmington to provide localized services.
- **Flex-route services** – DARTS is the contracting agency that provides a flexible fixed route service to the Dakota County Technical College.

In addition to the community partnerships, DARTS provides the following professional services and logistical support

services to other transit providers in the county:

- **Vehicle Maintenance** – DARTS' maintenance garage has provided services to some 30 different agencies, including nonprofits and one school district. DARTS also was contracted to prepare 65 paratransit vehicles for Metro Mobility (the ADA paratransit provider in Minneapolis and St. Paul).
- **Driver Training** – DARTS offers training in a wide variety of transit driver issues, ranging from first aid to passenger assistance. Fees are charged for the classes with a reduced rate for nonprofit agencies.
- **Transportation Staff Development** – DARTS offers professional training in customer service for transit professionals.
- **Transit Planning** – DARTS transportation managers and administrators also offer help in operating procedures, operating service standards, and customer service practices and standards.

## ***Economic Benefits of Coordination***

According to DARTS staff, the nonprofit community views DARTS as a reliable resource for many of its senior and transportation needs. DARTS' Vice President provided several examples where DARTS' coordination efforts have reduced total transportation costs in the county and improved resources for those who provide transportation.

- The largest cost-saving program offered by DARTS is its arrangement

with Metro Mobility to provide the ADA paratransit service in the county. By combining ADA trips together with those provided for seniors, DARTS eliminates the need for Metro Mobility to extend its service to Dakota County. DARTS' current cost per trip (for both senior and ADA trips) is approximately \$17.00, including recovered fares. In contrast, Metro Mobility's average cost per ADA trip, including fares, is \$20.50. In 2001, DARTS provided about 65,000 ADA-only trips and another 30,000 trips to seniors who are ADA eligible. If Metro Mobility were to provide the ADA service in Dakota County, this would theoretically increase its costs by approximately \$195,000 a year. Because this is more inefficient for both agencies, these costs would probably be even higher as the average cost per passenger increased. The current arrangement is also good for seniors. DARTS primarily provides senior transportation services Monday–Friday from 8:00 a.m.–4:30 p.m., while the ADA service is available from 5:00 a.m.–11:00 p.m., 7 days a week. Although ADA passengers are given priority, seniors are allowed to utilize the service during this time if space is available. DARTS staff estimate that approximately 5 percent of the seniors use DARTS do so, taking trips that would otherwise cost about \$35,000 annually to provide.

- In 2000, DARTS began working with the Volunteers of America (VOA) Transit Collaborative in Minneapolis. The goal of the collaborative is to improve access to services for all agency customers. Based on a recommendation by DARTS, the collaborative pooled its resources and centralized dispatch and schedule functions at the DARTS facility. DARTS has been in charge of implementing this collaborative effort

and ensuring that it runs smoothly. DARTS staff estimate that this arrangement has saved the VOA and DARTS from \$10,000–\$20,000 in administrative costs.

- DARTS and the city of Farmington were jointly granted a Federal 5310 grant to purchase a new vehicle for use by the Farmington Senior Center. In exchange for exclusive use of the vehicle 1 day a week, the city allows DARTS drivers fueling privileges and a parking space. When the vehicle is not being used in the Farmington area, DARTS uses it for other purposes in the county. This agreement has not only enabled the city of Farmington to provide more localized service but also made more efficient use out the vehicle and saved Farmington an estimated \$60,000 to purchase a new vehicle.
- DARTS provides vehicle maintenance services for as many as 127 vehicles from 30 different agencies. Providing these services has resulted in an estimated income of \$75,000 for DARTS. It is estimated that the agencies that use DARTS' maintenance facilities save an equal amount by not having to hire their own maintenance staff.
- DARTS offers training classes geared toward professional transit drivers. Classes are published in a brochure and range from passenger assistance to first aid. Costs are \$25.00 per class if held onsite. Off-site training is also offered. In 2001, DARTS trained more than 30 drivers from 8 different United Way agencies.
- To assist small transit providers with scheduling and dispatching, DARTS developed the EZ-Trip Scheduling software package. The software is designed for the small paratransit provider (between 1 and 10 vehicles)

and helps automate routine functions, maintains a database of current users, and tracks compliments and complaints. DARTS charges around \$1,000–\$2,000 for the software package.

Total annual benefits from DARTS' coordinated transportation services are estimated as \$380,000, as shown in Table 9.

### ***Challenges and Drawbacks for the Agency***

Although many nonprofits agencies have seen the benefits of DARTS' coordination efforts, some smaller nonprofit agencies fear that DARTS may eventually take them over. Despite repeated attempts to coordinate with these smaller agencies, at least two nonprofits have been hesitant in fear of losing control of very localized, homegrown services.

Another challenge awaits DARTS in 2003. Previously, the Metropolitan Council allowed DARTS to estimate the number of ADA riders as a basis for its funding. For the next funding cycle, however, DARTS will have to certify all ADA riders and funding will be based only on those that are certified.

### ***Potential for More Consolidation Efforts***

DARTS is looking into providing transportation services for Medicaid patients in Dakota County. However, they are somewhat reluctant to start providing

this service because the billing process for Medicaid is very onerous and the health care providers typically require as-needed, spur-of-the-moment service – not something DARTS can guarantee at this time.

### **RIDE CONNECTION — PORTLAND, OREGON**

Ride Connection is a not-for-profit corporation that coordinates transportation provided by 30 community-based organizations in the three-county Portland Metropolitan Area, including Clackamas, Multnomah, and Washington Counties.

Ride Connection was formed in 1988 (originally under the name Volunteer Transportation, Inc.), following a collaborative process involving a citizen committee and Tri-Met, the principal public transit operator in the region. The process recognized that the elderly and people with disabilities had transportation needs that were not served by existing programs and determined that a volunteer program could meet those needs.

Transportation is provided through a network of over 30 partner agencies. These include religious and ethnic organizations, medical and senior centers, youth clubs, public agencies, and general social service organizations such as the American Red Cross. Ride Connection has gone beyond its original mandate of serving the elderly and people with disabilities and is now also involved in Job Access programs.

**Table 9**  
**Estimated Annual Benefits of DARTS' Coordinated Operations**

<i><b>Benefit Type</b></i>	<i><b>Estimated Annual Value</b></i>
Provide ADA paratransit trips for Metro Mobility	\$195,000
Provide trips for seniors	\$35,000
Centralized dispatching functions	\$15,000
Joint use of city of Farmington vehicle	\$60,000
Maintenance income to DARTS from 30 different agencies	\$75,000
Driver training for 30 drivers of 8 United Way agencies	(not included)
Software provided to small paratransit providers	(not included)
<b>Total annual benefit estimate</b>	<b>\$380,000</b>

Ride Connection is also responsible for coordinating all applications for community transportation funding in the three-county area. As in other parts of Oregon, a unified process has been established for applications for Federal Section 5310 funding; the state Special Transportation Fund (cigarette tax); and the recently created Oregon Transit Network funding, which supplemented other sources with state general fund revenues. Ride Connection has been able to supplement these public sources with private donations and grants from foundations. From the beginning, volunteer time has been a major resource in the programs under the Ride Connection umbrella. In the most recent fiscal year, the combined efforts of Ride Connection, its partner agencies, and over 370 volunteers provided 236,000 rides, a 13 percent increase over the prior year. The trips totaled 957,374 miles of service.

Ride Connection provides capital and operating funds to some of its member organizations and loans out vehicles to others that have their own source of operating funds. Most drivers are volunteers, who are required to take training courses offered by Ride Connection. Its elderly and disabled passengers need not be ADA-eligible and can request any type of trip. In one county, Ride Connection also brokers trips for the general public on the same vehicles as its elderly and disabled riders. Ride Connection pursues cost savings through vehicle sharing, insurance pooling, and operational efficiency.

### ***Benefits***

Benefits of Ride Connection work were explored using interviews with the

agency's staff, interviews with staff of Tri-Met, and analysis of operating data. In addition, an assessment of the program from the perspective of Tri-Met was reviewed. The assessment was prepared by Crain & Associates in 1994 at a time when Tri-Met needed to determine whether to make changes to its contract with the agency, which was then known as Volunteer Transportation, Inc. (VTI). That assessment included a survey of riders who received service from VTI's partner agencies, interviews with staff of three of the largest partner agencies, and interviews with 11 board and staff members of Tri-Met and VTI. Based on more recent discussions with Tri-Met staff, they continue to see similar benefits from working with Ride Connection today. Benefits that have been documented include

- **Reduced management cost.** Ride Connection's work in coordinating funding applications reduces Tri-Met's administrative and management costs. Under state law, Tri-Met is responsible for coordinating community transportation funding in the three-county region within which it operates. Without Ride Connection, Tri-Met would have to coordinate this application process and would need to conduct post-award contract management as well.
- **Added resources.** As a nonprofit agency, Ride Connection is able to tap into resources that would not be available to Tri-Met or other public agencies in the region. These resources include foundation grants and donations from individuals and corporations.

- **Volunteer rides in place of publicly provided rides.** Ride Connection and its partner agencies are able to mobilize volunteers to provide rides; otherwise, many of these rides would need to be provided by Tri-Met or other organizations using paid drivers. Based on the rider survey, 67 percent of riders on Ride Connection services would probably be eligible for ADA paratransit. At the time of the rider survey, only 10 percent of riders indicated they would have used Tri-Met's LIFT service if the volunteer ride had not been available. However, in the 8 years since the survey was conducted, the LIFT program has grown from 462,000 rides per year to 782,000 rides per year.
- **Personalized service.** Riders are receiving a level of service that would probably not be available otherwise. Volunteers are able to provide personalized service that is difficult to provide in a publicly operated, shared-ride paratransit system. In the rider survey, many riders indicated they preferred volunteer rides over the Tri-Met LIFT service for a variety of reasons:
  - Like to travel with a volunteer driver (54 percent);
  - Driver waits for me while I'm doing my business (33 percent); and
  - Need special help getting between my home and the vehicle (21 percent).

This level of personalized service probably enables some people to make trips that could not be made using LIFT.

- **Preservation of human service transportation.** Ride Connection has

helped to maintain a viable social service transportation network. This network allows agencies to provide services that meet their own needs and potentially reduces the pressure for Tri-Met to take on more service. Service is also provided to portions of the three-county area beyond the Tri-Met district. About 17 percent of Ride Connection trips are provided beyond the Tri-Met district boundaries.

### ***Economic Benefits***

Of the benefits described, the one that is most amenable to quantitative estimate is the potential reduction in operating cost for the Tri-Met LIFT program. This benefit calculation assumes that LIFT would take over the transportation now provided under the Ride Connection umbrella using volunteers. (Ride Connection's primary source of funding is the contract with Tri-Met.)

For purposes of this research, Ride Connection separated its volunteer driver programs from its paid driver programs. In 2000–01, the volunteers drove 726,846 miles in 42,925 hours to deliver 150,722 trips. The cost to provide these trips was \$1,467,239, which is paid for by revenues from Tri-Met, rider donations, and funding contributed by the 30 organizations under the Ride Connection umbrella. As shown in Table 10, these contributions account for over half a million dollars, so the amount billed to Tri-Met is reduced by more than a third. Table 10 shows the net cost to Tri-Met is \$6.05 per trip. If the contributions of the partner agencies are counted, the cost per trip is about \$9.73.

Table 10 shows what it would cost Tri-Met to take over all of the transportation now provided under the Ride Connection umbrella at the current cost per trip on the LIFT ADA paratransit system. Tri-Met's most recent audited data show that LIFT cost \$19.14 per trip in 2000–01. As shown in the table, that would result in a cost of nearly \$2 million over the amount paid to Ride Connection.

Without Ride Connection, some portion of the trips would continue to be provided by agencies other than Tri-Met. Many of the partner agencies would continue their transportation programs, although perhaps at a reduced scale of operations. Also, about 17 percent of Ride Connection volunteer trips are provided in areas beyond the Tri-Met district. Without Ride Connection, it is possible that Tri-Met would face additional political pressure to expand its service area, at least for specialized transportation. In addition, it is possible that the Ride Connection trips have significantly different trip lengths than the average LIFT trip. It is also possible that some of the clientele served would find LIFT too difficult to use and would forgo the travel that they currently make.

### **STAR PARATRANSIT — ARLINGTON, VIRGINIA**

#### ***Overview***

Arlington County, Virginia, is located directly across the Potomac River from Washington, DC, bordering Fairfax County, the city of Alexandria, and the city of Falls Church. Arlington is the smallest county in

**Table 10**  
**Estimated Tri-Met Costs for Ride Connection Trips**

<b>Factor</b>	<b>Value</b>
1. Total Ride Connection trips	\$236,000
2. Volunteer trips only	\$150,722
3. Cost of volunteer trips	\$1,467,239
4. Partner agency funding	<u>-555,371</u>
5. Amount billed to Tri-Met	\$911,868
6. Cost per trip to Tri-Met	\$6.05
7. Tri-Met LIFT cost per trip	\$19.14
8. Tri-Met cost to provide trips	\$2,884,819
Possible cost savings to Tri-Met	$(\$911,868 / 150,722)$ $(\$19.14 \times 150,722)$ $(\$2,884,819 - \$911,868)$

the United States, with a land area of just over 26 square miles. This small size, combined with a 2000 population of just under 190,000 residents, provides a population density of over 7,000 persons per square mile. Arlington is home to nearly 18,000 persons over the age of 65.

Since the inception of the ADA in 1990, paratransit services in Arlington County had been provided solely through a contract with the Washington Metro Area Transit Authority (WMATA). WMATA, which also provides contracted fixed route services to Arlington County, provides complimentary ADA-paratransit services to Arlington residents under the MetroAccess program. ADA-certified paratransit clients call WMATA directly to schedule trips with MetroAccess, which then bills the county of origin for each passenger trip. Arlington pays WMATA a fixed fee for the operating and administrative costs of each

trip provided by MetroAccess, which is currently just over \$30 per trip.

Three years ago, Arlington and WMATA officials instituted a program that would send overflow trips to local taxi service providers. The taxi service turned out to be substantially less expensive than the MetroAccess paratransit service, which inspired Arlington officials to create the STAR program.

STAR was established as a lower cost alternative to MetroAccess paratransit service, with cost savings realized through the use of less costly local providers. STAR operates as a brokerage, contracting with Red Top Cab; Diamond Cab; and Answers, Inc. (a paratransit van operator). Currently, the county pays STAR between \$20 and \$22 per trip, which represents a substantial cost saving over MetroAccess.

STAR believes that it offers several advantages to clients, such as better

customer service and improved quality control and oversight. The vast majority of paratransit clients in Arlington seem to agree, because they are choosing STAR over MetroAccess. STAR officials estimate that they provide 5,000 paratransit each month, whereas MetroAccess is currently providing 850 trips per month.

The success of their paratransit service has allowed STAR to branch out into other areas of service. It has contracted with the local Area Agency on Aging to provide door-through-door service to county residents who are too frail to use traditional paratransit. STAR officials estimate that between 10 and 50 clients use the door-through-door service each month. STAR has also implemented the Senior Loop route, a free fixed route service operating between the hours of 10:00 a.m. and 2:00 p.m. 2 days per week, provided by a grant from the Area Agency on Aging. The Senior Loop uses a bus belonging to Arlington Transit (a commuter bus service), which previously sat idle during midday hours. The route stops at several apartment buildings, medical offices, Arlington Hospital, and the grocery store/pharmacy. The overall length of the route is short enough to allow five or six circuits to be completed in the 4 hours that the route is run. STAR officials estimate that between 150 and 200 seniors ride the Senior Loop each week.

### ***Benefits Calculation***

The major benefit of the STAR paratransit service is that it shifts paratransit passengers away from the MetroAccess service to less costly local alternatives. The

major benefit of the Senior Loop service is that it shifts passengers away from paratransit to less costly fixed route service.

Each paratransit trip provided by STAR represents savings of between \$7 and \$8 versus the same trip using the MetroAccess paratransit service. Thus, the benefits generated by the STAR system can be calculated as

$$\$7.50 \times 60,000 \text{ annual trips} = \$450,000 \text{ annual economic benefit.}$$

(This calculation assumes that STAR is not generating any new trips. In fact, if Arlington residents can get same-day service from the taxi operators, more trips could be generated and the actual benefits would be greater than those shown here.)

The benefits generated by the Senior Loop route are not as clearly defined. If a paratransit-eligible passenger rides the Senior Loop service instead of using paratransit, then that action represents a savings of approximately \$21 (the cost of a STAR paratransit trip) for Arlington County. Assuming that only one-half of the current Senior Loop riders would use paratransit in the absence of the Senior Loop route, the benefits can be calculated as

$$87 \text{ seniors} \times 2 \text{ one-way trips per week} \times \$21/\text{trip} \times 52 \text{ weeks} = \$190,008 \text{ annual economic benefit.}$$

In total, the coordination/brokerage activities provide an estimated annual benefit of approximately \$640,000 for Arlington County.

## 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 that 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** in Charlottesville, Virginia, provides free rides on fixed route transit for all paratransit-eligible persons. The cost of trips on the free ride program would have approached \$2.5 million if those trips 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.** 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**. 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 from ADA paratransit saved about \$1,050,000 per year.

## CHARLOTTESVILLE ADA PARATRANSIT SERVICES

Charlottesville Transit System (CTS) has been providing fixed route service to the City of Charlottesville and urbanized areas of Albemarle County since 1976. Using a fleet of 13 lift-equipped vehicles, CTS provides service to 13 routes between 6:15 a.m. and 6:45 p.m., Monday through Saturday. There are also four nighttime routes (geared toward night-shift jobs and entertainment centers) that operate from 7:00 p.m. until 11:45 p.m. The regular fixed routes were recently rearranged to cover a wider geographic area, and the night service has been expanded. In addition, CTS has recently added a free trolley service operating on Main Street, between the downtown area and the university.

JAUNT was formed in 1975 as a coordinated transportation system for human service agencies in the City of Charlottesville and to provide demand-responsive public transportation to rural areas of Albemarle County. The system grew quickly, expanding on the success of its initial services, and introduced service to three additional outlying rural counties in the Charlottesville area (Fluvanna, Nelson, and Louisa). In 1982, the Jefferson Area Planning District Commission (the local metropolitan planning organization [MPO]) implemented a policy naming JAUNT as the sole provider of human service transportation for its four counties and

requiring all human service agencies to contract with JAUNT. The menu of services was later expanded to include fixed route service to the rapidly growing outlying areas, as well as route deviation service. Since the inception of the ADA, JAUNT has provided the complimentary ADA service under contract to CTS for the City of Charlottesville. JAUNT is now providing service Monday through Friday, 6:30 a.m. to 6:30 p.m., with 29 vehicles.

CTS ridership dropped from 691,000 in 1993 to a low of 649,000 in 1997, but ridership has been on an upswing since then, increasing slightly for 1998, 1999, and 2000. For the 2001 fiscal year, ridership jumped to an all-time high of more than 1 million annual passenger trips, a 30 percent increase over the previous year's total. At the same time, JAUNT's ridership has reached an all time high of more than 300,000 annual passenger trips, and ridership on its fixed route feeder service has doubled in the past 3 years. These dramatic increases can be attributed to several factors, such as the geographic expansion of the routes, the extension of nighttime services, and the free trolley. It can also be attributed to enhanced coordination efforts between CTS and JAUNT, efforts that have provided positive results for both systems.

The most successful (and beneficial) coordination efforts in Charlottesville involve the mainstreaming of elderly and disabled paratransit passengers. In 1994, at the request of CTS, the Charlottesville City Council passed an ordinance, which provided free CTS rides for all JAUNT-eligible persons. The intent was to offer

additional opportunities for the elderly and persons with disabilities to be in the mainstream of transportation services. Because JAUNT requires 24 hours advance notice for paratransit trips, this free CTS ride program allows an elderly or disabled passenger to take a spontaneous trip without advance notice. In addition, the program was intended to lower demand for paratransit trips and to slow the rapidly escalating cost of paratransit service. In conjunction with the free rides, CTS has instituted a travel training program in partnership with the local Independence Resource Center.

Judging by the ridership totals for recent years, the free rides program has become very successful. For FY 1999, CTS reported 58,801 trips on the free ride program. For FY 2000, CTS reported 70,668 trips on the free ride program. For FY 2001, CTS projected 76,800 trips on the free ride program. If all these trips had been made using JAUNT paratransit, assuming a cost per trip of approximately \$12 (provided by JAUNT officials), the cost for these trips would have approached \$2.5 million for those 3 years. Even if only one-half of the free ride trips in FY 2001 had been made on paratransit, it would have cost the city \$460,800. The director of CTS reported that the paratransit ridership (and costs) have subsequently leveled off since the free ride program gained momentum, so that the FY 2001 annual cost savings of \$921,600 is about what can be expected on a continuing basis.

The CTS director devised the idea for the free ride program while attending an ADA workshop sponsored by the FTA. She was

shocked to learn that almost no other fixed route transit systems had instituted a similar free pass program for paratransit clients. Her short assessment of this program is the following: “To me, local funding is the big issue. You have a finite amount of resources for a community, and some of these resources will go to fixed route service, some will go to demand-responsive service. If you can save money with the fixed route passes, you are **not** generating a new cost. Also, I believe that fixed route systems should want to mainstream paratransit passengers and increase their independence.”

## TRAVEL TRAINING IN SACRAMENTO, CALIFORNIA

### *Overview*

When transit and human service agencies collaborate on training people with disabilities to use fixed-route transit services, both types of agencies can benefit. Teaching people with disabilities to travel independently on public transit is commonly called travel training or sometimes “mobility training.” From the point of view of transit agencies, the principal benefit of travel training is reducing the demand for ADA complementary paratransit. For human service agencies that provide or contract for transporting clients to their programs or that pay a portion of the cost of those trips on ADA paratransit, travel training can reduce their cost of transportation as well. For human service agencies, travel training can help meet a mandate to help their clients become more independent.

One organization that operates a successful travel training program is Paratransit, Inc. in Sacramento, California. Sacramento, the capital of California, is in the north central part of the state. The metropolitan area has a population of about 1.2 million people, of whom 407,000 live in the city of Sacramento. Paratransit, Inc. (PI) is a nonprofit corporation that provides paratransit and other related services to a variety of agencies in its area. PI provides ADA complementary paratransit service under contract to Sacramento Regional Transit. It is also one of several organizations that provide transportation for people with developmental disabilities to and from their day programs under contract to the Alta California Regional Center.

PI has been providing travel training since 1982 and estimates that it has trained about 7,600 people since then. 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. PI’s travel training program is funded with contributions from multiple agencies: the Alta California Regional Center for their clients with developmental disabilities; Sacramento Regional Transit (RT) for people with disabilities who apply for ADA paratransit; the Sacramento Employment and Training Agency for low-income seniors and people with disabilities; and the State Department of Rehabilitation. In practice, there is a fair amount of overlap among the target groups of the funders. PI’s Mobility Training Department employs a staff of 11 people, including 7 full-time trainers, a manager, his assistant, and 2 support staff.

## **Benefits**

According to data provided by PI staff, the agency successfully trained 587 people in FY 2001–02. A total of 10,442 trainer hours were needed to complete these trainings (and 30 unsuccessful training attempts) or about 18 hours per completed training. PI estimates the number of trips per month that each person trained will take on fixed route transit that he or she would have taken on ADA paratransit and uses that number to project savings from the training. In doing so, it conservatively projects only for the months remaining in the fiscal year in which the person was trained. (For a person trained 7 months into the year, only 5 months of savings are projected.) PI also assumes that 20 percent of those trained stop using transit after the end of the training, based on the results of a recent followup survey. On this basis PI, estimates that the 587 trained individuals took 74,781 trips on transit in FY 2001–02 that they would have taken on ADA paratransit (an average of roughly 20 trips per person per month).

The trips shifted from ADA paratransit would have cost about \$1,321,000 to provide at a cost per trip of \$17.67. By comparison, the travel training program cost about \$275,000, of which RT contributes \$50,000 per year plus the value of free passes for the trainers and trainees. This leads to a total annual benefit estimate of \$1,046,000.

The program also provides a significant benefit to other agencies, most notably the Alta California Regional Center. However,

PI has not calculated the size of that benefit.

## **PHOENIX PEER TRAINING PROGRAM**

The Phoenix, Arizona, Peer Travel Training Program has been provided for many years. (More or less service has been provided based on budgetary considerations.) Officially, staff services come out of another contract, and the budget for Peer Training includes only Peer Trainer salaries, bus tickets, and some program associated costs such as bookkeeping. The usual allocation is \$15,000 for the year; usual annual expenditures are between \$11,000 and \$12,000.

For FY 2000–2001,

- 36 people were trained to use fixed route transit. Of these, 32 continued to use the bus 1 to 6 months after their training.
- By using the bus instead of Dial-a-Ride for three trips each week (156 trips a year), each Dial-a-Ride user who switched to the bus after training saved the City of Phoenix about \$3,655 during FY 2000–2001:

<i>One trip on Phoenix Dial-a-Ride</i>	<i>\$24.53</i>
<i>One trip on a Phoenix Bus</i>	<i>\$1.10</i>
<i>Difference per trip</i>	<i>\$23.43</i>

- On average, it takes 15 hours for one trainer to train one person to use the bus. Peer Trainers are paid \$10.00 an hour, so the direct training cost is about \$150.00 per person.

The time staff devote to this project adds another \$7,000.00 to the cost of the program. This represents a total of about 10 hours a week from two persons. That brings the cost estimate for training 36 people to about \$19,000.

Other significant issues regarding the Phoenix program include the following:

- There is no charge to the student being trained, as bus tickets are supplied by the program.
- In the past, the system has not paid for Train the Trainer time, but plans to do so in the future. This would add about an additional 5 hours per trainer.
- The net cost of a Phoenix Dial-a-Ride trip is about \$27.00 in FY 2002 and the net cost of a bus trip is \$1.44, so the difference has increased to \$25.56 per trip.
- Trainers are matched with trainees in terms of their disability, age, and interests. The trainers achieve a high level of customer satisfaction.
- Getting trainees is more difficult than getting trainers. Many times agencies ask the system to bring a bus and train a group of their clients. Individual training is offered as a followup option, but rarely does anyone request this option.

On a continuing basis, if 36 persons were trained per year and 32 remained in the program taking an average of three trips per week, the net savings in Phoenix would be about \$107,600 per year (assuming that the training costs remain similar to current costs, about \$20,000 per year).

## HUMAN SERVICE AGENCIES COORDINATE THEIR TRANSPORTATION EFFORTS

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. There are also many examples of a coordinated system functioning as a combination of the above strategies, 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. However, the potential for cost reduction depends heavily on the existing transportation infrastructure. Agency vehicles in poor condition may require large initial capital investments, and implementation of area-wide service can prove costly. Sometimes anticipated savings do not materialize.

**Martin County Transit** in North Carolina employs a brokerage system with centralized dispatching and vehicle ownership. Based on 1999 figures, the coordinated system’s benefits are about \$156,000. **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. will 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.

## **MARTIN COUNTY TRANSIT — WILLIAMSTON, NORTH CAROLINA**

### ***Overview***

Martin County is located in the upper area of the eastern part of the state, bordering the counties of Bertie, Washington, Pitt, Edgecombe, and Beaufort. The county's 2000 population was 25,593, which was a 2 percent increase over the county's 1990 population of 25,078. Approximately 75 percent of the county is rural in nature.

Martin County Transit was formed in 1993 to coordinate human service transportation in Martin County. Previously, human service agencies in Martin County provided their own in-house transportation service using their own vehicles and drivers. The agencies providing or purchasing transportation in Martin County included

- Martin County Council on Aging;
- Martin Enterprises (ADAP);

- Martin County Community Action Agency;
- Tideland Mental Health Center;
- Tideland Child Development Center;
- Martin Health Department;
- Martin County Department of Social Services;
- Martin General Hospital; and
- Martin County Board of Education.

There were coordination agreements among certain agencies (such as the informal coordination between the DSS, Council on Aging, and Health Department) but no overall coordination of transportation activities in the county. Transportation Development Plans completed in 1987 and 1992 recommended a coordinated system to address several problems with human service transportation in Martin County. According to those studies, a coordinated system could

- Reduce the duplication of administrative tasks and transportation services;
- Allow for real-time dispatching from a centralized location;
- Allow for centralized maintenance either through a maintenance contract or through the construction of a maintenance facility;
- Allow for cost-effective joint purchasing of vehicles and supplies;
- Provide out-of-county medical trips to satisfy unmet demand; and

- Provide for group insurance coverage at a substantially lower rate.

Martin County Transit, established in 1993, set out to achieve the service goals listed above. The service design employs a brokerage system with centralized dispatching and vehicle ownership. There are 2 full-time administrative employees, 25 full-time drivers, and a fleet of 9 vehicles (as of FY 1999).

In 1991, according to a Transportation Development Plan prepared for Martin County, county human service agencies were spending more than \$125,000 to provide 20,871 passenger trips and 125,557 miles of service using a fleet of seven vehicles (Weslin, 1992). (It should be noted that the cost figures for agency transportation are almost always under-reported because it is usually agency staffers who drive the vehicles. Human service agencies usually do not recognize the cost of having in-house staff driving vehicles rather than doing their regular jobs and thus do not include it when calculating their costs. Based on local and national financial breakdowns of demand-responsive transportation costs, we estimate that driver salaries normally account for approximately one-third to one-half of typical transportation operating costs.)

### ***Benefits***

Since the coordination efforts take time to achieve the desired results, data were examined for 5 years after coordination took place. Five years after coordinating, one would expect that the changes should

be established and the system should be mature enough to stand on its own merits. The most recent and complete data available for Martin County Transit are for the 1997, 1998, and 1999 fiscal years. These data, along with the 1992 data, are summarized in Table 11.

Looking at the results, it is clear that the coordination efforts have produced quantifiable benefits. Although the ridership numbers have increased significantly (more than doubling), the costs actually decreased for several years before increasing to their current level. The large jump in costs from 1998 to 1999 can be attributed to the introduction of out-of-county medical trips (which also resulted in a large increase in mileage). These trips are longer and more expensive to make, but they are a necessity for area residents, and the increased efficiency of a coordinated system makes them viable. Another clear improvement brought about by the coordinated system is the reduction in miles per trip. Before coordination, the average trip took more than 6 miles. After the coordinated system was implemented, the process of combining and organizing trips and schedules reduced that number significantly. The miles per trip figure increases again in 1999, which is again a result of the introduction of out-of-town medical trips, but it is still substantially less than the precoordination numbers. The same is true for the cost per trip figures, which fall dramatically with the implementation of the coordinated system, and then rise slightly with the introduction of out-of-county medical trips.

**Table 11**  
**Martin County Transit Operating Statistics  
Before (1992) and After Coordination Efforts**

	<b>1992</b>	<b>1997</b>	<b>1998</b>	<b>1999</b>
Fleet	7	6	7	9
Trips	20,871	31,263	41,737	44,005
Miles	125,557	122,812	108,771	150,075
Cost	\$125,315	\$83,167	\$96,131	\$156,163
Cost/Trip	\$6.00	\$2.66	\$2.30	\$390.55
Cost/Mile	\$1.00	\$0.68	\$0.88	\$1.04
Miles/Trip	6.02	3.93	2.61	3.41

How much has coordination saved Martin County? It is difficult to give a precise answer, but it is possible to make an estimate. Applying an inflationary adjustment to the 1992 total cost figure of \$125,315 yields a 1999 value of \$158,701 for the 1992 costs. Dividing that current value by the number of trips provided in 1992 produces an adjusted cost per trip figure of \$7.60. Then applying the adjusted cost per trip figure to the number of passenger trips provided in 1999 provides a hypothetical total cost figure of \$334,610. This is a conservative estimate of what it would cost to provide the current level of service under the system that preceded coordinated transportation in Martin County. Thus, this process produces an estimate that coordinated transportation saved Martin County \$178,447 in fiscal year 1999. By the same logic, coordinated transportation saved Martin County \$154,533 in 1997, and \$221,233 in 1998. Over the 3-year period of FY 1997-1999,

coordinated transportation probably saved Martin County more than \$500,000.

#### ***The State's Role in Martin County's Coordination Project***

In 1978, Governor Jim Hunt signed an Executive Order which mandated coordination of human service transportation in the State of North Carolina. In doing so, he placed North Carolina at the forefront of coordination efforts nationwide and took a strong step toward improving the safety, reliability, and cost effectiveness of transit and paratransit services throughout the state. Today, there are 55 human service transportation systems in North Carolina operating under three types of service arrangements:

- ***Coordinated systems*** - These consist of two or more service agencies working together through a lead agency to maximize resources and efficiency.

- ***Consolidated systems that provide their own services*** - These consist of a single transportation program that uses its own vehicles and drivers to provide service to a variety of agencies. In most cases, the agencies handle eligibility and screening.
- ***Consolidated systems contracting for transportation services*** - These consist of a single transportation program that purchases transportation services and contracts for operations with private transportation companies.

Core agencies that utilize human service transportation in North Carolina transportation include county social service departments (for Title XX, Work First, and Medicaid recipients); county, private, and nonprofit programs for the aging; mental health programs; sheltered/vocational workshops; and county health departments.

Coordinated and consolidated transportation systems have resulted in increased efficiency and more cost-effective services for the State of North Carolina and are also providing higher quality transportation than their uncoordinated predecessors.

## R.Y.D.E. TRANSIT — BUFFALO COUNTY, NEBRASKA

### *Overview*

Buffalo County, Nebraska, is located in south central Nebraska. With a population of 37,477 and 968 square miles, Buffalo County is situated in the heart of Nebraska's farmland. The county's only city is Kearney, which has various medical

and major shopping facilities. With many persons traveling to Kearney from outlying areas, transportation was always a problem.

Many different systems of delivering transportation were in place in Buffalo County in 1996, yet many people were still unable to make the necessary connections to primary life maintenance activities such as medical appointments, employment, and shopping. In early 1996, four separate committees in Buffalo County were looking into ways of delivering transportation services. Coordination was found to be the factor lacking for a viable transportation service.

R.Y.D.E. (Reach Your Destination Easily) Transit started operation in Buffalo County on January 3, 2000, after 4 years of research, planning, and hard work by the Buffalo County Community Health Partners Transportation Goal Work Group. The Goal Work Group brought together representatives from over 20 different agencies in the city of Kearney and from Buffalo County. Diverse agencies represented included the local university, the City of Kearney, Buffalo County, employment specialists, health care representatives, local cab and livery companies, representatives from state agencies on transportation and human services, and local school district representatives. The Transit Division of the State of Nebraska Department of Roads gave valuable input to the process by providing leadership and resources for this group. This unique planning process made R.Y.D.E a community effort. From the beginning, the Working Group realized that eliminating duplication and coordinating

resources offered the best solution to its rural county's transportation needs.

The Transportation Goal Work Group focused on commonalities inherent in community transportation, thereby allowing a greater breadth of partnership to develop. R.Y.D.E. Transit serves the city of Kearney and Buffalo County with on-demand public transportation and represents the first brokered transit system to operate in Nebraska. The idea is based on the utilization of existing community resources to meet the need of public transportation in rural areas. Mid-Nebraska Community Action, Inc. (MNCA), the local community action agency, took the lead in the effort by offering office space, salaries, and executive direction for the transit operation.

R.Y.D.E. began operation by assuming the responsibilities of a vehicle owned and operated by the local hospital, Good Samaritan Health Systems, the "Health Express." R.Y.D.E. operates this vehicle through a contract with the hospital to provide the service. This vehicle was underutilized in its role of connecting people with mobility limitations to health care. Immediately, the ridership of the vehicle grew from an average of 5 boardings a day to more than 15 boardings a day within the first 2 weeks of operation. R.Y.D.E. then assumed the operational duties of the two existing public transit vehicles in the city of Kearney, operated by MNCA.

These three vehicles were brought under one dispatch system to help better utilize the resources more effectively. MNCA then allowed R.Y.D.E. to rehabilitate two

vehicles to expand the fleet to five. R.Y.D.E. contracted with a local agency, which provides transportation services to the disabled. A few months later a contract with a local employment agency was written allowing R.Y.D.E. to provide transportation for them. This brought the number of vehicles in the system to seven. These vehicles, when not in use for the contracts, are used to provide public transportation for the city of Kearney and Buffalo County.

The Buffalo County Community Health Partners Transportation Goal Work Group and State of Nebraska Department of Roads Transit Division still provide direction and leadership for R.Y.D.E. Through this collaboration, R.Y.D.E. Transit has been able to be involved with many different projects.

By bringing these vehicles "under one roof," R.Y.D.E. has been able to be more responsive to the customer needs in Buffalo County. R.Y.D.E. eliminated barriers to providing transportation to the public. Original operating hours before R.Y.D.E. took over were 7:00 a.m. to 4:00 p.m. and were expanded to 6:00 a.m. to 6:00 p.m. Monday through Friday. This has allowed R.Y.D.E. to better serve those members of the community who need public transportation to and from work.

R.Y.D.E. also abolished the waiting and time requirements. Prior to R.Y.D.E., there were strict rules requiring that rides be scheduled 24 hours in advance. Intake information also needed to be recorded before rides were given. R.Y.D.E. dropped these requirements in an effort to be more

responsive to the demands of the customers. R.Y.D.E. has also established operations on holidays to give mobility-limited customers access to health care, employment, and social activities on those days.

R.Y.D.E. has also expanded transportation access to rural Buffalo County. R.Y.D.E. now has vehicles available to serve residents outside of Kearney 5 days a week. Prior to R.Y.D.E., established routes served only part of Buffalo County once a week. The expansion of these routes has been offset in part by the contract with the hospital. This has allowed for better service to mobility-limited clientele outside of the City of Kearney. R.Y.D.E. plans to further expand service to rural residents as part of the 2000 Job Access Reverse Commute/Job Access Grant, which was awarded to them in January of 2001. This grant will help R.Y.D.E. better serve customers in rural Buffalo County.

The system has also been granted funds to implement intelligent transportation systems (ITS) into rural transit. R.Y.D.E. is using these funds to upgrade the radio dispatch system to include telephone line access for the drivers, giving access to emergency personnel and the dispatch staff in times of emergency. The system is also implementing computer-aided dispatch software to increase the reliability of the system for the customers.

### ***Benefits***

R.Y.D.E. has seen a rapid growth in its ridership. R.Y.D.E. planned to provide 70,000 rides in 2000. In 1999, public transportation provided 11,000 rides in Buffalo County. During the July–September 2002 quarter, the system provided the equivalent of 78,220 rides in Kearney and Buffalo County. The local taxi company is involved in coordinated transportation, providing approximately 300 rides per month. Fourteen agencies now coordinate their trips through R.Y.D.E.

In January 2000, local agencies were providing 1,100 rides per month at a cost of \$9.24 per ride. During the last reported quarter (July through September 2002), R.Y.D.E. provided an average of 6,518 rides per month at a cost of \$4.16 apiece. Total annual benefits of the coordinated services are slightly more than \$400,000, as shown in Table 12.

### **KENTUCKY COORDINATED HUMAN SERVICE TRANSPORTATION SYSTEM**

In 1996, Empower Kentucky (a gubernatorial advisory committee) released a report that provided the impetus for statewide coordination of special-needs transportation. The report suggested that the consolidation of State Human Service Transportation systems under a managed care approach would be the best way to control the rapidly escalating costs of

**Table 12**  
**Estimated Annual Benefits of R.Y.D.E.'s Coordinated Operations**

<i>Per Trip Cost</i>	<i>Current Number of Trips</i>	<i>Total Cost</i>
Pre-coordination: \$9.24 @	78,220	\$722,753
Post-coordination: \$4.16 @	78,220	\$325,395
<b>Total savings</b>		<b>\$400,358</b>

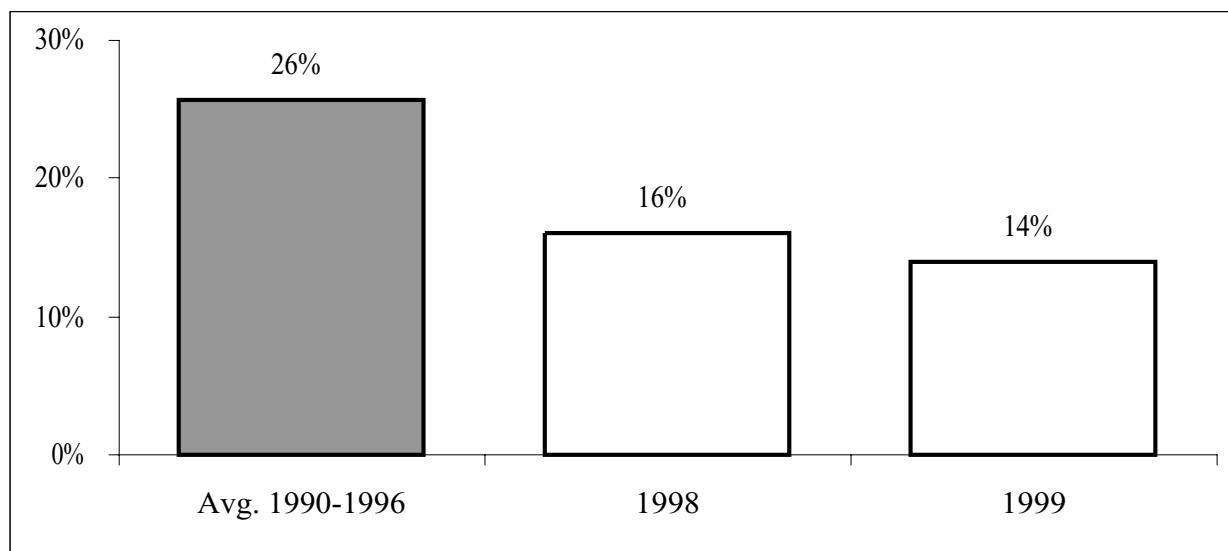
agency transportation. The consolidated approach was also suggested to address the growing problem of non-emergency Medicaid transportation (NEMT) fraud and to meet the needs of the state's Welfare Reform program.

In 1998, the Kentucky General Assembly formalized the proposed coordinated system with the passage of House Bill 468. Kentucky's umbrella human services transportation program, considered by some to be a model undertaking, functions under contracts between the Transportation, Health Services (Medicaid), and Families and Children Cabinets. Contracts total almost \$46 million annually. The program operates under a network of brokers who are responsible for the delivery of services to Medicaid non-emergency clients, Temporary Assistance for Needy Families (TANF) clients, and clients of human service agencies throughout the state. The brokers provide services that include recruiting transportation subcontractors, payment administration, gatekeeping,

reserving and assigning trips, assuring quality, and providing oversight. A capitated rate system provides brokers with a certain amount of money for each eligible recipient each month.

According to a 1999 Progress Report by the Legislative Research Commission, the Coordinated Human Services Transportation System made several major improvements over the previous system. In terms of controlling costs, the report shows that the rate of increase for non-emergency medical transportation costs has decreased since the inception of the managed care system. Figure 2 illustrates the decline in annual NEMT cost increases since the inception of the Coordinated Human Service Transportation Program. From FY 1989 to FY 1997, NEMT costs had increased by an average of 26 percent each year (see shaded bar). For FY 1998 and 1999, under the coordinated system, NEMT costs increased 16 and 14 percent, respectively (Legislative Research Commission, 2000).

**Figure 2**  
**Annual Cost Increases for  
 Non-Emergency Medicaid Transportation in Kentucky**



While the NEMT costs are still increasing year to year, the coordinated system has succeeded in slowing the rate of increase.

There are several explanations for the reduction in growth:

- Under the old voucher payment system, providers were paid on a fee-for-service basis. Their gross income depended on how many trips and miles they reported, and thus they had an incentive to make (and report) as many trips as possible. The capitated rate system, which replaced the old voucher payment system, pays the brokers a fixed amount. The more trips and miles that are claimed, the less money that the broker keeps. Thus, under the capitated system, it is in the broker's interest to monitor providers and ensure that trips and miles are billed appropriately. Of course, the capitated

system requires vigilant monitoring to ensure that financial incentives do not result in trip denials or poor service.

- The old voucher system was also susceptible to fraud and abuse, and generated several infamous examples. In one county, every single passenger transported was classified as "disoriented," which meant that the Medicaid reimbursement was paid at a rate that was nearly 10 times higher. Another county reported providing 15,000 trips annually before the coordinated system was established. After the brokerage system was implemented, its annual trip total dropped to 4,500, and there were no complaints from passengers. In another instance, two eastern Kentucky ambulance service operators were indicted by a grand jury for defrauding the state by providing unnecessary

ambulance service to NEMT passengers.

- The statewide brokerage system is also far easier and less expensive to operate. The old voucher system required 55 full-time employees to issue and process more than 1 million vouchers each year. The current system reportedly requires far less paperwork and staff (although the staff reductions at the state level may have been offset by staffing increases at the brokerage offices). The voucher system required a large budget for oversight, investigations, and audits (which still proved inadequate). The coordinated system requires far less in terms of investigations and audits, although it does require vigilant oversight of service quality and passenger satisfaction. The voucher system also required more time from caseworkers, in that they were charged with determining eligibility, determining need level, and issuing vouchers. Under the current system, the client simply calls their local broker.

As NEMT costs have increased at a lower rate, the number of trips provided by the Coordinated Human Service Transportation System has increased sharply. For FY 1997, the final year under the old voucher system, Kentucky provided 720,000 one-way NEMT passenger trips. The number of passenger trips increased to 1,084,875 in FY 1999, under the coordinated system. For FY 2000, the number of trips provided jumped to 2,400,361 trips, an increase of 121 percent. At the same time, the total cost to provide was increasing at a much slower rate, which meant that the unit costs were decreasing. Figure 3 shows the average cost per trip for 1997, 1999, and 2000.

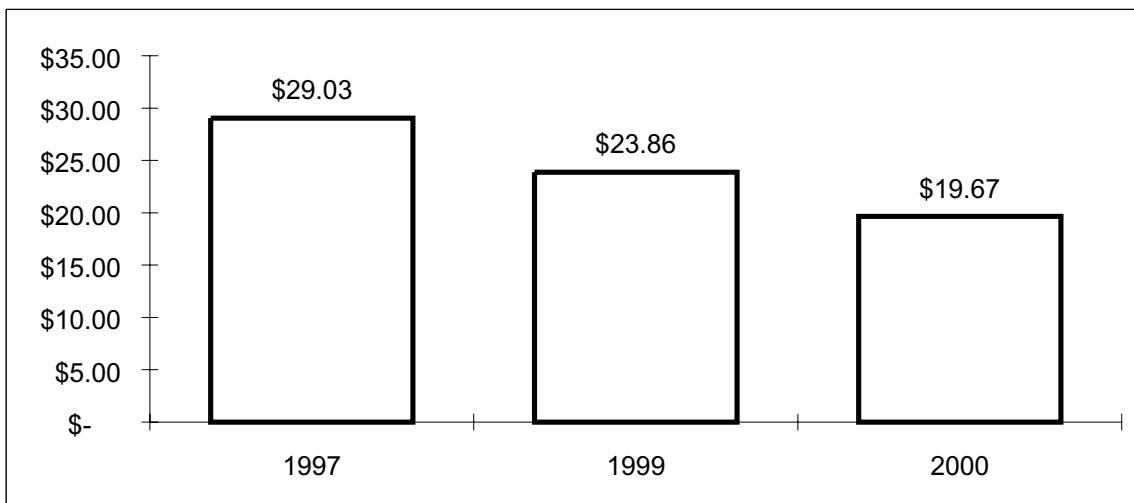
The FY 2000 cost per trip figure of \$19.67 represents a 48 percent decrease from the 1997 figure of \$29.03. Kentucky's coordination effort has shaved nearly half of all NEMT costs. If Kentucky were to provide the FY 2000 2,400,361 passenger trips with the cost efficiency of the 1997 voucher system (which recorded a per-trip cost of \$29.03), it would cost them nearly \$70 million dollars. The cost savings from coordination can be calculated as the current trips times the previous costs, generating a total cost of \$69,682,480, minus the present trips times the present cost, or \$47,215,101. The savings is \$22,467,379, nearly half the amount now spent with the coordinated transportation system.

The Coordinated Human Service Transportation System also provides rural general public and special needs transportation in Kentucky. The coordination of these services has not yet been implemented in most of the counties in the state, which makes it nearly impossible to draw any conclusions at this point. However, the potential for cost savings is there, just as it is with the NEMT services.

Future efforts of the Coordinated Human Service Transportation System include plans to focus on implementing the general public and special needs services statewide and to keep careful oversight on customer satisfaction and complaint issues. Consolidated system staff will also be working with brokers and providers on establishing fair and reasonable capitation

**Figure 3**

### Kentucky Non-Emergency Medical Transportation Cost Per Trip, 1997, 1999 and 2000



rates, which has been a sore point since the inception of the system. The state must find a balance that provides efficient service, yet allows the providers to make a fair profit.

## CONCLUSION

Coordinated cost reduction strategies generated impressive savings for transportation providers in the cases examined. Transit authorities can receive substantial cost savings through contracts with other agencies that may have more freedom to combine trips or to use volunteers and may provide service at lower cost. Such arrangements often lead to

significantly increased revenues for the other transportation providers. Coordinating fixed route and ADA paratransit services to encourage more travelers to use the fixed route services — through fare reductions, travel training, or other strategies — is a significant way of shifting riders from a more expensive to a less expensive travel mode. When human service agencies coordinate or consolidate their separate transportation services to create larger transportation services, the typical benefits to human service agencies include reduced unit costs; improved quality of service; and increased efficiency, effectiveness, and cost effectiveness.