
Chapter 4

TAPPING CURRENTLY UNUSED SOURCES OF FUNDING

Coordination can be a major business opportunity for transit providers and can lead to increased funding. For example, in many communities, Medicaid agencies have not made full use of fixed route transit services, opting for more costly paratransit services instead. As shown in numerous cases, moving only a small proportion of Medicaid clients to fixed route transit service saves the Medicaid agency very large sums of money, substantially increases revenues of the transit authority at no additional operating cost, and provides mobility benefits for Medicaid clients. Coordination with welfare to work programs is another strategy that can also prove to be mutually beneficial for the agencies and transit providers.

The following cases demonstrate the economic benefits of coordination

strategies that focus on increasing funding and expanding business opportunities.

COORDINATING PUBLIC TRANSIT SERVICES AND MEDICAID TRANSPORTATION

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 agency may bill agencies directly for services to designated, eligible clients. The potential benefits to the transit agency

include increased ridership and revenues without additional costs. The primary benefits to human service agencies are decreased costs. However, this strategy may reduce revenues from demand-responsive services, meaning that paratransit providers may oppose it. Changes from demand responsive to fixed route services also may be seen as a reduction in the level of service provided or the quality of service.

MEDICAID TRANSIT PASSES

The rising demand for transportation services is creating large annual cost increases for many human service agencies throughout the United States, especially for the Medicaid program. According to a 1998 report, nationwide non-emergency Medicaid transportation costs increased from \$750 million to \$1.2 billion between 1994 and 1997 (Health Care Financing Administration [HCFA], et al., 1998). Several states, such as Kentucky and Washington, have experienced higher-than-average increases in non-emergency Medicaid transportation (NEMT) costs. In Kentucky, for example, NEMT costs increased by an average of 26 percent annually between 1990 and 1996. Statewide NEMT per trip costs vary considerably, with some states, such as the District of Columbia, spending over \$40 per trip, and others, such as Rhode Island, spending less than \$1 per trip. The primary reason for this discrepancy is that some states rely on expensive modes of transportation, such as paratransit and taxi services, whereas others find more economical modes of transportation for their NEMT clients, such as fixed route transit services. Human

service agencies and transportation providers at the local level are feeling the pinch of increased demand and limited resources. According to National Transportation Database reports, demand-responsive transportation usage increased 25 percent between 1996 and 2000. Over that same period, paratransit costs increased 39 percent. Many human service agencies, Medicaid transportation contractors, and paratransit providers 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.

METROPASS: DADE COUNTY, FLORIDA

Florida's **Miami Dade Transit (MDT)** provides an excellent example of the "bus pass" approach to moving clients to fixed route services. Since 1990, the state Medicaid office had purchased door to door paratransit trips for medical clients from the local Community Transportation Coordinator (CTC) at a cost of approximately \$16. The Medicaid office and CTC analyzed their client base and found that many Medicaid eligible individuals were transit dependent and used conventional fixed route transportation for all their daily nonmedical trips. These same clients used door to door Medicaid paratransit trips for their medical appointments. The Metropass program was created to shift these transit-dependent clients to fixed route service for their medical trips by providing them with monthly bus passes free of charge. In order to qualify for the Metropass program, the Medicaid recipient must be able to use

public transportation on a regular basis and must make six or more Medicaid-funded round trips per month for 3 consecutive months. Once an individual becomes part of the Metropass program, Medicaid will no longer pay for door to door medical trips.

Metropass users ride regular fixed route transit services; no operating changes were made to accommodate these riders. Thus, other than the administrative expense of handling an increased number of passes per month, MDT incurred no additional marginal costs related to transporting clients of the Medicaid program.

Between 1993 and 1998, over 9,000 Dade County residents participated in the Metropass program for at least 1 month. MDT reported 4,943 registered users in the Metropass program in December 2002. Each of those registered users had been making at least 12 paratransit trips each month at a cost of \$16 per trip (many Medicaid clients had been making more than 20 trips per month). Thus, in the absence of the Metropass program, transporting those clients would have cost at least

$$4,943 \text{ clients} \times 12 \text{ monthly trips} \times \$16 = \$949,056 \text{ per month.}$$

Over an entire year, transporting these clients would have cost the Medicaid program \$11.4 million.

The cost of providing monthly bus passes for the MetroAccess clients can be calculated as

$$4,943 \text{ clients} \times \$31.44 \text{ average bus pass cost} = \$155,408 \text{ per month.}$$

(The updated \$31.44 average bus pass cost figure was based on 2002 data showing that about 7 percent of the bus passes purchased by the MetroAccess program were full fare passes at \$50 each, whereas almost 93 percent were discounted passes at \$30 apiece.) MDT also receives a \$7.20 administrative fee for every bus pass sold to the Medicaid program, which is

$$4,943 \text{ passes purchased per month} \\ \times \$7.20 \text{ administrative fee per pass} \\ = \$35,590 \text{ per month.}$$

The total economic benefit to the Medicaid program is thus the alternative cost of paratransit trips minus the actual cost of the bus passes (direct costs plus administrative costs) or

$$\$949,056 - (\$155,408 + 35,590) = \$758,058 \\ \text{per month or } \$9,096,696 \text{ per year.}$$

Because there were no marginal cost increases to MDT in transporting the Medicaid clients and the administrative fee received by MDT presumably covers any increased marginal administrative costs, the total annual economic benefits to the MDT are derived from the sale of bus passes plus the administrative fees; the total is calculated as

$$\$190,998 \text{ per month} \times 12 \text{ months} = \\ \$2,291,976 \text{ per year.}$$

This matches the MDT estimate of revenues from Medicaid bus passes of \$2,292,000.

Although MDT and the Medicaid program still have not reported any major problems with the implementation of their bus pass

program, there are potential problems that could arise with a similar arrangement. Paratransit providers may oppose the loss of ridership and revenue (although most paratransit providers contacted were operating well above capacity and would welcome the relief). It is also possible that advocacy groups might see the effort as a reduction in service, rather than a voluntary program. Neither problem should present any serious barrier to obtaining significant economic benefits from coordination.

MEDICAID TRANSIT PASS PROGRAMS IN OTHER LOCALITIES

In most states, the Medicaid program spends vast sums of money to ensure that Medicaid clients can access needed medical services. Fixed route public transit services can often provide trips to Medicaid clients at a mere fraction of the costs required by alternative modes of transportation. A growing practice is to have the state or local Medicaid program purchase transit passes that they then distribute to Medicaid clients who need frequent trips. Because the Medicaid clients ride on existing fixed route public transit services, the transit agency incurs no additional costs but obtains substantial additional revenues from the transit passes purchased by Medicaid. The transit passes cost the Medicaid agency much less money than it would spend in reimbursements for fewer paratransit trips. Finally, the Medicaid clients get reliable transportation for their appointments and other travel needs. Such programs have provided significant benefits in areas such as Miami, Florida (discussed above); Philadelphia, Pennsylvania; and the states

of Connecticut, Rhode Island, and Washington (Ecosometrics and American Public Works Association, 1999). Estimates of the benefits from these different programs are shown in Table 5.

NON-EMERGENCY MEDICAL TRANSPORTATION BROKERAGE: TRI-MET — PORTLAND, OREGON

Tri-Met is a public transportation district that operates transit services in large parts of a three-county area in northwestern Oregon, centered on the city of Portland. Under an agreement with the state Office of Medical Assistance Programs (OMAP), Tri-Met also operates a brokerage for non-emergency medical transportation in the entire three-county area.

The objectives of the Medical Transportation Program (MTP) for OMAP are to

- Reduce the cost of transportation by ensuring that Medicaid clients in the tri-county area are transported to covered medical services by the least costly mode suitable to the client's needs;
- Reduce inappropriate utilization; and
- Ensure adequate access to quality non-emergency transportation services.

From Tri-Met's point of view, the program is intended to be cost neutral. However, from the outset it was recognized that economic benefits could accrue to Tri-Met from increased use of bus passes and reduced use of LIFT, Tri-Met's ADA paratransit program.

Table 5
Estimates of Annual Benefits Derived From
Selected Medicaid Transit Pass Programs

<i>Site</i>	<i>Additional Revenues to Transportation Providers</i>	<i>Estimated Savings to Medicaid Programs</i>
State of Connecticut	\$1,802,000	\$4,250,000
Dade County, Florida	\$2,292,000	\$9,097,000
King County, Washington	\$300,000	\$3,610,000
Philadelphia, Pennsylvania	\$2,089,000	\$2,700,000
State of Rhode Island	\$2,100,000	\$4,050,000

Sources: Interviews with Miami-Dade Transit staff and the Medicaid Transit Passes brochure

History and Background

MTP was established in September 1994 to broker all non-emergency Medicaid transportation in the three-county region within which Tri-Met operates. The brokerage is authorized under a Section 1915(b) freedom of choice waiver. The waiver has been renewed twice and is currently set to expire in July 2003. The entire Medicaid program in Oregon is the subject of a demonstration waiver under which Medicaid has become part of a managed care program known as the Oregon Health Plan (OHP), which aims to ensure that all Oregon residents have access to health care. The Medicaid component of OHP was implemented in February 1994.

Before MTP was initiated, non-emergency transportation in the three-county regional was provided under a decentralized, fee for service basis. Clients requested service through 25 branch offices of the state

Department of Human Services (DHS) charged with administering various programs for seniors, children, and people with disabilities. OMAP, the state Medicaid agency, oversaw a wide array of providers and processed their reimbursement requests. Providers included taxi companies, private lift-van operators, and stretcher car by ambulance. OMAP also paid for Tri-Met bus passes and tickets.

Under MTP, Tri-Met became the single point of access for Medicaid non-emergency transportation for OHP participants in the three-county area. It receives inquiries and requests for transportation from eligible clients, verifies eligibility based on daily reports from OMAP, authorizes and schedules all trips, subcontracts with providers, monitors fraud and service quality, and investigates grievances.

The main source of anticipated savings was that more trips could be directed to bus passes and tickets instead of the more expensive taxis. In addition, it was anticipated that there could be savings by more effective grouping of trips, negotiating lower rates with providers, and reducing misuse, particularly rides taken after 5:00 p.m. when riders were able to call taxi companies directly.

MTP was housed in the same building that houses Tri-Met's LIFT program. However, a strict separation was established between the two programs. Currently, there is some sharing of staff and information, but the two programs continue to operate in separate offices, with separate management, separate provider contracts, and separate software.

One element of coordination between the two programs relates to trip referral and scheduling. In some cases, a trip request that initially comes to LIFT may be referred to MTP. Also, MTP schedules some of its trips on LIFT. In this case, LIFT is treated as a provider for which it is paid a negotiated cost per trip.

Economic Analysis

Tri-Met staff provided cost and trip data from OMAP for 1993 (the last year that Medicaid non-emergency transportation was provided under the prebrokerage system), for fiscal year 1994–1995 (the first year of the brokerage), and 2000–2001 (the most recent full fiscal year). Unfortunately, in the period before Tri-Met began operating the brokerage, OMAP did not

estimate the number of trips provided using bus passes and tickets, even though cost data indicate that many trips were provided that way. Further, OMAP did not include the cost of administering its transportation program. Staff at DHS branch offices were responsible for making transportation arrangements among their other duties. Their time was not charged to OMAP's transportation budget. Also, unit costs for the lift van have escalated sharply over the years. For all these reasons, a simple before and after comparison is not feasible.

In 1998, Internal Audit Services of the Oregon Department of Transportation (ODOT) prepared an independent assessment of the cost efficiency of MTP. The audit was prepared to determine whether OMAP should receive an extension of the Medicaid waiver that permitted continued operation of the brokerage. Such waivers can only be extended if it is determined that they result in cost savings. Cost savings were estimated by comparing projected total costs under the waiver (that is, using the brokerage) with what costs would be without the waiver (that is, using conventional Medicaid transportation arrangements). As shown in Table 6, the assessment estimated that cost per trip was about \$0.50 less using the brokerage than if OMAP were arranging transportation using more traditional methods. However, because fewer rides would be provided without the brokerage, the total cost would be about the same.

This assessment was based on projected costs and used extremely conservative assumptions. For example, the assessment

assumed that 59 percent of rides would use bus passes and tickets under a brokerage compared with 53 percent without a brokerage. In fact, in 1999–2000 and 2000–2001, according to Tri-Met’s figures, 65 percent of rides were provided using bus passes and tickets. The assessment also assumed that volunteer transportation would continue to be available as an option to OMAP, which was not the case before the brokerage.

(At the time of the assessment, some volunteer transportation was available under the brokerage. This is no longer the case. OMAP did not have access to volunteer transportation under the brokerage, and the assumption was that volunteer transportation would be low cost and the brokerage could make use of it. Because of the types of organizations involved and their in-house structures, volunteer transportation has not been an effective option. When the broker did use some volunteer transportation, it was not always the most cost-effective mode. Insurance issues have also prevented volunteer programs from participating.)

The assessment also attempted to determine what rate OMAP would be paying for each type of trip in the absence of the brokerage. For example, in the case of wheelchair vehicle trips and taxi trips, the assessment applied inflation rates for the 6 years from 1993 to 1999 to project hypothetical OMAP rates per trip.

From the state’s point of view, the fact that more trips are being provided with the

brokerage is not necessarily a problem. Recall that the stated objectives of the waiver included ensuring adequate access to quality non-emergency transportation services, in addition to reducing inappropriate utilization. For example, in information provided to the Federal Medicaid agency in support of a waiver renewal, the state cited an increase in utilization per eligible person from 4.071 rides before the start of the waiver to a projected 6.661 during the renewal period (Center for Medicare and Medicaid Services, 2001).

On this basis, the economic benefit of the brokerage would be the difference between the cost to OMAP of paying the broker compared with the cost of providing the same number of rides as the brokerage using prebrokerage methods. With the use of Tri-Met’s operating data from 2000–2001 and prebrokerage data on the percentage of rides transported by each mode, these savings can be estimated as shown in Table 7.

This estimate makes a variety of important assumptions about hypothetical conditions without the brokerage, including

- The percentage of use of modes would be the same as experienced in the last prebrokerage year, 1993. For this calculation, the use of bus passes and tickets, which was not counted by OMAP, had to be estimated from expense data.

Table 6
Transportation Costs With and Without
ODOT Waiver (Brokerage)

	<i>Total Rides</i>	<i>Total Cost</i>	<i>Cost Per Ride</i>
1999			
Without brokerage	870,315	\$8,162,633	\$9.38
With brokerage	916,121	\$8,142,934	\$8.89
2000			
Without brokerage	894,648	\$8,644,912	\$9.66
With brokerage	941,735	\$8,612,638	\$9.15

Source: ODOT Audit & Review Services

Table 7
Cost Comparison of Brokerage and
Prebrokerage Transportation, OMAP

	<i>With Brokerage (Fiscal Year 2000-01)</i>			
	<i>Rides</i>	<i>Percent of Rides</i>	<i>Cost Per Ride</i>	<i>Cost</i>
Wheelchair car/van	64,845	5.4%	\$22.12	\$1,434,320
Taxi	345,182	28.9%	\$14.26	\$4,923,229
Stretcher Car	4,409	0.4%	\$181.68	\$801,006
Bus Passes	703,216	58.8%	\$0.81	\$572,793
Bus Tickets	76,602	6.4%	\$1.13	\$86,526
Volunteer Transport	55	0.0%	\$15.58	\$857
Secured Transport	1,500	0.1%	\$133.51	\$200,261
Administration*			\$1.57	\$1,871,476
Totals	1,195,809		\$8.27	\$9,890,468

*Including provider credits

	<i>Without Brokerage (Hypothetical)</i>			
	<i>Rides</i>	<i>Percent of Rides</i>	<i>Cost Per Ride</i>	<i>Cost</i>
Wheelchair car/van	91,801	7.7%	\$22.12	\$2,030,555
Taxi	469,803	39.3%	\$14.26	\$6,700,660
Stretcher Car	752	0.1%	\$181.68	\$136,669
Bus Passes**	507,615	42.4%	\$0.81	\$413,470
Bus Tickets**	125,838	10.5%	\$1.13	\$142,141
Volunteer Transport	0	0		\$0
Secured Transport	0	0		\$0
Administration			\$1.57	\$1,871,476
	1,195,809		\$9.45	\$11,294,971
Savings			\$1.17	\$1,404,503

**Estimated from prebrokerage expenses

- Cost per ride for each mode would be the same as paid by the broker. This ignores any cost savings the broker may have been able to achieve by negotiating with providers, as well as any increased cost that could have resulted from enforcing higher service quality standards.
- Administrative cost per ride would be the same as with the broker. Although OMAP did not count administrative costs in the prebroker period, those costs were incurred by other departments of DHS. An analysis by Crain & Associates for Tri-Met conducted in 1994 (Koffman, 1994) indicated that those costs were, if anything, higher than those which were later experienced by the broker.

According to the Federal Centers for Medicare and Medicaid Services fact sheet cited earlier, the most recent waiver renewal application submitted by the State of Oregon estimated savings of \$2,671,742 in 2001–02 and 2002–03.

Service Quality

The ODOT Public Transit Section conducted a nonfinancial assessment of the program in 1998 (Palmateer, 1998). The assessment included interviews of case managers and service providers and reviewed a 1998 client satisfaction survey conducted by OMAP. The assessment found that “the project appears to be an unqualified success. The general level of satisfaction by case managers, service providers and clients is higher than in 1996, with only few specific issues primarily related to unique

problems, not systemic problems associated with either the brokerage design or implementation.”

The assessment quotes the following results from the survey of 1,322 clients:

- 88 percent gave the program ratings of good or higher;
- 85 percent reported on-time pickups always or most of the time;
- 88 percent reported on-time delivery always or most of the time; and
- 63 percent reported no problem with the program.

Other findings include

- Quality of service provided improved;
- Providers were satisfied with financial arrangements and the billing system;
- The most common complaint from case managers was lateness, particularly for return trips and particularly for dialysis centers. Tri-Met staff work hard to resolve these issues so that case managers felt the majority of needs were being met; and
- Providers felt that Tri-Met has been responsive in addressing concerns about customer no-shows.

Based on the success of the brokerage in the Tri-Met area, the state has implemented similar programs in two other parts of Oregon and is in the process of implementing a fourth.

OREGON'S MEDICAID-FUNDED SUPPORTIVE SERVICES

While Medicaid transit pass programs bring additional funds to transit agencies, Oregon's Medicaid-funded supportive services have paid for some expenses that the transit agencies would otherwise have paid themselves, freeing up transit funds for other purposes.

Overview

The State of Oregon has obtained a Medicaid waiver that allows it to use Medicaid program funds to provide supportive services, including transportation, to help frail seniors and people with developmental disabilities to reside in community-based settings and to remain out of institutions. If these same people had to be institutionalized, their institutional care (which would be much more expensive than the costs of the supportive services) would be an eligible Medicaid expense. Under the waiver, supportive services can be paid for instead, which creates substantial savings for the Medicaid program.

Within the State DHS, there are two distinct programs that operate under this waiver:

- The Department of Senior and Disabled Services has 25 contracts with transportation providers throughout Oregon. The contractors, including public transportation agencies, bring eligible seniors to services such as adult day care and health programs. Such services assist seniors to remain living in their own homes.

- Oregon Development Disabilities Services contracts with four providers around the state (including some public transit operators) to provide transportation that allows people with developmental disabilities to remain in the least intrusive most appropriate setting. Rides are provided between the riders' homes and workshops and training centers. This program is known in Oregon as the DD 53 program, which refers to a state accounting code which is used for billing.

Oregon's current Medicaid match rate for program services is 60 percent Federal and 40 percent state. To operate under one of these programs, the local provider is required to provide the 40 percent state matching funds. The 60 percent Federal match, once received by the state, is passed through to the local provider.

Benefits in a Local Application of the Waiver Program: Eugene, Oregon

One example of a locality that operates services under both programs is the paratransit operator that works in conjunction with Lane Transit District (LTD) in Eugene, Oregon. The DD 53 program saves the LTD money by providing funds for riders whose rides would otherwise be paid for through the transit agency's ADA services. For the DD 53 program, the transit district's ADA contractor provided 16,173 rides in fiscal year 2000–01 at a total cost of \$280,000 or \$17.33 per ride. The local public transit agency pays for 40 percent of the cost and

receives 60 percent from the state. As a result, the net cost to the local public transit agency is only \$6.93 per ride. Because most of the individuals who use this service are ADA eligible and either used to ride the ADA paratransit service or would use ADA paratransit services if the DD 53 service were discontinued, LTD is paying \$112,100 for \$280,000 worth of trips.

Estimates of actual savings to the transit agency should be calculated on a with and without basis as shown in Table 8. To do this, it is necessary to take account of fare differences. Rides provided using Medicaid funds are free to the rider, whereas rides provided under the transit agency's ADA

paratransit program have a fare (\$2.00 cash or \$1.50 with a prepaid ticket). If riders now sponsored by the current no-fare DD 53 service had to pay the ADA fare, ridership for the DD program could be lower. As the following calculation shows, even if ridership were 25 percent lower, the local transit agency would still be paying 60 percent more per year (about \$68,000) in the absence of the DD 53 program.

From a larger perspective, it would be necessary to consider the overall cost of services, comparing the transportation and supportive services received by these individuals, compared with the cost of supporting them in an institutional setting.

Table 8
Benefit Estimates for LTD
Medicaid Waiver Program

	<i>With DD 53</i>	<i>Without DD 53</i>
Rides	16,173	12,130
Fully allocated cost	\$280,285	\$210,214
Fare revenue	\$0	\$30,324
State payments	\$168,171	\$0
<i>Net local cost</i>	<i>\$112,114</i>	<i>\$179,889</i>
<i>Savings</i>	<i>\$67,775</i>	

COORDINATION WITH SCHOOL PROGRAMS

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 available to PfP to use for other trips, such as senior and Medicaid transportation. The school district benefited because the program did not cost it anything and saved the school district about \$15,210 per year. The **Mason County Transportation Authority** in rural Mason County, Washington, coordinates school district and public transit resources, saving the Mason Transit and the Mason County School Bus Transportation Co-op over \$20,000 per year in operating expenses, \$120,000 in vehicle purchase costs, and \$83,000 in fuel costs in 2001. The **Dodger Area Rapid Transit System** in Fort Dodge, Iowa, operates the small urban transit system in Fort Dodge, the regional transit service in the six counties, and a school bus service. Being able to spread staff costs over multiple contracts produces an efficiency equivalent to three-fourths of a full-time staff member, which is about \$20,000.

PEOPLE FOR PEOPLE — YAKIMA, WASHINGTON

Although it is not currently in operation, for several years PfP operated a successful school to work program for a rural school district composed of one elementary and one high school in Mabton, Washington, southwest of Grandview. PfP expected the program to resume in 2002. PfP leased a nine-passenger van for \$2 a month from the district. In return, it transported high school students to and from various industry sites for job shadowing programs. The school district fueled and maintained the vehicle and gave a small amount of matching dollars. The vehicle was then available to PfP to use for other trips—such as senior and Medicaid transportation—while the students were at their job shadowing programs.

The school district also benefited, because the school to work transportation program did not cost the district anything and the district did not have to provide a driver for its bus. The school district estimates that driver wages and benefits total approximately \$18 per service hour. When operated as an exclusive program, the school to work program required the district to staff approximately 5 hours of service daily. The following is an estimate of the total annual cost savings to the district:

$$5 \text{ hrs} \times \$18 \text{ per hr} = \$90 \text{ per day} \times 169 \text{ school days} = \$15,210.$$

The vehicle sharing arrangements, like the volunteer-driver arrangements, will require special attention from the coordinating agency in order to monitor complaints and

maintain acceptable quality control. If the quality of service can be maintained, there are no serious flaws to this type of arrangement.

DODGE AREA RAPID TRANSIT SYSTEM – FORT DODGE, IOWA

The State of Iowa has promoted coordinated transportation services for many years. Sixteen regional transit systems provide coordinated services throughout the state. Region 5 in north central Iowa includes six rural counties and the city of Fort Dodge. The **Dodger Area Rapid Transit System** in Fort Dodge provides service to the Mid Iowa Development Association (MIDAS), the council of governments, and the coordinated provider for the six-county region of 101,000 persons in an area of 3,455 square miles (29 persons per square mile). DART operates the small urban transit system in Fort Dodge, the regional transit service in the six counties, and a school bus service. The system provided about 306,000 rides with 42 vehicles (mostly small buses) and a budget of about \$1.0 million in fiscal year 2000–01, excluding school transportation, which is not reported to the state DOT.

School transportation is specifically exempted from the coordination requirements of the Iowa State Code, so the fact that the school system has chosen to contract with DART is a strong indication of the cost effectiveness of coordination in this region. School rides and transit rides are not combined on the same vehicles, so vehicle productivity gains (passengers per

hour) are not possible in this case through coordination. However, the administrator of DART believes that combining these services makes more efficient use of staff time. For example, the school bus service was added without any increase in staffing for vehicle maintenance, dispatching, or drug and alcohol testing. He estimates that being able to spread these staff costs over multiple contracts produces savings equal to three-fourths of one full-time staff member, which is about 10 percent of the total nondriving staff and is equivalent to an annual savings of about \$20,000.

MASON COUNTY TRANSPORTATION AUTHORITY — MASON COUNTY, WASHINGTON

The **Mason County Transportation Authority (Mason Transit)** provides public transportation in Mason County, Washington — a geographic area of 700 square miles with a population of about 40,000. The county is quite rural and has only one city, Shelton, home to approximately 8,000 residents. Much of the remaining population is scattered to the north and east of Shelton and around the many bays that penetrate the county from the Puget Sound.

The transit authority was voted into existence in 1992 and began providing general public dial-a-ride service shortly thereafter. Mason Transit now provides fixed route, dial-a-ride, and commuter services. Ridership on the system grew from 60,000 trips during its first year to over 300,000 in 2001.

Mason Transit is a publicly funded transit authority with 30 vehicles and a \$1.2 million annual operating budget. It contracts out all of its services to a private provider. Mason Transit receives both Federal and state operating funds but is funded in large part by a local sales tax. Mason County is one of only a few rural counties in Washington to have passed a replacement sales tax after a 2000 ballot initiative drastically cut statewide transit funding. (Initiative-695 eliminated motor vehicle excise taxes, which previously generated 40 percent of the operating revenue for transit agencies throughout Washington.) In 2000, Mason Transit began receiving annual funding from Washington's Agency Council on Coordinated Transportation (ACCT) to act as lead agency on coordination in Mason County.

History of Coordination in Mason County

Since its inception, Mason Transit has been coordinating with social service providers in the county. Even before the Washington ACCT was formed, Mason County had its own Coordinated Transportation Coalition. The Coalition is still very active and currently has 66 members, including approximately 15 that provide transportation services. The transit authority subcontracts trips to social service providers, including a large disabled transportation service called Exceptional Foresters, Inc. (EFI). Mason County is home to one of the largest disabled populations in the state of Washington, due

in part to a large sheltered workshop located in Shelton. EFI is the primary transportation provider for disabled citizens attending the workshop. Mason Transit contracts with EFI to provide general public demand-response trips on a space available basis. Mason Transit dispatchers can track EFI vehicles and contact their drivers when an EFI vehicle is in the range of a desired general public pickup.

Over 1,200 Mason County residents work at the Puget Sound Naval Shipyard located in Kitsap County, which borders northeast Mason County. About 35 percent of the service deployed by Mason Transit goes to meeting the commuting needs of these and other residents working in neighboring counties.

Mason Transit has a cooperative agreement with the Puget Sound Naval Shipyard to operate a worker/driver program. This is a cost effective solution for providing Mason County residents transportation to shipyard jobs in Bremerton. The program trains shipyard workers to drive transit vehicles, and the vehicles are then loaned to employees to operate. The Navy pays Mason Transit \$100 for each participating employee per month for the loan of two 35-foot transit coaches. During the year 2001, Mason Transit received \$75,000 from the Navy to provide services that cost the system \$28,800 per year, for a total benefit of \$46,200.

Were Mason Transit to provide the service itself, the annual operating cost for this service would be \$45,720. This cooperative agreement with Puget Sound Naval Shipyard administration and workers allows

Mason Transit to operate what might otherwise be a revenue neutral program at a profit. The program requires minimal staff time; its revenues help to support other poorly funded services.

Coordination with School Districts

One of the more exciting outcomes of Mason Transit's long-standing commitment to utilizing community resources is a program developed to coordinate school district and public transit resources. Mason Transit received a 1997 demonstration grant of \$69,410 from the ACCT for a 1-year demonstration project. The four primary objectives of the project were to

1. Build a transportation coalition with local agencies to establish community consensus relative to rational expectations and achievable goals;
2. Identify transportation deficiencies;
3. Develop coordination and collaboration addressing identified deficiencies in the transportation system; and
4. Increase transportation opportunities.

Even before the Mason Transit received the ACCT grant, community activist groups had been meeting to discuss methods for providing afternoon transportation for students in the Shelton School District. Citizen groups had approached the transit authority about providing this service, but the authority's resources and vehicles were already spread thin, due to significant demand for evening commuter service. In fact, Mason Transit was already cutting service to rural areas in order to provide

additional vehicles for the evening commute. With the impetus of the ACCT grant and several vocal community activists, Mason Transit and the Shelton School District developed a coordination plan to address these two major gaps in service: (1) insufficient service to rural areas of the county and (2) no transportation home for students attending after-school activities. The shared service on the school buses allows Mason Transit to provide service to previously unserved areas.

In the spring of 2000, Mason Transit contracted with the Shelton School and North Mason School Districts to use late afternoon school bus service (around 5:00 p.m.) to provide public transportation in rural areas of the county. This demonstration program combined the transportation of middle and high school students needing a ride home from after school programs with general public passengers.

Mason Transit agreed to pay the Shelton School District \$19.86 per hour and an additional \$0.85 per mile to provide service on three rural routes using the district's yellow bus vehicles. The school district also contributed funds to pay for students traveling to and from after-school activities. The resulting per hour cost to provide this service is slightly less than the per-hour rate Mason Transit pays its contractor to operate its own coaches. Two of the initial routes were deviated fixed routes and a third operated as a zone route. The zone route allowed Mason Transit to remove a demand-response vehicle it regularly deployed to serve the zone area and utilize

the vehicle elsewhere. Coordination with the Shelton School District also eliminated the need for Mason Transit to purchase new vehicles.

Mason Transit is also exploring the coordinated use of school buses that transport special needs students out of the county. These buses currently deadhead empty from Thurston County in the morning and back in the afternoon. Mason Transit has proposed using the school bus vehicles to transport general public passengers between counties, rather than simply deadheading back to the garage or to the pick-up site. The school districts and transit providers in neighboring Thurston County have expressed significant interest in coordinating these services.

Although the school/transit bus demonstration program ended in June 2001, Mason Transit was able to continue funding for two of the three routes serving the Shelton School District. North Mason District is very interested in reinstating the third route, and Mason Transit expects that funding will be available to revive service on that route later this year. The county's third school district, Pioneer, is also very interested in the program.

Mason Transit also runs a worker/driver program for employees of the Puget Sound Naval Shipyard. The program trains workers at the site to drive transit vehicles, and the vehicles are then loaned to employees to operate and to transport other Shipyard employees. The Navy pays approximately \$100 per employee per month for the service. In turn, Mason Transit loans two 35-foot coaches to

employees of the Naval Shipyard. Loads on both vehicles are consistently high, and there is often only standing room available.

Economic Benefits of Transit/School Coordination in Mason County

As is the case in many rural areas where transportation funding is limited, Mason Transit has found that transportation coordination programs generate significant benefits. The school district coordination program has shown quantifiable economic benefits for Mason Transit in terms of (1) operational cost savings, (2) capital cost savings, and (3) fuel cost reductions.

Operational Cost Savings. The school/transit bus coordination project in Mason County has economic benefits to both the transit district and the school district's transportation co-op. Mason Transit reimburses the school district \$0.85 per mile and \$19.86 per hour for driver salaries. The school district transportation director estimates that each of the two 1.5-hour daily routes cost \$29.79 for driver pay and \$25.50 for mileage, a total of \$55.29 per route per day.

The school year in Mason County is 169 days. Therefore, operating the service on every school day (a total of 507 revenue hours) costs

$$\begin{aligned} \$55.29 \times 2 \text{ routes} &= \$110.58 \text{ per day} \times 169 \\ \text{days} &= \$18,688 \text{ annually.} \end{aligned}$$

Comparatively, Mason Transit contracts for paratransit services at a cost of \$44.33 per revenue hour. Were Mason Transit to provide this service using paratransit

services, the estimated annual costs would be

$$3 \text{ rev. hrs/day} \times 169 \text{ days} = 507 \text{ rev. hrs} \times \\ \$44.33 \text{ per hour} = \$22,475 \text{ annually.}$$

Although this total annual operating costs savings of \$3,789 is not large, the subsidy of the school service can be assumed to provide an economic benefit by replacing traditionally duplicative service.

Future expansion of the program, now being studied, could significantly increase the economic benefits generated annually by the coordination program.

Capital Cost Savings. Mason Transit's fixed route fleet is composed primarily of 35-foot Gillig buses. These vehicles cost approximately \$300,000 in 2002 dollars. The school/transit bus coordination program allows Mason Transit to provide service at a time when its fleet resources are fully utilized serving the regional commuter demand. In other words, the program allows Mason Transit to provide service that would otherwise require the addition of two passenger service vehicles to its fleet. Assuming these vehicles would be full sized coaches that Mason Transit would buy from Gillig, the school/transit bus coordination project has eliminated the need for over \$600,000 in vehicle purchase costs. Because Mason Transit is eligible for FTA Section 5309 capital grants, which typically fund 80 percent of vehicle purchase requests, the actual capital cost savings to the Mason Transit authority may be closer to its 20 percent local share or \$120,000. Assuming that the service life of

such vehicles is 10 years, the annual capital cost savings to Mason Transit is \$12,000.

If the program expands into additional areas and Mason Transit is able to provide new general public service with no expansion to its fleet, capital costs savings from the program will continue to grow.

Shared Fuel Purchasing. The school/transit bus coordination project has allowed Mason Transit to purchase diesel and unleaded fuels through the school district's co-op program. Since they began participating in the fuel co-op program, Mason Transit has been the largest annual consumer of diesel fuel. Instead of paying retail prices at the pump, as they did previously, Mason Transit now pays the district's fuel cost plus an 8 percent administrative fee for fuel purchased from the district. Mason Transit paid \$91,000 for diesel fuel and \$320 for unleaded fuel in 2001. During that year, Mason Transit purchased approximately 110,000 gallons of fuel at an average of \$0.80 per gallon. In addition, Mason Transit is eligible to receive an exemption from the Washington state gasoline tax of \$0.23 per gallon. Therefore, Mason Transit's average annual cost per gallon was just \$0.57 during 2001.

According to the Energy Information Administration Retail Diesel Fuel Price Index, the average retail cost per gallon for diesel fuel in the Northwest was \$1.33 for the year 2001 (Energy Information Administration, 2002). This means that Mason Transit may have saved as much as \$0.76 per gallon of diesel fuel purchased during this year, amounting to an annual cost savings of about \$83,600. (It should be

noted that actual diesel prices in Mason County might have varied slightly from the regional averages used in this calculation.)

Overall Benefits to Mason Transit. The overall economic benefits to Mason Transit total nearly \$100,000 per year from the following sources:

- Operating cost savings: \$3,789;
- Capital cost savings: \$12,000; and
- Fuel cost savings: \$83,600.

Benefits to the School District. Without the coordination program, the school district would be required to duplicate the service provided by Mason Transit. To do this, Mason School District would need to expend an additional \$18,688 annually.

This is a significant benefit to this poorly funded school district transportation program.

Other Key Benefits. The following is a summary of other noneconomic benefits of coordination with school districts in Mason County, focusing primarily on the school/transit bus program:

- Provides rides for school children attending after school programs and allows many children who were previously unable to attend after-school activities.
- Fills gaps in Mason Transit's rural service during the afternoon commute when commuter services utilize all available vehicles.
- Creates a much larger pool of certified transit drivers in the area. School bus

drivers operating the shared routes are required to participate in Mason Transit's driver training program. This is an important benefit as it can be difficult to find certified drivers in a rural area like Mason County.

- Generated community interest in the transit system and acted as an educational process. After some initial confusion about the school/transit bus program, its success has become a point of pride for citizens of Shelton and all of Mason County.

CHALLENGES AND HIDDEN COSTS OF COORDINATION EFFORTS

Mason Transit and the participating school districts have faced a number of challenges over the course of the school/transit bus coordination project. Despite some significant cost savings (discussed above), Mason Transit has also incurred some capital and administrative costs in running the school/transit bus program. The following list outlines a number of obstacles, challenges, and costs faced by Mason Transit in coordinating general public transportation services with the local school district and other regional providers.

- **School buses do not have programmable headsigns and all carry school logos.** Magnetic signs announcing Mason Transit were placed over the school district signs when the bus was being used for public transportation. The initial set of signs purchased by Mason Transit blew off because they did not fit between the rivets on the bus. Mason Transit spent quite a bit of money replacing the lost signs.

- **Safety and stop lighting are different on school buses than on public transit vehicles.** The transit authority agreed not to use the school bus' safety equipment to stop on rural roads. Rather, buses are required to move off the road for pickups and drop-offs.
- **Fare collection on school buses is problematic.** Mason Transit is a fare free system. Over the last year the transit agency's board has been looking into implementing fares for fixed route and demand-responsive trips. Were it to implement a per-trip fare, this could cause significant problems on the shared vehicle routes as the school district is not interested in installing fareboxes or asking drivers to collect fares.
- **Communication systems are not compatible.** Communications are an issue that is yet to be resolved. Mason Transit is not able to communicate with drivers on school bus vehicles due to configurations of the different radio systems. Mason Transit is currently working with the school district to resolve this issue. The solution will most likely require Mason Transit and/or the district to purchase new radio equipment.
- **Administrative costs have increased.** Administrative demands of the school/transit bus program have required Mason Transit to hire additional administrative staff. Initially demands came from stakeholder and policy group meetings; now with the program's nationally recognized success, the dissemination of information has become very demanding on staff time.
- **School buses are not lift equipped.** Because the larger vehicles on the school/transit routes are not lift equipped, the district has a smaller lift equipped school bus on stand-by to pick up any wheelchair passengers. This requires that the district pay a standby driver during the time these routes are in service.
- **Concerns have surfaced about the safety of school children riding with the general public.** Mason Transit and the Shelton School District had to overcome the Washington State Superintendent of Public Instruction's edict that no members of the general public share a school vehicle with school age children. A legal review by the state showed that there was no Washington law that clearly prohibited such sharing of vehicles.
- **The public is confused about the identity of buses.** There was a lot of confusion and curiosity when the school buses with magnetic Mason Transit logos first rolled out. In fact, Mason Transit's director claims that this was probably their best advertising as people were calling in constantly to see what was going on. The success of the program has now become a real source of pride in this relatively poor rural area.
- **There is a low level of financial contribution by the school districts.** Mason Transit currently pays the majority of the costs for the school/transit services even though a greater percentage of the ridership is school children. The school districts realize that they will have to find a way to pay a higher percentage of the cost to make the service more sustainable.
- **Stable funding to keep the program running and to expand is lacking.** Mason Transit faces the challenge of keeping a very popular program running with limited financial support. In the face of pressure by the public and school districts to expand the

program, Mason Transit is being forced to make difficult decisions about how much service its budget can support. For example, Pioneer School District wants to join the program, in part to provide additional revenue to pay drivers who are currently being paid for hours they are not actually driving, but does not have funding to contribute to additional service.

CONCLUSION

When transit agencies coordinate with human service agencies to provide trips to human service agency clients, the transit agencies can realize significant additional funds. At the same time, human service

agencies typically receive substantial trip cost savings. Florida's Miami-Dade Transit and Tri-Met in Portland, Oregon, achieved very large funding increases by providing trips to Medicaid clients. The Medicaid program seems to present larger funding opportunities than does coordination with most other human service programs. Coordination of public transit services with pupil transportation services has also been beneficial in a number of communities. The applicability of various strategies to a particular community will depend on local conditions. Coordination strategies that increase transit funding and save money for human service agencies should be worth pursuing in many communities.