



Kansas RTAP Fact Sheet

A Service of The University of Kansas Transportation Center for Rural Transit Providers

Sharing the Costs of Coordinated Human Services Transportation: It Starts With a Plan

By Nate Vander Broek

In our October 2011 issue, our article titled “The Economic Impact of Public Transportation in Rural Kansas” highlighted the benefits and costs of transit coordination. Benefits include: providing access to more funds and more sources of funds; filling in service gaps within existing budgets; and improving the quality and cost-effectiveness of services. A significant need for coordinating services is the time to develop a cost allocation plan that distributes costs across a regional area fairly. This article will show transit and financial managers how to get started with such a plan.

Common reporting problems

According to the National Conference of State Legislatures, there are approximately 44,000 government agencies at different levels—each with its own laws or regulations—and thousands of nonprofits, private companies and individuals involved in transportation service provision in the United States. With so many organizations and regulations involved, it's no surprise that it's difficult to have a uniform system of collecting data and reporting costs.

Other reasons for a lack of a uniform system of collecting data and reporting costs are:

- Major federal programs often have very different data collection and reporting requirements;
- States impose their own accounting and reporting practices; and
- Local service administrators create their own sometimes complicated reporting process.

These inconsistencies in accounting procedures make comparing services and costs among organizations like comparing apples and oranges and may cause the managers of one organization in a coordinated service to wonder if they are unfairly paying more of a shared service than other organizations. Furthermore, without a uniform system, there may be an incomplete knowledge of all the programs' costs and services, leading to poor decisions.



Coordination objectives are best accomplished when participating providers agree on an accounting structure and apply consistent methods to record, report and analyze financial and non-financial data.

For example, Richard Garrity, an expert in transit and paratransit planning and co-author of the TCRP report *Sharing the Costs of Human Services Transportation*, says that when all costs are not recorded or fully understood, effective management is compromised. For instance, when recording costs for coordinated transportation, if only out-of-pocket costs like gasoline or vehicle maintenance are recorded and other costs, such as administrative personnel or utilities are not reported, then the overall costs are under-reported. Garrity warns that this may give managers a false picture of operating costs and lead to unwise decisions, especially when comparing alternative options for providing service.

The components of a uniform system

A system that accounts for all services provided and costs incurred will give agencies the tools to compare, analyze, and determine program effects. By using a system that requires all the necessary data (financial and non-financial) to be pulled in a consistent manner, transit agencies may be able to

identify areas with performance problems and quickly make changes before the situation worsens. Having these essential data also helps with long-term planning and decision-making by accurately knowing current costs and better predicting future costs. And finally, organizations that use this method will likely already have all the data and information required for future funding from state and local governments.

According to *Sharing the Costs of Human Services Transportation*, to create a comprehensive cost accounting system for a coordinated transportation service, you must:

- Describe in detail all costs that have been incurred and all services provided.
- Describe in detail how the funds of all participating agencies have been spent. (This description should be designed to satisfy the audit and regulatory requirements of each participating agency.)
- Provide the opportunity to distribute the costs of transportation services among those receiving services based on the actual costs of the services each has received.

These objectives are best accomplished when participating providers agree on an accounting structure, create standardized definitions and data collection procedures, and apply a consistent chart and method to record, report and analyze both financial and non-financial data.

Setting the right price for the service

Sharing the cost of transportation services among all stakeholders—including riders, transportation providers and purchasers, local governments and state and federal programs—must be done in a fair manner to be considered cost-effective. When trying to get the right price, it's important to understand the difference between the costs of your services and the price you will pay for services. Costs include everything related to producing transportation services, such as salaries, fuel, supplies, insurance and taxes. Price, on the other hand, is negotiated in a contract and is specified by a unit, such as cost per mile, per hour or some combination of these.

While costs may change over time, price is typically consistent over a period of time, such as the length of the contract. Prices, therefore, should be equitable and easy to understand for all parties. All stakeholders should pay their fair share of the price. This is accomplished when each

A Cost-Sharing Model

The TCRP report 144 includes a free downloadable Excel tool called the Human Services Transportation Cost Sharing Model designed to help you learn your organization's total costs of a specific service or program. The tool, which can be downloaded at <http://www.trb.org/Publications/Blurbs/165015.aspx>, runs on Excel 2003 or 2007 and requires the use of macros.

The Human Services Transportation Cost Sharing Model requires that the user enter the following data:

- Total service outputs – miles, hours and passengers from prior years;
- Line item expenses from the previous year or the coming year as projected;
- The anticipated number of miles, hours and passengers for the service alternative being considered.

Based on this data, the model automatically assigns each expense as variable or fixed costs. Variable costs are those that change with the amount of service provided, such as fuel and maintenance costs. Fixed costs, such as salaries and facility depreciation, do not change based on the amount of service. Next, the model calculates the costs of the services, and then calculates a price per mile, per hour or per passenger.

To establish a unit rate for each purchasing agency, repeat these calculations for each agency that purchases transportation services. For detailed instructions on the cost sharing model, how the calculations are made, and definitions of the terms used in the model, download the TCRP Report 144 Volumes 1 and 2 at <http://www.trb.org/Publications/Blurbs/165015.aspx>.

stakeholder's proportion of payments for service equals that stakeholder's proportion of costs required to provide services.

Solutions to common problems when using a uniform accounting system

As this article has shown, using a uniform accounting system has its advantages, but it also has its own set of obstacles. To help overcome these obstacles, we've listed

Sources

- The Economic Impact of Public Transportation in Rural Kansas, Nate Vander Broek and Pat Weaver, Kansas TransReporter, October 2011 <http://www.kutc.ku.edu/pdf/files/KTR2011-Oct.pdf>
- TCRP Report 144, Sharing the Costs of Human Services Transportation, Volumes 1 and 2, 2011 <http://www.trb.org/Publications/Blurbs/165015.aspx>
- The Human Services Transportation Cost Sharing Model. <http://www.trb.org/Publications/Blurbs/165015.aspx>
- Regional Human Service Transportation Coordinating Councils: Synthesis, Case Studies and Directory. National Conference of State Legislatures, 2012. http://www.ncsl.org/documents/transportation/NCSL_Regional_HSTCC_synthesis_case_studies.pdf

some common problems and solutions to those problems.

Problem: Disagreement on definition of terms and services among participating transportation providers.

Solution: Agree on and use standardized terminology. This is critical to providing comparable data for management and accountability. The sidebar listing the required pieces of a comprehensive accounting system provides definitions of some common reporting terms. For a complete list of definitions of key transportation and accounting concepts as well as federal legislation and programs, see the glossary found in the TCRP Report 144 at http://onlinepubs.trb.org/onlinepubs/tcrp/tcrp_rpt_144v1.pdf.

Problem: A lack of comprehensive data for all contracting agencies in one standardized electronic format. **Solution:** Let your dispatching and scheduling software do the work for you. The software should provide comprehensive data in one standardized format to eliminate the need for modifications per each contracting customer.

Problem: Contradictory reporting requirements within state agencies and between state and local agencies. **Solution:** While there isn't an easy fix for this problem, it is important that you proactively talk to the state and local agencies and inform them of this problem. According to the TCRP Report 144, most of the state agencies contacted were not aware of how the local grantee was collecting data from the transportation providers. The more aware the agencies are of their inconsistencies with other agencies, the more likely they will work together with other agencies and agree on a standardized reporting system. In Kansas, representatives for state agencies interested in human service transportation, including KDOT, Kansas Department on Aging, Kansas Department of Social and Rehabilitation Services, Kansas Department of Commerce, and others meet in a quarterly basis to discuss coordination issues among the agencies. Contact your KDOT Program Consultant if you encounter a specific obstacle in reporting requirements.

Conclusion

Using a systematic approach to documenting transportation services and costs not only helps managers better understand the programs' costs and services, but opens up the possibility to coordinate services in a fair and cost-effective way. A free cost sharing model will provide you with the real service price, whether per mile, per hour or per passenger, helping you make an informed decision when purchasing transportation services. ●

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What data are required for a comprehensive cost accounting system?

- **Total dollar costs.** This includes labor, fringe benefits, purchased transportation, contracted services, materials and supplies, general administrative expenses, utilities, casualty and liability costs, taxes, leases and rental, capital expenses, depreciation and amortization, and miscellaneous expenses.
- **Total vehicle miles.** This is the number of miles a vehicle is scheduled to or actually travels from its point of departure to when it pulls in from service.
- **Total vehicle hours.** This is the number of hours a vehicle is scheduled to or actually travels from its point of departure to when it pulls in from service.
- **Total passenger trips.** These must be unlinked trips, meaning that passengers are counted each time they board a vehicle, no matter how many vehicles they use before arriving at a destination.
- **Total unduplicated persons served.** Unlike total passenger trips, where each unlinked trip is counted, total unduplicated persons served counts the number of unique individual persons who receive transportation services during any reporting period. For example, if two passengers take a trip involving three vehicles, then: total passenger trips = 6 (2 passengers x 3 unlinked trips) and total unduplicated persons served = 2.

Note that number of persons served is generally available from demand-responsive but not fixed-route operations, and is more commonly recorded for human service programs than for transportation programs.