Successful Local Transportation Coordination Case Studies

Coordination Strategy: Coordinate dispatch

Hubbard County Heartland Express/Paul Bunyan Transit Joint Dispatch

Background

The Hubbard County Heartland Express offers on-demand bus service within the City of Park Rapids. The city buses are 12-passenger, wheelchair-accessible vehicles that run Monday through Friday, from 7:15 a.m. to 4:45 p.m. Anyone is eligible to schedule a ride. About 25 percent of riders are children, 33 percent are people with disabilities, 26 percent are older adults, and 16 percent are other adults.

Beginning in February 2011, Hubbard County contracted with Paul Bunyan Transit, located in Beltrami County, to provide dispatch services for its city buses. Paul Bunyan Transit used dispatch software, automatic vehicle locators (AVLs), and mobile data terminals to make a direct connection with the Heartland Express vehicles. Residents of Park Rapids call the same phone number for service, but calls are transferred to Paul Bunyan Transit for dispatching.

Problem/Opportunity

Originally, the Heartland Express offered service to the City of Park Rapids using one bus. The bus driver also acted as the dispatcher, with all incoming calls going to a cell phone carried by the driver. When the Heartland Express added a second bus to the service, it became clear that safety, efficiency, and coordination would be compromised by the continued use of this system. One driver would have to answer all of the incoming calls and then dispatch both buses by placing calls to the other driver.

Solution

Contracting with Paul Bunyan Transit to provide dispatch services for the two city buses helped improve the safety and coordination of the city bus service. Paul Bunyan Transit’s dispatch system allows each Heartland Express bus driver to receive dispatch instructions on a screen rather than via a cell phone.

Results/Benefits

The joint dispatch has allowed the Heartland

Service Area

- Serves the City of Park Rapids
- 6 square miles
- 3,709 residents
- Anyone in the city may schedule a ride

Financial

- $33,000 initial capital expenditure to install dispatch equipment in Heartland Express buses
- $15,000 budgeted for dispatch in 2011
- Fare: $1.50 for a one-way ride

Operational Characteristics

-Began on February 1, 2011
- Two Heartland Express city buses
- Two full-time-equivalent bus drivers (Heartland Express)
- One full-time dispatcher at Paul Bunyan Transit dedicated to Heartland Express

Results

-1,800 rides from February – May 2011

Lessons Learned

- Adjusted to needs of new system; tailored dispatch to fit smaller community

Contact

- Linda Bair, Hubbard County, 218-732-9328, lbair@co.hubbard.mn.us
- Gregory O. Negard, Paul Bunyan Transit, 218-751-8765, pbtrans@paulbunyan.net
Express to maintain a more efficient dispatch service for its city buses. Because of this improved efficiency, city ridership increased by 18 percent in the first three months of the joint dispatch.

The partnership has also given the Heartland Express inexpensive access to dispatch software and AVL technology. The Heartland Express was able avoid the expense of purchasing an entire system by taking advantage of Paul Bunyan Transit’s existing core equipment and software. Access to AVL technology has also provided the Heartland Express with the tools to track its buses at all times and create reports of each bus’s activities.

In addition, hiring a dispatcher dedicated to the city service would have cost Hubbard County an estimated $38,000 per year. The $15,000 budgeted in 2011 for dispatch services means that Hubbard County has saved about $23,000 in 2011 staff costs by using the joint dispatch. Paul Bunyan Transit has also benefited, both from the added revenue from the dispatch contract and the addition of a staff person who can help with other administrative duties.

Challenges/Lessons Learned

The first challenge faced by the Heartland Express was making sure that bus drivers and passengers adjusted to the new dispatch system. Drivers were at times uncomfortable with the idea of placing control into unknown hands, and passengers had to adapt to longer wait times caused by the coordination of more group rides. The addition of group rides increased total capacity, but it also meant that passengers had to allow for a 15-minute window on either side of a scheduled ride.

Drivers and passengers also had to start providing specific addresses for pick-up and drop-off locations. Under the old system, bus drivers in the small community were familiar with business names and even passengers’ residences. The dispatchers at Paul Bunyan Transit, however, needed addresses in order to dispatch the buses.

Another challenge early on was adjusting to the differences in size between the City of Bemidji, served by Paul Bunyan Transit, and the City of Park Rapids. Paul Bunyan Transit dispatchers were used to working with a larger community, where drivers needed 15 to 30 minutes to complete a trip and get back across town. In Park Rapids, drivers only needed about 5 or 6 minutes to cross town, so rides could be scheduled closer together. Throughout the process, Paul Bunyan Transit was flexible about adapting their procedures to develop a system that met the smaller community’s needs.

Future Direction

Currently, the Heartland Express only provides city service within the city limits of Park Rapids. Because of the increased efficiency and capacity achieved through the joint dispatch, the Heartland Express is considering expanding the service outside of the city to some nearby dense population areas. The Heartland Express is also hoping to increase its service offerings to groups that have not been served by the city bus in the past, such as older adult and assisted living facilities.