CASE STUDY: REGINA TRANSIT

Regina Transit is the public transportation agency operated by the city of Regina, the capital of Saskatchewan in Canada. With a population of almost 200,000, Regina is the cultural and commercial metropolis for southern Saskatchewan. Regina Transit operates fixed route transit as well as a fleet of 30 demand response vehicles which perform approximately 600 trips per day. In 2007, Regina Transit equipped their demand response vehicles with Trapeze Mobile Data Computers (MDC, now called Treq).

"One other notable difference that has been noticed for 2007 is that our trips are up by 2,300 and our vehicle operating hours have decreased by 650 hours. The [savings into dollars] conversion would be approximately $20,000."

— Jamie Halpenny, Paratransit Officer, City of Regina

Challenges

Before installing Trapeze MDCs, Regina Transit faced numerous operational inefficiencies and problems in a manual dispatch environment. Dispatchers wanting to accommodate will calls or missed trips had difficulty pinpointing the actual location of vehicles. Often, it was impossible to find out where the vehicles actually were at a given time.

Giving out add-on trip information to drivers took several steps: dispatchers had to radio them, and drivers had to pull over and write down the pick-up and drop-off addresses. Then, drivers had to figure out the best connections between two or more stops. If sites had poor radio coverage, dispatchers sometimes could not even get through to drivers and pick-ups were being missed.

Dispatchers lacked real-time information on trips. There was no way of knowing the actual pick-up/drop-off statuses of each trip unless the dispatch spoke to the driver.

Solution

After analyzing the above mentioned challenges, Regina Transit managers realized that most of their inefficiencies stemmed from unreliable radio/communications and a lack of real-time location information. It was decided that a complete Trapeze mobile computing solution would be the best way to address all challenges and smoothen out the communications between dispatch and vehicles.

Trapeze mobile computing solutions enable instant communications between drivers and dispatch. Integrated GPS automatically provides the dispatch center with accurate real-time vehicle location information at all times.

In 2007, Regina Transit opted for MDCs (now Treq) to provide drivers with all information they may need to complete their shift. Real-time updates enable dispatch and drivers on the road to constantly optimize manifests and schedules to provide customers with the most effective and cost-efficient demand response service possible.

Trapeze offers various hardware solutions to suit different operational needs and budgets. Agencies can opt for ruggedized on-board computers such as the Treq and other options as well as for more cost effective handheld options such as BlackBerry and Android-based Smartphones and tablets.

NOVUS-DR also offers reporting functions that make it easier for Transit Managers to produce performance and overview reports, as well as follow-up on client complaints. Ridership numbers and other performance indicators are automatically generated with the new system.

Results / Conclusion

Regina Transit dispatchers now can view the real-time location of vehicles on a map from the Trapeze dispatch system. They can also check run information and each event that has been performed at a given time. The mobile system automatically sends out add-on data for viewing on the mobile unit.

All trip exceptions are automatically dispatched by the mobile system. Dispatchers do not need to rely on the radio anymore and can text message drivers. Significantly less time is required for data reconciliation since data is automatically entered. For customer investigations, Regina Transit staff can mine historical data and verify no-shows using actual GPS data.

After the implementation of MDCs, Regina Transit's weekday ridership increased by 16 percent. The passengers per hour number increased from 2.96 to 3.0.

SNAPSHOT

Type of Service:	Demand Response and Fixed Route Transport
Number of Vehicles:	30
DR Trips per Day:	ca. 600

U.S.A. (480) 627 8400 | **Canada** (905) 629 8727

www.trapezegroup.com

NOVUS™ Trapeze™