

## Client Case Study

### ▶ DISTRICT PROFILE



**Round Rock Independent School District - Round Rock, TX** is a fast-growing district located in the Austin, Texas area.

Considered a flagship operation in Texas transportation, the district consists of four high schools, nine middle schools and 30 elementary schools with a population of 41,000 students.

The transportation department serves 13,000 students twice per day and operates 157 routes generating 1100 daily trips covering approximately 17,000 miles.

**Dan Roberts**, Round Rock's Executive Director of Long Range Planning and Business Support, is a pioneer in developing routing and logistics software solutions for school districts. In 1976, while at Austin ISD, he and two professors from MIT and Rice University formed a task force to develop one of the first computerized routing and logistics management software programs in the country.

### SITUATION

The financial challenge faced by Round Rock, especially as fuel prices have increased, has been significant. The state of Texas froze Round Rock's funding level in 2005, and the per pupil budget has not been increased in the last several years, nor will it be bolstered in the foreseeable future. This is happening at the same time that fuel and utility costs are going through the roof and Round Rock's student population is growing.

As a matter of fact, district population projections indicated that 10 new bus routes would have to be created. Confronting these circumstances, Dan Roberts still had to maintain his current service levels and find a way to make his routes more efficient.

### SOLUTION

The Round Rock district has always stressed efficiency, and they used to place their stops away from centralized, heavier traffic-patterned areas. For fall of 2008, though, Roberts used Transfinder's Routefinder Pro software to execute a strategy that focused on making the routes more linear and avoiding the fuel-consuming twists and turns and stops and starts of neighborhood developments. He suggests that any district can do what was done at Round Rock.

The Round Rock transportation team used the Routefinder Pro system to give them another way to consolidate routes while still servicing the same riders. They reduced the average number of bus stops per route from eight or nine down to an average of seven to cut 1000 stops out of 1100 daily trips. "Community response was very reasonable," said Roberts. "Almost everyone understood that these changes were necessary. And they know that we always keep safety in mind when analyzing our routes."

## BENEFITS

Routefinder Pro is such an easy-to-use and visual program that even new users, in districts small and large, will be able to make the kinds of changes that Round Rock did to improve its efficiency.

The ability to see students on the map and have a broad overview of existing routes creates a visual cue to the kinds of efficiencies that can be achieved.

“The speed and user-friendliness of Routefinder Pro allows you to bring in people with little or no experience and get them trained in a very rapid manner,” said Roberts.

School transportation departments face a variety of challenges from year to year. Escalating fuel cost is the latest. There will no doubt be more down the road.

### ▶▶ District Faced Increasing Ridership, Skyrocketing Fuel Prices, and Little Budget Relief

“Looking for routing efficiency, we changed our philosophy from having bus stops away from collector streets to placing them closer to, or even on, collector streets, while still ensuring walk to stop safety and bus stop safety. So we moved the stops in more of a linear pattern through the neighborhoods and were able to eliminate 1000 bus stops while still servicing the growing student population. Some students have to walk farther, but some walk a shorter distance. It was a change for everyone, but we were able to cut those 10 new bus routes and save \$460,000.”

Dan Roberts  
Round Rock ISD, TX



Tracy Hoke, Chief Financial Officer, and Dan Roberts, Transportation Director, review and rewrite daily bus routes for maximum efficiency.

Photo from *Texas School Business - In the Driver's Seat* (2007-2008)



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