



Project Summary

Texas Department of Transportation

0-6205: Benchmarking and Improving Texas Rural Public Transportation Systems

Background

Rural and small urban transit systems in Texas will become even more important with predicted changes in population trends. Rural demographic trends indicate growth in persons age 65 and over coupled with a decrease in population density. Small urban area trends indicate substantial population growth and broadened geographic boundaries. Yet resources to provide rural and small urban transit are limited. Therefore, transit managers find it is increasingly important to maximize service efficiency and effectiveness. The purpose of this research was to identify peer groups, performance benchmarks, and strategies used by successful transit providers to achieve high performance.

What the Researchers Did

Researchers used cluster analysis to identify peer groups among rural and urban transit districts in Texas. To establish these clusters, researchers used data that reflect the transit environment in which each district operates, focusing on key demographic factors that influence transit utilization. Researchers then created charts to plot revenue miles per operating cost (efficiency factor) and passengers per revenue mile (effectiveness factor) for each of the peer groups and for the collective sets of all rural transit districts and all small urban transit districts.

Using the resulting charts, researchers could visually identify higher-performing districts for case study. Through the case studies, researchers identified the key characteristics of transit districts that achieve higher operating efficiency and/or effectiveness. Researchers then categorized the characteristics of the higher-performing transit districts and the successful service strategies. The research report for this project provides transferrable information that other transit districts can use to improve performance and increase the return on transit investment.

What They Found

Through case study analysis, researchers found that although the environment plays some role in performance, managers can control or influence operating effectiveness and efficiency through good management and initiatives to improve performance. Researchers grouped these factors into four major categories.

Efforts to Grow Ridership

- Engage city and county officials in transit—find champions for transit.
- Actively seek out areas with transit-dependent communities.
- Work with major manufacturers, plants, and industries to serve worker shifts.
- Consistently attend and actively request to speak at community events and meetings.
- Work with colleges, universities, and school districts to create cooperative transit routes.
- Work with health and human services and medical facilities to coordinate schedules for the convenience of clients.

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Strategies to Manage Costs

- Actively seek in-kind contributions to support the transit program.
- Work with cities and counties to supply fuel at lower-cost bulk rates.
- Utilize fuel cards (state or private) to monitor fuel usage and cost.
- Use sub-contractors to provide service at cost-effective rates where appropriate.
- Utilize sub-contractors to provide service during low-demand times of the day.
- Ensure rates for contracted transit services cover both operating and capital costs.
- Allocate administrative and overhead costs across programs in agencies that provide other programs in addition to transit.

Tactics to Decrease Vehicle Miles or Maximize Labor Productivity

- Create satellite parking sites with vehicle spares located throughout a large service area to minimize deadhead (seek in-kind contributions for parking).
- Create cooperative agreements with other transit districts to coordinate the use of vehicles (when in another transit district service area) to minimize downtime/idle time and increase productivity.
- Utilize automated scheduling systems to maximize grouping of trips and minimize “slack” time.
- Utilize automated vehicle locator systems to improve vehicle dispatch, provide quality information to patrons, map scheduled trips to ensure trip reasonableness, and verify no-shows.
- Cross-train staff to provide backup and improve staff productivity (match senior staff with new trainees).
- Monitor and manage driver overtime.
- Create both full-time and part-time driver schedules to match service demand.

Efforts to Improve Management and Administration

- Run weekly/monthly reports to monitor and manage driver productivity, passenger complaints, passenger no-shows/cancellations, absenteeism, vehicle inspections, vehicle repairs (repeats), client travel times, and client wait times.
- Require vehicle operators to turn in paperwork and fares on a daily basis with finance staff providing receipt and reconciliation.
- Ensure quality maintenance with priority turn-around through maintenance agreements.
- Monitor preventive maintenance and fleet issues to prevent costly repairs.
- Regularly communicate to passengers rules/regulations for demand-response transit services. Create a partnership with patrons to meet vehicles on time.
- Address complaints quickly to foster a positive patron-transit district relationship.

What This Means

The results of the peer grouping and performance comparison indicate that transit districts can achieve high performance regardless of the transit environment. This finding indicates that the use of performance data as factors in the allocation of transit funds is reasonable.

The strategies that have assisted current top-performing transit districts to achieve success are broadly transferrable. Individual districts can assess performance using statewide performance data and identify areas with the opportunity for improvement. Districts can then consult the list of successful strategies for ideas.

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