



# Project Summary

Texas Department of Transportation

## 0-6473: Filling the Transit Gaps: Unserved Urbanized Area Populations

### *Background*

Public transportation in Texas is funded through a combination of local, state, and federal funds. Local funds typically include passenger fares, contributions from local governmental entities, and in some cases, local option sales taxes. Federal and state funding is distributed largely based on federally defined geographic areas—urbanized areas or rural areas (non-urbanized areas). For urban transit districts, funding is based on characteristics of the entire urbanized areas.

Transit providers in urbanized areas often have service area boundaries that differ from the defined urbanized area boundaries. In some instances, transit is operated as part of a city government and confined to the city limits, while the urbanized area may extend well beyond city limits. In other cases, portions of an urbanized area have not approved a local option tax to support a regional transit authority. This results in “urban gaps”—portions of an urbanized area that are outside of the urban transit provider’s service area.

The purpose of this research study was to document the extent of such urban gaps, characterize the populations within those gaps, identify mechanisms by which these areas have managed to offer some transit services, and identify best practices for service gaps in Texas.

### *What the Researchers Did*

Researchers identified portions of urbanized areas not within the service area of urban transit service providers by comparing the boundaries of urbanized areas in Texas with the boundaries of service areas for each urban provider. The areas of overlap were considered served markets, whereas the portions of urbanized areas outside the boundaries of the urban provider service area were defined as urban gaps.

Researchers then generated transit needs assessment data for each urban gap using indicators typically employed in transit needs analyses. These indicators included:

- percentage of working persons without automobiles,
- percentage of people who are elderly,
- percentage of persons with disabilities, and
- average household income.

Researchers estimated the size and characteristics of each urban gap for population and urbanized area boundaries established by the 2000 Census, as well as population and urbanized area boundaries projected for the 2010 Census.

### *Research Performed by:*

Texas Transportation Institute (TTI),  
The Texas A&M University System

The University of Texas at San Antonio  
(UTSA)

### **Research Supervisor:**

Jeffrey Arndt, TTI

### **Researchers:**

Suzie Edrington, TTI

Matt Sandidge, TTI

Jeffrey Jordan, UTSA

Lila Valencia, UTSA

**Project Completed:** 8-31-10

Within and outside Texas, there are examples of communities and elected leaders coming together to find ways to provide some level of public transportation in urban gap areas. Researchers explored the variety of approaches, including several case studies to specifically illustrate approaches.

## What They Found

The issue of urban gaps is significant. Based on the 2000 Census, 2.9 million Texans fell into urban gap areas, representing 14.1 percent of the state's population. The estimated size of the urban gaps that will emerge from the 2010 Census grows to 4.2 million Texans. Almost one-quarter of the residents in urbanized areas will reside in urban gap areas.

The largest gap areas are found in the major metropolitan areas. However, several smaller urbanized areas already have sizable gap areas, and those areas are likely to grow.

At the same time, Texas has several examples of communities finding ways to provide transit services within these gaps, and Texas is not alone in facing this issue. Approaches identified for filling urban gaps include creating urban/rural joint providers, generating sponsorship at the county level, and leveraging resources of existing transit providers.

Funding transit service is a key challenge in gap areas. In two Texas cases, urban gap areas were able to muster federal legislative support for funding. In other cases, urban gap areas identified federal sources outside the traditional formula funding silos, local agency funds, and local support, including in-kind services.

There must be an individual or agency that champions transit service. Engaging community interest often involves targeting specific potential transit user groups. Transit services in urban gaps are typically available to specific eligible users—elderly, persons who are disabled, and persons living in poverty. A transit provider can maximize the service by engaging service delivery partners as well.

## What This Means

An increasing number of Texans living in urbanized areas reside outside the service area of their region's major transit provider. There are a variety of approaches to bringing transit to at least some portion of these Texans. The research findings suggest that TxDOT can be supportive of emerging projects through maintaining flexibility in the way that it allocates transit funds, including special federal funds such as New Freedom and Job Access-Reverse Commute.

### *For More Information:*

Research Engineer - Duncan Stewart, TxDOT, 512-416-4730  
Project Director - Wanda Carter-Dyer, TxDOT, 361-293-4395  
Research Supervisor - Jeffrey Arndt, TTI, 713-686-2971

*Technical reports when published are available at:*  
<http://library.ctr.utexas.edu/index.html>

[www.txdot.gov](http://www.txdot.gov)  
keyword: research



This research was performed in cooperation with the Texas Department of Transportation and the Federal Highway Administration. The contents of this report reflect the views of the authors, who are responsible for the facts and accuracy of the data presented herein. The contents do not necessarily reflect the official view or policies of the FHWA or TxDOT. This report does not constitute a standard, specification, or regulation, nor is it intended for construction, bidding, or permit purposes. Trade names were used solely for information and not for product endorsement.