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One-Stop Transit Information

A person traveling by car to an unfamiliar destination can usually accomplish the trip successfully with the aid of a road map and basic knowledge of the rules of the road. A person taking the same trip using other modes such as public transit, intercity transit, or passenger rail needs more information to successfully arrive at the desired destination, particularly if the trip involves more than one transportation provider.

“One-stop” regional information centers for transit information are an answer to the traveler’s dilemma of finding and interpreting route, schedule, fare, and other necessary information from several transportation providers across an area. Regional information systems are also a tool for transit providers who are trying to fill gaps in community transportation services and to attract new riders through regional coordination of services.

This project examined several existing one-stop regional transit information services to determine ways in which similar systems might be developed in Texas. Three regions in Texas were selected as case study areas where regional transit information would be likely to benefit transit riders.

What We Did...

To begin collecting information on one-stop transit information services, researchers visited the websites of some existing systems:

- bus-stop.org, a search engine for transit services in the Dallas-Fort Worth area (<http://bus-stop.org>);
- TranStar and GoVentura, serving the counties of southern California (<http://latranstar.tann.com/> and <http://www.goventura.org>);
- TransitInfo/TakeTransit of the San Francisco Bay Area (<http://www.transitinfo.org> and <http://www.transitinfo.org/tripplanner/index.asp>); and
- Minneapolis-area Metro Transit’s Transit Information Center (<http://tips.metc.state.mn.us/tripplanner.html>).

Subsequent telephone interviews with staff at each of these systems provided information on the development and operation of these systems, as well as on obstacles encountered and lessons learned in the process. A report from the Oregon Department of Transportation, which is in the process of developing its travel information services to

include statewide transit trip planning, provided additional details on technical and financial considerations for regional information systems.

In each of three selected regions in Texas (the Austin-San Antonio corridor, the Dallas-Fort Worth area, and the Laredo area), researchers identified transit providers, rental car companies, taxicab companies, and all other potential participants in a regional transportation information system. Information gathered through surveys of these stakeholders built a database of provider names, contact information, services provided (e.g., rural transit, intercity transit, paratransit), service area, and other operational information. Interviews with selected stakeholders in each region revealed details about the current status of their own information services, interest in a regional transit information system, and potential challenges and benefits of such a system.

Based on these interviews and the collected data from existing systems, researchers developed guidelines for developing one-stop transit information systems in each of the three regions. The guidelines were finalized following review and discussion by stakeholders. Project



progress, resources, and results were communicated throughout the project on the website <http://onestoptransit.tamu.edu>.

What We Found...

Lessons Learned from Existing Systems

The regional transit information systems examined varied greatly in the number and categories of transit providers represented, from 11 public transit providers in the Minneapolis area to 200 public, private, and demand-response providers planned for inclusion in Oregon's statewide system. They also varied in the type and format of information provided.

The transit information website created by the North Texas Transit Cooperation Association for the Dallas/Fort Worth area (<http://www.bus-stop.org>) is a searchable directory of transit providers with basic contact and service information provided for each — a low-cost initial step in coordinating transit information. (See Figure 1.) Minneapolis-area Metro Transit's website provides full-trip planning on its own bus routes and those of 10 additional transit providers, using off-the-

shelf trip-planning software. The Southern California Association of Governments (SCAG) developed its own trip-planning software for the telephone-based TranStar transit information system (<http://latranstar.tann.com/>). The same software was the basis for the San Francisco Bay Area's TransitInfo, and Ventura County's GoVentura (<http://www.goventura.org>) developed a user interface to bring TranStar's trip-planning service to the web (See Figure 2). TransitInfo began as a telephone operator-assisted service and is now also available to users on the website TakeTransit (<http://www.transitinfo.org/triplanner/index.asp>). Oregon's TripCheck website (<http://www.tripcheck.com>), in addition to providing information on weather and roadway conditions, offers a directory of transit and rideshare links for each city and plans to offer statewide point-to-point transit trip planning in the near future.

The most common challenge faced by the systems surveyed was maintaining correct and up-to-date information. All agreed that a central administrator or staff is the best way to ensure regular updates of each transit provider's hours, routes, schedules, and other data.

Transit and Transit Information in the Case Study Areas

Laredo is one of the principal border crossing sites between Texas and Mexico, and Laredo-area transit services carry a large number of international travelers in addition to local passengers. The primary public transit providers in Laredo and Webb County are the urban transit system El Metro and the rural transit provider El Aguila. Greyhound, Latinos de Greyhound Autobuses, Latinos Azabache de Greyhound, and El Conejo are the primary intercity carriers. Greyhound and El Metro both provide web-based information on their services (Greyhound also offers on-line reservations and fare payment) but the other transit providers in the area do not.

After meeting with Laredo-area transit providers, the project team proposed a telephone-based regional information system as an initial step, using spare capacity in El Metro's telephone voice-mail system. Callers using one local number would be able to select recorded information about any of the local transit providers, and/or have their calls forwarded to any transit provider's customer service office. This service could be a precursor to a 511 toll-free number, and a website version could be developed in the future.

The Austin-San Antonio corridor includes eight counties and nearly 100 incorporated towns and cities, including San Marcos, Bastrop, Round Rock, Elgin, and New Braunfels. Significant numbers of commuters travel between cities on a daily basis, with many commutes crossing transit and rideshare jurisdictional boundaries. Regional transit and rideshare information is therefore of interest to many of the transit providers and rideshare coordinators along the corridor. Based on a focus group of stakeholders from this region, the project team proposed a website with



Figure 1. Main page for bus-stop.org's regional directory of transit services



full transit trip-planning capability and on-line rideshare matching.

The north central Texas region surrounding Dallas and Fort Worth experiences a significant amount of commuting and other travel across city and county lines. The Trinity Railway Express, a collaboration between Dallas’ “DART” and Fort Worth’s “The T” metropolitan transit agencies, is one answer to city-to-city travel. The two agencies are pursuing further coordination and regional transportation planning. Bus-stop.org was created as a first step to provide regional transit information for the urban and rural transit providers in the north central Texas area. While the website has not been updated recently due to lack of funds and staff time, steps are underway to resume the development of bus-stop.org.

The Researchers Recommend...

Based on the experiences of the regional transit information systems surveyed, researchers developed general guidelines for the development of similar systems in Texas:

- Form a working group of stakeholders to determine levels of participation in a regional coordination effort. Determine the objectives for the information system or coordination effort. Develop institutional agreements for collecting and managing data, for pursuing funding, and for contracting with vendors and consultants.
- Determine the desired functions for the information system. Technical needs for the project will be dictated by the type and level of functionality desired. Some options are a recorded, staffed, or automated telephone information system, a web-based transit information directory or clearinghouse, and web-based automated trip planning.



Figure 2. GoVentura’s “Getting There by Bus or Train” directory page

- Determine staffing and maintenance needs for the system. A system which provides route and schedule information or full transit trip planning will require considerably more staff time to remain accurate and up-to-date.
- Implementation should include extensive functional testing of the system to correct inaccurate or missing information. Marketing and promotion of the system should be part of the development process and of consultant contracts.
- System evaluation should include user feedback via telephoned comments and web-based surveys and comment forms. Public awareness can be measured by website counters, and more accurately by on-board or mail-out or telephone surveys of the community.

From the focus groups and other feedback from transit stakeholders in each of the three case study areas, researchers then described how these general guidelines might be applied to serve the needs and resources of each area. Implementation projects for one or more of these areas are the next logical step in the process of making regional travel information available to transit riders in Texas.



For More Details . . .

The research is documented in the following report:

Report 4233-1: *One-Stop Transit Information: Guidelines for Development of Regional Transit Information Systems in Texas*

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The Texas Transportation Institute researchers developed guidelines for developing one-stop transit information systems. These guidelines are being applied in a follow-on implementation project to establish an internet-based trip planning information clearinghouse for people to use for traveling along the I-35 corridor. In addition, the implementation project will demonstrate an interactive trip planning software application for a selected case study area. It is envisioned, when this application is operational (projected in fiscal year 2005), the trip-planning software will interface local transit information with intercity bus and rail scheduling systems to provide point-to-point travel itineraries.

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