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**Transit-Operated Vanpools in the United States:  
Selected Case Studies**

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## **Executive Summary**

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Transit providers across the United States are examining new ways to increase services and ridership and to operate as cost-effectively as possible. Vanpools are an alternative to traditional fixed-route service, and can help to realize one or more of these objectives. This study examined selected vanpool programs operated by transit agencies and other public-sector or not-for-profit organizations, and presents them in this report as brief case studies.

The most frequently cited objective of the twenty-five programs profiled in this study is to extend the reach of transit services into areas or service hours not well served by fixed-route public transit. Air pollution and congestion relief, welfare-to-work transportation, replacement of underused fixed-route service, specialized transit service for special-needs travelers, and preliminary transit service in a new area were other objectives cited by the vanpool providers.

Some of the notable vanpool programs surveyed include the six Seattle-area transit-operated vanpool programs in Washington state, which together account for 40 percent of the vanpools in the United States; The T's substitution of vanpools along low-ridership routes in Fort Worth, which has resulted in an \$11,500 annual cost reduction per route; and the variety of vanpool services provided by Pace Suburban Bus Service of Chicago, which includes commuter and employer-sponsored vanpools, non-emergency medical transportation, not-for-profit agency shuttles, and vanpools serving riders with disabilities. Other vanpool programs have helped to bring needed workers into retail and resort areas, military and commercial worksites, and other employment centers.

Funding sources for the surveyed vanpool programs include (in descending order of frequency) passenger fares, transit funds, Congestion Mitigation and Air Quality (CMAQ) funds, other federal, state, and local funds, and employer subsidies. Easy Streets of Connecticut and Ben Franklin Transit in Washington are able to cover all operating costs through passenger fares, while several other programs offer subsidized or fare-free ridership to serve low-income commuters or to encourage high ridership in congested areas. The City of Austin and the Houston-Galveston Area Council subsidize vanpool fares as part of their efforts to reduce congestion and improve air quality.

Conditions that have been favorable to the success of these vanpool programs include long-distance commutes, vanpool priority on roadways (via high-occupancy vehicle lanes or other accommodation), centralized employment centers, high retail growth, and rising fuel prices. Obstacles or challenges to vanpool programs include lack of funding and promotion, severe traffic congestion (if vanpooling offers no time advantage over solo driving), reluctance of commuters to give up the flexibility of driving, and lack of awareness of the cost advantages of vanpooling over driving. Incentives offered to riders include fare subsidies, guaranteed ride home programs, and perks for vanpool drivers.

Suggestions for further research include detailed assessments of vanpool programs in Texas, including economics, target ridership, community characteristics, and factors contributing to their success, discontinuation, or restructuring. Along with the results of this study, the research can be used to develop a list of characteristics that appear to contribute to successful vanpool programs, and to guidelines for assessing vanpool market potential.



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# **Chapter 1: Background and Introduction**

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## **Project Problem Statement**

Transit agencies throughout Texas are interested in providing cost-effective and efficient services to a wide range of customers. Fixed routes represent a major segment of these services. Fixed routes are not appropriate in many situations, however, and some transit agencies are using vanpools, buspools, and other techniques to serve low-density areas and new markets.

There is a need to examine the experience to date with the use of vanpools as part of the service mix provided by transit agencies and to assess the market potential for greater use of this approach. This research project is the first step in examining these issues and developing a guidebook for use by transit operators interested in starting or expanding vanpool programs.

## **Background**

The growth of suburbs, multiple “downtown” areas within cities, and other lower-density development has presented increasing challenges to public transit systems in the United States. Traditional fixed-route transit, which operates most effectively in high-density areas, is often incapable of serving the changing travel needs of both urban and suburban residents and commuters. Vanpools are one way to serve lower-density areas, suburb-to-suburb commutes, and other emerging transit markets while keeping costs relatively low.

This research project builds on interviews with general managers of Texas metropolitan transit authorities, particularly Karen Rae, general manager of the Capital Metropolitan Transit Authority (Capitol Metro) in Austin. Other examples of publicly-sponsored vanpool programs within Texas include vanpools funded by the federal Congestion Mitigation and Air Quality Improvement Program (CMAQ) in Fort Worth, which have allowed The T to eliminate some low-ridership fixed routes, and Houston’s METROVan program, which takes advantage of the city’s high-occupancy vehicle (HOV) lanes and serves destinations such as the Galleria which were previously underserved by transit.

## **Objectives of Study**

Task 1 of this study examined the innovative use of vanpools by transit agencies through brief case studies. Future tasks of the study, if funded, will examine the market potential for vanpool services. This assessment will include an examination of the socio-economics, trip patterns, land use characteristics, and other factors that appear to favor the use of vanpools as both a long-term strategy and as a way to introduce service that may later be replaced by fixed-route buses.

The objectives of this research are as follows:

- to identify the factors that are favorable to vanpools as a public-transit supplement or alternative, and
- to provide transit providers with techniques for assessing the vanpool market in their areas.

### **Work Plan**

The examination of vanpools as an alternative to fixed-route transit service will be accomplished through the completion of four work tasks. This research report documents the research and results of Task 1, vanpool case studies from across the United States.

Vanpools operated by transit agencies across the United States were identified and their experiences briefly documented as case studies. The case studies include information on ridership levels and demographics, major trip patterns and purposes, and any characteristics of the transit system or community that have been significant in the operation of these services.

Initial information was gathered from transit agency web pages and existing literature, including transportation journal articles and research reports. To complete the case studies, additional information was obtained through a telephone survey of transit-operated vanpool service providers. A copy of the survey is provided as an Appendix.

Future tasks, if funding is obtained from another source, will include detailed assessments of vanpool programs in Texas, identification of target markets for vanpools, and the development of a guidebook or toolkit for assessing vanpool market potential.

### **Organization of This Report**

This report is organized into five chapters. Chapter 2 provides summary information and case studies of the vanpool programs studied. Chapter 3 summarizes funding sources used by these programs for capital and operating expenses. Chapter 4 describes incentives used, obstacles encountered, and lessons learned by the vanpool programs. Chapter 5 presents recommendations for future research.

## **Chapter 2: Summary of Transit-Operated Vanpools**

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Information on the following transit-operated vanpool programs (and some vanpool programs operated by metropolitan planning organizations (MPOs), state departments of transportation, and regional not-for-profit organizations) was collected from published documents, from Internet web pages, and via telephone interviews. Table 1 provides a summary of program sizes, goals, and primary customer bases.

### **Primary Goals for Transit-Operated Vanpool Services**

The primary goals for the vanpool services summarized in this report fell into the general categories described below. The goals are shown in order from most to least frequently cited. Most vanpool programs listed more than one goal for their services.

- **Extend the “reach” of transit services:** Serving riders whose trips are not well-served by fixed-route transit services, due to geography or time of trip, was the goal most often mentioned by the vanpool programs examined. These trips most often involve suburb-to-suburb or suburb-to-city commutes or alternative/late-shift schedules.
- **Air pollution and congestion relief:** Vanpools are often part of a community’s emissions-reduction plan.
- **Welfare-to-work transportation:** Several of the vanpool programs have a welfare-to-work component. The Kibois Area Transit System began its vanpool program specifically to serve welfare-to-work participants.
- **Replace underused fixed-route service:** In an effort to make transit services more efficient and effective, a few transit agencies have implemented vanpools in areas where fixed routes are significantly underused. The transit system can continue to serve riders in those areas without the higher costs of fixed-route buses. Starting in 1985, The T in Fort Worth saved \$11,500 in annual operating costs by replacing one of its low-ridership routes with three vanpools.
- **Specialized transit:** Some vanpool programs target specific types of riders or trips. Elderly or disabled riders, students, medical or other non-commute trips, and some alternate-schedule or long-distance commute trips are among the categories for which specialized vanpools have been formed.
- **Preliminary transit service in a new area:** A few transit systems have used vanpools to introduce transit services in areas not previously served by public transit. The vanpools can serve as an indicator of potential fixed-route ridership levels.

## Primary Customer Bases for Transit-Operated Vanpool Services

Vanpool riders in the systems examined fell into the following categories, listed in order of frequency:

- “eight to five” commuters;
- late-shift or other alternate-schedule commuters;
- commuters needing specialized transportation services, described in the Americans with Disabilities Act (ADA);
- welfare-to-work commuters; and
- non-commuters, including students and elderly passengers.

## Case Studies

### *Texas*

**The T, Fort Worth, Texas:** The T’s vanpool program was established in 1985 when the Fort Worth Transportation Authority initiated a partnership with VPSI Commuter Vanpools. As an experiment, The T replaced a bus on a low-ridership route with three 15-passenger vans operating as commuter vanpools. This experiment resulted in an estimated \$11,500 annual reduction in costs per route converted to vanpools. As of 1997, The T operated 140 vanpools, many of which operate from park-and-ride lots to major industrial plants. Subsidies are provided by the T to lower the cost of a month’s vanpooling to the cost of a monthly bus fare. In addition to regular commuter vanpools, The T and VPSI operate a low-income commuter vanpool service called “Weed & Seed,” which is government subsidized.<sup>1,2</sup>

**METROVan, Houston Metropolitan Transportation Authority (METRO):** Established in 1995, METROVan is sponsored by METRO and by the Houston-Galveston Area Council (H-GAC). The incentive provided by these two entities allows vanpool service to be provided both inside and outside METRO’s service area and also provides a \$35-per-month incentive discount per rider on vanpool fares. The vanpool subsidy, paid for by CMAQ funds, is available to vanpool riders in Harris, Brazoria, Chambers, Fort Bend, Galveston, Liberty, Montgomery, and Waller counties, approximately an 8000-square-mile region. METRO pays approximately 95 cents per passenger trip for the vanpool subsidy, in contrast to \$1.92 per passenger trip on fixed-route park-and-ride bus service. (Another estimate is a savings of \$1.29 in subsidies per passenger trip.) Other sources of funds are employer subsidies and rider fares. A service called “Caravan” is being considered, which would use vanpools as a form of fixed-route service, while still maintaining the convenience and flexibility of a vanpool for its passengers.<sup>2,3,4,5,6</sup>

**Capital Metro Transit Authority, Austin:** Capital Metro brought their vanpool program in-house in 1998. Since then, vanpool ridership has increased 8.5 percent, with ridership now at 789 passengers per day (267,755 per year). The vanpools allow Capital Metro to extend transit service into Austin's suburbs. Corporate commuters make up the majority of riders. In addition to transit funding, the program receives a two-thirds subsidy from the City of Austin to supplement passenger fares, as part of the city's efforts to reduce peak-hour congestion and improve air quality. Capital Metro's goal is to reduce commuter VMT by 15 percent over the next five years.<sup>7,8</sup>

### *Washington*

The six transit-operated vanpool programs which serve the Puget Sound region of Washington state (Community Transit, Island Transit, Intercity Transit, King County Metro, Kitsap Transit, and Pierce Transit) together account for approximately 1450 vanpools – approximately 40 percent of all public vanpools in the United States. An estimated 22,000 vehicle trips are saved each day in the region (which includes the city of Seattle) due to the vanpools, representing about 2.7 million vehicle miles annually. In 1998, grants were distributed to the six programs for the purchase of new vans, since the programs had reached rider capacity and had long waiting lists. Overall, vanpools claim approximately 2 percent of commuter trips in the Seattle area, and 7 percent of commuter trips of 20 or more miles.<sup>9,10,11,12</sup>

**King County Metro, Seattle, Washington:** King County Metro operates the oldest and largest vanpool program in the United States, carrying over 6000 passengers daily in nine counties. Each vanpool has an assigned driver (who receives 40 free "personal use" miles of the van per month for evening and weekend travel), a backup driver, and a bookkeeper to handle fares. In the summer of 2001, Metro led the development of RideShareOnline, an online vanpool and carpool matching system for the Puget Sound region. Another program intended to reach new riders is "Ticket to Ride," which offers a free three-ride ticket to a new rider on an existing vanpool (if seats are available). VanShare, begun in April of 2001, provides vanpool service from neighborhoods to public transit facilities such as park-and-ride lots, train stations, and ferry terminals. Other amenities for vanpool riders include free park-and-ride and park-and-pool lots, many with bicycle lockers. A semi-annual newsletter, "Vanpool Voices," keeps Metro vanpool riders informed of new programs, incentives, fares, and other vanpool news.<sup>9,13,14</sup>

**Pierce Transit, Tacoma, Washington:** The Pierce Transit Vanpool Program provides approximately 632,000 trips per year to regular-shift and alternate-shift commuters. Population and traffic in the Puget Sound region are growing dramatically, and the increasing congestion, along with rising gasoline prices, have contributed to the vanpool program's growth from seven vanpools in 1986 to 250 in 2002. In addition to the regular vanpool program, Pierce Transit provides approximately 500,000 ADA paratransit trips yearly, many of them to

developmentally disabled adults commuting to sheltered workshops. Since most of these passengers do not need lift-equipped vans like those operated in the paratransit program, Pierce Transit and the Centerforce sheltered workshop began a vanpool program with one 15-passenger van. The van is driven by qualified volunteer employees and is available to Centerforce for commuting and other work-related transportation for its employees. Even with Pierce Transit paying for all acquisition and maintenance costs for the van, the vanpools serving Centerforce's ADA-eligible passengers represent a 90 percent savings per passenger trip over paratransit service. Similar programs with other sheltered workshops in the area are being considered. The program, besides saving money, creates additional capacity in Pierce's regular paratransit service, which will help the agency to accommodate growing demand for specialized transit.<sup>9,15,16</sup>

**Community Transit, Lynnwood, Washington:** As of 2001, Community Transit was the third-largest vanpool fleet in the United States. Begun in 1986 to extend the reach of transit service in Snohomish County and to relieve traffic congestion, the service has grown significantly in the past few years, from 94 vans in 1994 to 327 vans in 2002. Incentives that have led to increased ridership include lowered vanpool fares, the use of HOV lanes, and priority loading of vanpools for ferries. Many of the vanpool commuters work late shifts at large business parks, which simplifies the routes and aids ridership.<sup>9,17</sup>

**Kitsap Transit, Bremerton, Washington:** Bremerton, Washington, in Kitsap County, is a ferry ride away from King County and Seattle. A large number of Bremerton/Kitsap residents work in Seattle, so the 8-to-5 commuter market provides the largest percentage of vanpool riders. ADA and welfare-to-work transportation are also provided via the vanpool program. Kitsap's "Vanlink Program" provides vans to local social service agencies to use for transporting their clients. Agency staff members drive the VanLink vans. Kitsap operates both eight-passenger and 12-15 passenger vans, and is considering investing in more of the smaller vans, which are more flexible and useful in a fluctuating economy.<sup>9,13,19</sup>

**Intercity Transit, Olympia, Washington:** Intercity Transit's vanpool was begun in 1982, but has grown significantly in the past few years, from 27 vans in 1997 to 65 in 2002. Congestion and air pollution in the Puget Sound area have led to mandatory trip reduction laws for nine counties and to vanpool subsidies for riders and employers. The subsidies can have a negative as well as a positive effect on vanpool ridership: while encouraging more people to try vanpooling, it also reduces the "value" of the service for some commuters, who may not use the service for which they've paid a reduced price. This "absenteeism" reduces the efficiency of the vanpool program: as the state capital, Olympia draws significant commuter traffic, and demand for vanpools currently exceeds supply. Otherwise, the only limiting factor for increasing vanpool service in Olympia is funding.<sup>9,20</sup>



**Ben Franklin Transit, Richland, Washington:** Ben Franklin Transit Vanpools provide 1200 trips per day to commuters (regular shift, alternate shift, and ADA). A federal worksite 30 miles from Richland generates the largest portion of the commute trips. Twenty-seven vans are assigned to local social service organizations to provide transportation for students, the elderly, and others. In 2001, passenger revenues generated \$800,000, fully covering operating costs. Ben Franklin transit purchases all equipment and supplies, including vehicles and office supplies for the vanpool service, through state contracts. As a result, costs are significantly reduced.<sup>2,9,21</sup>

**Island Transit, Coupeville, Washington:** Begun in 1988, the vanpool program serves primarily shift workers for a Boeing manufacturing plant, who would not be well-served by regular transit service.<sup>9,22</sup>

**Whatcom Transit Authority, Whatcom County, Washington:** The Whatcom Transit Authority operates two different van services for commuters living in the county. WTA Rideshare was created in 1995 to serve suburban commuters in Whatcom County, many of whom commute long distances to the Seattle area. Vans are leased by the WTA to commuter groups, with the transit authority providing rideshare matching, van maintenance, and driver orientation. The Commute Connection provides van service from suburban areas into the city of Bellingham. Commute Connection is a “fixed-route” vanpool service, with designated pick-up zones and schedules, but otherwise operates like most vanpool services.<sup>23,24,25</sup>

#### *Others in the United States*

**SANDAG for Ridelink, San Diego, California:** Started in 1995, Ridelink offers an alternative to San Diego commuters who are not well served by fixed-route transit. SANDAG provides rider subsidies and offers a two-week free trial to attract new riders. Vanpooling is especially popular for long-distance commuters, some of whom travel over 50 miles to work, and the program has grown larger than initially expected.<sup>26</sup>

**Santa Cruz County Regional Transit Commission/Commute Solutions, Santa Cruz, California:** The Santa Cruz RTC has been providing vanpool-matching services since the 1980s, but Commute Solutions, operating as part of the RTC, began to offer incentives for vanpooling in the form of rider subsidies starting in 1996. The incentives are part of the air quality plan for the Monterey Bay area.<sup>27</sup>

**VOTRAN, Volusia County, Florida:** Begun in 1998 as a way to serve the 25,000 Volusia County residents that commute outside of the county, VOTRAN has grown from two to eleven vanpools, and now has a waiting list for riders.<sup>28</sup>

**Space Coast Area Transit, Brevard County, Florida:** Space Coast Area Transit (SCAT) and Vanpool Services, Inc. (VPSI) teamed in 1987 to provide

vanpool services for commuters. Having begun with six vans, the program now has close to 100 vanpools in operation and is the largest publicly sponsored program in the state. Many of SCAT's vanpool riders are employees of the Kennedy Space Center, and many of their daily commutes are over 100 miles. In addition to commuter vanpools, the program leases vans to social service agencies for specialized transit services.<sup>29</sup>

**Pace Suburban Bus Service, Chicago, Illinois:** Pace operates several vanpool services, serving a variety of passenger groups. The largest is the Vanpool Incentive Program (VIP), for suburb-to-suburb and other commutes which are not served by Pace's fixed-route transit services. Pace's ADvAntage vanpools work with human service organizations and workshops to provide commute service to riders with disabilities. The Employer Shuttle is available to employers in the air quality non-attainment areas in and adjacent to the Pace service area. The Non-Emergency Medical Shuttle is available to medical facilities in those non-attainment areas, and the Not-for-Profit Shuttle similarly serves not-for-profit agency clients. An upcoming program is the VIP Metra Shuttle, which will offer trips connecting to local Metra rail stations, at a lower cost than the regular VIP program.<sup>30</sup>

**Greater Cleveland Regional Transit Authority Job Access Program, Cleveland, Ohio (GCRTA):** GCRTA's Job Access Program provides welfare-to-work and other need-based transportation, transporting people to interviews, training, and jobs. One of the commuter groups served are employees of the hospitality industry in Beechwood (suburb of Cleveland), who work late or irregular shifts that cannot be served by regular transit. The service was organized in 1998 and is sponsored by the Greater Cleveland Regional Transit Authority, the Northeast Ohio Areawide Coordinating Agency, and the Beechwood Chamber of Commerce. The program differs from a traditional vanpool program: rather than vans driven by a member of the vanpool, the Job Access Program provides vans and professional drivers, contracted through a local transportation company, to clients who register with the service.<sup>31,32</sup>

**Kibois Area Transit System, Stigler, Oklahoma:** Vanpools were implemented in 1984 to provide transportation for welfare-to-work factory employees in Southeast Oklahoma. The service is sponsored by the Talihina, Oklahoma Chamber of Commerce, and also provides transportation to Head Start and kindergarten students and senior citizens.<sup>33</sup>

**Greenville Transit Authority, Greenville, South Carolina:** Transit ridership was increased significantly by a vanpool program that contains elements of both traditional vanpools and dial-a-ride. The service was begun in 1992 with federal and state grants for the purchase of vans. Most vanpool trips are suburb-to-worksite, including a BMW plant.<sup>34</sup>

**Metro Transit Authority, Nashville, Tennessee:** Metro Transit Authority's Rideshare vanpool program was started 20 years ago with five commuter vans. Currently, Rideshare operates 30 15-passenger vans for commuters and three seven-passenger vans serving ADA-eligible riders. Rideshare's vanpools fill a variety of functions for the transit authority, from replacing former underused fixed routes to providing transportation services to new areas (many of Rideshare's passengers commute 20 miles or more). Rideshare also provides transportation for welfare-to-work participants and for students.<sup>35</sup>

**Traffix/Hampton Roads Transit, Hampton Roads, Virginia:** Hampton Roads Transit (HRT) partners with the Traffix travel demand management (TDM) program to administer vanpool services to commuters and welfare-to-work participants in the Hampton Roads region of southeastern Virginia. Two shipyards and several military installations are primary employment sites for many vanpoolers.<sup>36, 37</sup>

*Other Programs: State, MPO, and Not-for-profit*

The following vanpool programs are not operated by transit agencies, but were mentioned by survey respondents and in the literature as innovative programs. They are operated by state departments of transportation (DOTs), MPOs, transportation management associations (TMAs), and other not-for-profit groups, often as a complementing service to urban fixed-route transit.

**Ride-On Transportation Management Association (TMA), San Luis Obispo, California:** Ride-On TMA was formed in 1993 as a component of the San Luis Obispo Regional Transit Authority to provide transportation services for social service agencies in San Luis Obispo County. Ride-On now provides a variety of transportation services, including Guaranteed Ride Home trips, "lunchtime express" service to downtown restaurants, and airport shuttles. Commuter vanpooling is another of Ride-On's services, providing approximately 10,000 commute trips per month.<sup>38, 39</sup>

**Easy Street -- The Rideshare Company, Connecticut:** Easy Street is the first commuter vanpool service offered by a not-for-profit organization (the Rideshare Company). Vanpools provide commuter travel to employment centers and also link to transit services in Connecticut, New York, and two other neighboring states. Vans are purchased with zero percent financing through state-allocated federal funds. Vanpool users pay all operating costs, making the program completely self-supporting. Easy Street also participates in the JobLinks welfare-to-work program.<sup>40</sup>

**Emerald Coast Transportation, Okaloosa and Walton Counties, Florida:** The Destin Area Chamber of Commerce and the West Florida Regional Planning Council sponsored this vanpool program as part of an effort to fill available jobs in the Florida panhandle. The vanpools serve employees of hotels, stores, and

restaurants in the Florida panhandle, most of whom must commute from neighboring cities to their jobs in the hospitality industry. Some commutes are as long as 120 miles, round trip. Begun in 1997, the vanpools are funded by employers and the riders. VPSI handles the day-to-day administration of the program. The Regional Planning Council is planning to implement a similar vanpool program for military base employees.<sup>41,42</sup>

**CARAVAN (Caravan for Commuters, Inc.), Massachusetts:** Established in the late 1970s, CARAVAN is partially funded by the Massachusetts Highway Department, USDOT, and FHWA. Vans are contracted through VPSI. Participating employers and vanpool riders pay the balance of the cost. CARAVAN is a publicly supported, not-for-profit statewide program that is one element of the Massachusetts State Implementation Plan (SIP) for air quality. CARAVAN vanpools have access to approximately 100 free or discounted parking spaces in the city (with the cooperation of both public and private partners in the city of Boston).<sup>43</sup>

**Vehicles for Success, The TMA Group, Franklin, Tennessee:** The TMA Group provides vanpooling service in and around the city of Franklin and Williamson County, Tennessee, and works in cooperation with the Regional Transit Authority to provide vanpools between Williamson County and Nashville. TMA operates all aspects of the program, including purchasing vans (with funds from CMAQ grants), providing ridematching services, and marketing the service. The vanpools have been an effective tool for attracting workers from outlying counties to retail and service jobs in the cities.<sup>44,45,46</sup>

**Table 1. Summary of Vanpool Programs.**

Vanpool Service Provider	State	No. of Vanpools	No. of Riders	Primary Goals						Primary Customer Base					
				Extend Transit Reach	Replace Underused Routes	Preliminary transit service	Welfare-to-work	Air Pollution/Congestion Relief	Specialized transit	"8 to 5" commuters	Alternate-schedule commuters	ADA commuters	Welfare-to-work commuters	Non-commuters	
Fort Worth "The T"	Texas	286	3750		X						X				
Houston METRO	Texas	111	900	X				X			X				
Capital Metro, Austin	Texas	250	2411	X							X				
King County	Washington	700+		X				X			X				
Pierce Transit	Washington	261	1700	X				X	X	X	X	X			
Community Transit	Washington	239		X				X		X	X				
Kitsap Transit	Washington	92		X			X	X	X	X		X			
Intercity Transit	Washington	65	500	X				X		X					
Ben Franklin Transit	Washington	140	1200	X	X	X		X	X	X	X	X			X
Island Transit	Washington	30		X							X				
Whatcom Transit Authority	Washington	13	130						X	X					
SANDAG for Ridelinek	California			X							X				
Santa Cruz County RTC	California				X						X				
Space Coast Area Transit	Florida	100	18,000/month	X				X	X	X	X	X			X
Pace, Chicago	Illinois	380	3420	X	X	X	X	X	X	X	X	X	X	X	X
Greater Cleveland Regional Transit Authority	Ohio		110,000/year	X			X				X	X		X	
Kibois Area Transit System	Oklahoma		40		X									X	X
Greenville Transit Authority	South Carolina				X						X	X			
Metro Transit Authority, Nashville	Tennessee	33	450	X	X	X	X	X	X	X	X	X	X	X	
Traffix; Hampton Roads	Virginia	40	166,572/year	X			X				X			X	
<i>Other Programs: State, MPO, and Not-for-profit</i>															
Ride-On TMA, San Luis Obispo	California	36	10,000/month					X			X				
Easy Street	Connecticut	250	2411	X			X				X			X	
Emerald Coast Transportation	Florida	4	60			X					X				
CARAVAN	Massachusetts	200						X			X				
TMA Group	Tennessee	20	220/month					X			X				



## **Chapter 3: Funding Sources and Strategies**

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The vanpool programs surveyed used one or more of the following funding sources. Table 2 lists funding sources used by each agency, where information could be obtained.

### **Passenger Fares**

Passenger fares are the most common source of operating funds for the vanpool programs surveyed. The Greater Cleveland Regional Transit Authority and the Kibois Area Transit System vanpool programs, both serving primarily welfare-to-work commuters, and CARAVAN, which is fare-free to encourage high-occupancy vehicle ridership, are the only agencies among those surveyed that do not charge fares for riding. On the other end of the spectrum are Easy Streets of Connecticut and Ben Franklin Transit in Washington, which cover all operating costs through passenger fares.

### **Transit Funds**

At least one-third of the agencies included in this study use transit funds for part of vanpool capital and/or operating costs.

### **Congestion Mitigation and Air Quality (CMAQ) Funds**

CMAQ funds have been used by Community Transit, Pace, and the TMA Group to purchase vans and by Houston METROVAN to subsidize vanpool fares.

### **Other Federal Funds**

Federal grants have been used to purchase vans for the vanpool programs for Nashville's Metro Transit, Whatcom Transit Authority, Space Coast Area Transit, Pace, Pierce Transit, and Intercity Transit. The Greater Cleveland Regional Transit Authority vanpool program receives funding from Temporary Aid to Needy Families for its welfare-to-work transportation service, as well as flexible federal funds administered through the MPO. Hampton Roads Transit receives Regional Surface Transportation Program (RSTP) funds in addition to transit funds for the Traffix vanpools.

### **Other State/Local Funds**

The City of Austin subsidizes two-thirds of passenger fares for Capital Metro's vanpools. The Houston-Galveston Area Council partners with Houston METRO to subsidize rider fares on METROVAN. Santa Cruz County RTC receives funding from the Monterey Bay Unified Air Pollution Control District for vanpool rider incentives.

Chambers of Commerce contribute to vanpool funding for Emerald Coast Transportation in Florida, the Greater Cleveland Regional Transit Authority, and the Kibois Area Transit Authority in Oklahoma.

## Employer Subsidy

Employers of vanpool riders at Community Transit, Pierce Transit, Kitsap Transit, and Whatcom Transit in Washington; Emerald Coast Transportation in Florida, SANDAG in California, and CARAVAN in Massachusetts subsidize rider fares.

**Table 2. Funding Sources for Vanpools.**

Vanpool Service Provider	Funding Sources					
	Fares	Transit Funds	CMAQ Funds	Other Federal Funds	Other Local/State Funds	Employer Subsidy
Fort Worth "The T"	X	X		X		
Houston METRO	X		X			
Capital Metro, Austin	X	X			X	
King County						
Pierce Transit	X			X		X
Community Transit	X	X		X		X
Kitsap Transit	X	X				X
Intercity Transit	X			X	X	
Ben Franklin Transit	X	X		X		
Island Transit						
Whatcom Transit Authority	X	X			X	X
SANDAG for Ridelink	X			X	X	X
Santa Cruz County RTC*					X	
Ride-On TMA, San Luis Obispo	X				X	
Space Coast Area Transit	X	X			X	
Pace, Chicago	X	X		X		
Greater Cleveland Regional Transit Authority		X		X	X	
Kibois Area Transit System					X	
Greenville Transit Authority	X			X	X	
Metro Transit Authority, Nashville	X			X	X	
Traffix; Hampton Roads		X			X	
<i>Other Programs: State, MPO, and Not-for-profit</i>						
Easy Street	X					
Emerald Coast Transportation	X					X
CARAVAN				X	X	X
TMA Group	X	X	X			

\*Funding for rider subsidies only



## **Other Funding Techniques**

Ben Franklin Transit purchases vehicles, equipment, and office supplies via state contracts, which allows the agency to eliminate the bidding process. Besides saving time, this purchasing method saves from \$2000 to \$7000 per vehicle purchased, and saves significant percentages on other supplies.<sup>2</sup>

Easy Street purchases vans with zero-percent financing using state-allocated federal funds. Insurance for the vans is covered under the state fleet policy, which helps to lower operating costs.<sup>40</sup>



## **Chapter 4: Incentives, Obstacles, and Lessons Learned**

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Despite the wide range of size and location of the vanpool programs profiled in this study, a number of similarities emerged in obstacles encountered and “secrets of success.” This chapter summarizes the geographic, economic, and other elements that contributed to the success of these vanpool programs, the issues that presented challenges to vanpooling, incentives offered to riders and drivers, and other lessons learned.

### **Favorable Conditions for Vanpools**

#### *Geographic Conditions*

The geographic conditions that have contributed to the success of many of the vanpools are those that make solo driving less attractive and high-occupant vehicle travel more convenient or time-efficient.

**Long-distance commutes:** Commutes of at least 20 miles (and in some cases over 100 miles round trip) were cited by many of the programs surveyed as an incentive to vanpool. Construction and other contributors to traffic congestion were also mentioned as a reason for commuters to choose vanpooling and other alternate modes, though severe congestion could also act as a deterrent to vanpooling (see below under “Obstacles”).

**Vanpool priority through “bottlenecks”:** In Washington, many commute trips into Seattle involve ferries. During morning rush hour, ferries rapidly reach capacity, and the ferry crossings become a major point of travel delays for single-occupant vehicles. Vanpools receive priority in ferry boarding, reducing the delay for vanpool commuters. HOV lanes which allow vanpools to bypass congested urban freeways and designated vanpool parking (in areas or worksites with limited parking availability) are other ways in which vanpools have been given priority through bottlenecks in commuter traffic.

**Centralized employment centers:** Vanpools are most efficient (and therefore more attractive to riders) when they can serve a single employment center (or a closely spaced group of employers).

#### *Economic Conditions*

Economic conditions that contribute to long or expensive commutes, or that encourage employers to provide transportation options for employees, were credited by several of the vanpool programs as factors in their success.

**Lack of affordable housing close to jobs:** The long commutes that encourage vanpooling and other alternate commute modes are often the result of high housing costs close to employment centers. A large number of vanpoolers in the programs surveyed commute from outlying suburbs into higher-cost cities.

**Rising fuel prices:** As another factor in the cost of commuting, higher fuel prices are an incentive for commuters to seek modes other than single-occupant vehicles.

**High retail growth:** A growth in jobs, particularly in an area with a low unemployment rate, was the catalyst in some areas for employer-subsidized vanpools.

### *Demographic*

Demographic characteristics contributing to successful vanpool programs include a diverse population and varying population densities. White-collar workers who want to avoid rush-hour congestion, shift workers whose transportation needs cannot be met by regular public transit service, and other commuters traveling to distant job locations are some of the groups who join vanpools in these areas.

### **Obstacles to Vanpool Programs**

Obstacles encountered by the vanpool programs generally involve a lack of awareness of the potential benefits of vanpooling to the commuter and to the transit agency, or traffic conditions that diminish those benefits. Specific obstacles mentioned include the following:

- free and abundant parking at worksites;
- lack of awareness of the cost advantages of vanpooling over driving;
- reluctance of commuters to give up the flexibility of SOV commuting;
- lowering of HOV requirements (crowds HOV with too many cars);
- severe congestion, if vanpools have no travel-time advantage (HOV lane or other priority travel) over SOVs;
- difficulties recruiting drivers; and
- lack of vanpool funding and promotion.

### **Incentives for Riders**

To further encourage vanpooling, the programs surveyed one or more of the following incentives to vanpool riders and/or drivers:

- vanpool rider subsidies, parking cash-out, and/or free first week/month, provided through the transit agency, other third-party sponsor, or by employers of riders;
- use of HOV/priority lanes or equivalent (ferry priority, parking priority);
- guaranteed ride home programs; and
- “perks” for drivers, including free ridership in the vanpool and 40 to 500 hours of personal use of the van per month.

## **Incentives for Employers and Community**

Air pollution and congestion are the motivation for many communities to pursue vanpooling and other alternate commute programs. The commute trip reduction law in Washington requires employers with over 100 employees in Washington's nine air quality non-attainment areas to provide incentives for alternate commute modes.

Employers in some of the areas surveyed provide employee vanpool subsidies with pre-tax dollars, reducing payroll taxes.

Finally, vanpools are one way for employers to attract employees, especially in areas where unemployment is low and workers are needed.

## **Lessons Learned**

"Lessons learned" about the operation of vanpool programs centered around operating considerations, pricing and fares, and the vans themselves.

### *Program Operation*

- [Prepare for] flexibility with demand – last year we could not purchase enough vans to lease, this year [there's been] very little demand" – Traffix
- Listen to drivers, riders, client employers/agencies; evolve to best fit needs and preferences of customers – Pace
- The program is larger than expected – SANDAG
- Make the Customer Service Attitude the center of your universe. Be flexible in the way you provide your services. (BFT)
- Need for a range of support programs to make vanpooling "work" such as:
  - o guaranteed ride home
  - o ridematch
  - o company support
  - o system of park-and-ride lots on home end; affordable HOV parking on work end – The TMA Group

### *Pricing/Fares*

- Watch leasing rate – too expensive and program will not grow. – Traffix
- Would have priced service more attractively. – Whatcom
- Subsidies are a two-edged sword. If people aren't made to pay for their service they don't value it. Our service has people who pay but don't use it. – Intercity Transit
- Lowering fare increases ridership. Draws riders from other areas. Our program had 94 vanpools in 1994-1995. There was a fare decrease in 1995; there are currently 327 vanpools. – Community Transit

### *Vans and Equipment*

- Do not start with or retain inferior equipment. Spend the money to build Customer Comfort into your vans so you can effectively compete with the SOV.  
– Ben Franklin Transit
- [We] would have started with smaller vans than the 12-15 passenger ones. –  
Whatcom Transit
- Kitsap Transit needs to modify its fleet, obtaining more smaller-size vans (eight-passenger). Our fluctuating economy has little or no effect on our smaller vans versus our larger ones (12-15 passenger).

## **Chapter 5: Future Research Needs**

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Future research needs, described as Tasks 2 through 4 in the original project proposal (funding to be determined), are as follows:

### **Detailed Assessments of Vanpool Programs in Texas**

Transit vanpool services within Texas will be examined more closely, with detailed assessments of economics, target ridership, community characteristics, and the goals of the transit system for its vanpool programs. Factors contributing to success, discontinuation, or restructuring of vanpool services will also be examined. This task will include interviews with personnel at transit systems that have implemented vanpools.

### **Identification of Vanpool Target Markets**

Using the information collected in Tasks 1 and 2, a list will be developed of characteristics that appear to contribute to successful vanpool programs. These characteristics may include demographics and socio-economics of the community and/or the target ridership, the type and costs of vanpool service offered, the relationship of vanpool service to fixed-route transit service (if any), and the size of the service area.

Using this set of identified characteristics, the researchers will then identify specific target markets in which vanpool services are likely to be the most viable.

### **Guidebook/Toolkit for Assessing Vanpool Market Potential**

The characteristics and criteria identified in Task 3 will be developed into guidelines and techniques for assessing vanpool market potential. The resulting guidebook will be intended for transit authority managers, MPOs, city transportation engineers, and others who may be responsible for designing or providing public transit services.





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## **Appendix: Vanpool Provider Survey**

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## Vanpool Provider Survey

Transit Agency: \_\_\_\_\_ Location: \_\_\_\_\_

Name of Vanpool Service: \_\_\_\_\_

Contact Person: \_\_\_\_\_ Phone: \_\_\_\_\_

1. What year was the vanpool service started?
2. What is the primary customer base(s) for the vanpool service?
  - "8 to 5" commuters
  - Late-shift or other alternate-schedule commuters
  - ADA commuters
  - Welfare-to-work commuters
  - Non-commuters (students, elderly, or other groups)
  - Other
3. What elements of the vanpool service are in-house?
  - Transit agency owns vans
  - Transit agency operates vanpool registration/matching
  - Other
4. What are the funding sources for the vanpools?
  - Vanpool fares
  - Employer subsidy
  - Transit funds
  - CMAQ funds
  - Other local or state funds (specify): \_\_\_\_\_
  - Other federal funds (specify): \_\_\_\_\_
  - Private/corporate sponsorship
  - Other
5. Approximately how many riders use the vanpools? (any of the following)
  - per day
  - per week
  - per month
  - per year

6. Are there incentives to use vanpools in your community (or disincentives for driving)?
- Vanpool rider subsidies/parking cash-out
  - Vanpool employer/business subsidies
  - Limited or expensive parking in business/employment centers
  - Use of HOV or other priority lanes
  - Guaranteed ride home programs
  - Other
7. What are or were the primary goals for this vanpool service? (Elaborate if desired.)
- Replace underused fixed-route service
  - Extend reach of transit service into suburbs or other areas not conducive to fixed-route transit
  - Preliminary transit service in a new area
  - Welfare-to-work transportation
  - Air pollution/congestion relief
  - Specialized transit (ADA, late shift, etc.)
  - Other
8. Have goals been realized? What are results to date?
9. Are there any geographic, economic, or demographic characteristics of your community that have been advantageous to the development of a vanpool program? Has anything been an obstacle?
10. Any unexpected results or other lessons learned?
11. Do you know of other vanpool programs that we should contact?