

Factors of Successful Private-Sector Reverse Commute Services

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The suburbanization of employment in metropolitan areas has opened up new markets for private-sector reverse commute services. FTA initiated the Entrepreneurial Services Challenge Grant Program (ESP) to promote such services, yet the factors leading to successful services have not been identified. The objective of the research is to identify and examine the market, service provision, financial, managerial, and organizational factors that characterize successful services. A literature review and three case studies of successful private-sector reverse commute services in large metropolitan areas were conducted. The characteristics of successful private-sector reverse commute services are (a) a lean management structure with dynamic entrepreneurship and communication; (b) strategies emphasizing financial flexibility and marketing (market research to identify promising market niches and promotion that emphasizes cost savings to employers); (c) establishment of contracts with employers for subsidized transportation and matching of jobs with labor; (d) close relationships with employment, training, and recruitment organizations; (e) comprehensive screening of commute service employees; and (f) monitoring of performance. As a means to promote such services, FTA should implement a training and long-term technical assistance component to complement the financial assistance of ESP.

The suburbanization of employment in metropolitan areas has opened up markets for private-sector reverse commute services. Although suburban employers often experience labor shortages, large numbers of inner-city residents remain unemployed. Public mass transit systems have been unable to link city residents conveniently and cost-effectively to suburban areas, where economic activities are highly dispersed. As a result, some entrepreneurs in a few cities have established services that transport inner-city residents to suburban employment opportunities.

A detailed study of the Baltimore metropolitan area indicated that employment decentralization, low rates of automobile ownership, and inconvenient transit services contribute to declining job accessibility for inner-city residents who earn low wages (1). Travel times on public transit for reverse commutes are often significantly longer than for commutes oriented toward the central business district, and the accessibility by transit to suburban activity centers from several areas of the city is low. In addition, there are few reverse commute service options: they consist essentially of public mass transit and private automobiles or taxis.

In an attempt to mitigate similar conditions in many U.S. cities, FTA initiated the Entrepreneurial Services Challenge Grants Program (ESP). ESP was established in 1988 to pro-

mote the development of entrepreneurial services that use little or no subsidy to supplement mass transit systems. ESP grants were intended as seed money to assist private operators—particularly small, minority, and disadvantaged businesses—with capital acquisitions, technical planning, and marketing activities. It has supported various organizations such as inner-city civic groups, private-sector transportation providers, and local employers and developers that have attempted new services.

HYPOTHESIS, OBJECTIVE, AND METHODOLOGY

In the few cities that have private-sector reverse commute services, the factors leading to successful operation have not been identified. Adequate financial resources are thought to be critical to any small enterprise. Yet unique market, service provision, managerial, and organizational factors are also fundamental to successful private-sector reverse commute services. The objective of this research is to identify and examine the factors that characterize such services.

A literature review and three case studies of successful private-sector reverse commute services in large metropolitan areas were conducted. Success was not defined in terms of stringent financial criteria because of the small number of private-sector reverse commute services, their recent beginnings, the variety of organizations and service objectives, and the different scales of operation. Successful services were those that had at least 1 year of operations experience, were thriving and expanding operations, and were described by FTA staff as well-managed organizations. The literature review sought to define the factors to be evaluated in the case studies.

The cases selected are Accel Transportation, of Chicago; Accessible Services, Inc., of Philadelphia; and Central Transit System, of Orlando, Florida. These cases were evaluated using available documents and publications and face-to-face interviews with the top manager of each of the three organizations. The interviews were conducted using a prepared questionnaire.

LITERATURE REVIEW

In an attempt to improve the accessibility of inner-city residents to jobs, the federal government in the late 1960s funded reverse commute demonstration projects to link areas of high unemployment with job sites. Reverse commute bus services in several cities were provided by the then privately owned

mass transit franchises. In an evaluation of the status of reverse commute demonstration projects, it was found that for all of the cities one in three riders obtained employment through the availability of reverse commute services (2). But ridership attrition rates were high and the mass transit industry did not find such service to be profitable. Many of the mass transit systems at that time were on the verge of bankruptcy. The conclusions of the study were visionary, since they suggested that nonconventional operations, such as jitneys, and new approaches to financial subsidies needed to be tested. These conclusions set the stage for the current interest in small, unconventional private-sector reverse commute services.

Several authors have noted that various private-sector arrangements have become established in commuter transportation markets, usually because there are significant financial benefits. One study showed that vanpool services are highly cost competitive with all types of private bus operation and much less expensive than public agency bus services (3). Vanpools are often 40 to 50 percent less expensive than transit agency commuter bus services in suburban areas.

Another study, which focused on the benefits of private-sector transit and paratransit systems in eight small urban and suburban areas, found that the private sector is able to operate services at a lower cost than public systems can (4). The study concluded that the private sector is more flexible and has more options for responding to problems such as fluctuations in demand. The use of private contractors in a competitive environment keeps costs down and provides controls on quality of service.

A study of the suburban mobility problems of elderly, handicapped, and low-income city residents in Louisiana found that there is potential for new private-sector public transportation services (5). The author recommended that more market-sensitive and user-friendly services such as paratransit or shared-ride taxis be substituted for regular transit in low-density areas and that city governments should facilitate the entry of the private sector into the commuter transportation market.

A recent study of private-sector reverse commute services in several cities concluded that government funding and employer financial assistance appear to be critical sources of support (6). Service operators found it necessary to provide some social services, such as training and child care, in addition to transportation, however. The author concluded that since transportation alone was not the solution, a coordinated effort among several agencies and organizations that deal with inner-city employment was required. He also concluded that there was perhaps no one model for successful reverse commute service.

It is apparent that private-sector commute services have become established because of public- and private-sector financial support and because such services can increase access to jobs at a cost lower than that of public mass transit. Yet other factors must be present for these services to thrive, particularly with little or no subsidy. Firms that are thriving and well managed strategically display the following characteristics:

- A lean management structure is close to operations and market information,
- All segments of the organization participate in the flow of communications,

- Management has appropriate strategies to increase revenues through targeted marketing and to manage costs, and
- Management continually monitors performance (7).

CASE STUDIES

Accel Transportation

Accel Transportation operates reverse commute service in the Chicago metropolitan area. Accel is a for-profit subsidiary of the LeClaire Courts Service Corporation, a public housing resident management corporation. Accel also has organizational links to the Clarence Darrow Center, another subsidiary of LeClaire Courts, which offers job and life experience training for public housing residents.

Accel consists of the general manager, an operations manager, a mechanic, dispatchers, and drivers. Although they have no previous background in transportation, the members of the organization do have experience with business and strong links to social services through the Darrow Center. Accel's management and staff are young, enthusiastic individuals who have bought into the organization. They hold frequent meetings, and the management style is open.

Accel came into existence at the urging of the National Center for Neighborhood Enterprise, a national organization promoting private-sector solutions to social and economic problems in urban areas. Accel applied for and obtained an ESP grant of \$90,000 for planning purposes. Other grants have been obtained through the Regional Transportation Authority (RTA) for local demonstration. The Public/Private Transportation Network (PPTN), an FTA-sponsored technical assistance program, provided some short-term technical assistance to Accel during the initial stages of planning and operation.

Since there were no market research skills in-house, a class at Northwestern University conducted a market study for Accel. DuPage County, a suburban county west of Chicago, was selected as a promising market area for reverse commute services because of the rapid economic growth occurring there. Through discussions with the DuPage County Chamber of Commerce it became apparent that employers had particular problems obtaining entry-level labor.

Accel encountered no serious competition in the Chicago-to-DuPage County market. PACE, the suburban bus system in the metropolitan area, provided very little service in the county. The county had some small private-sector fixed-route operators and illegal taxis, but it remained inaccessible to many city residents. Other reverse commute services operated in the northern suburbs of Chicago.

Accel did not face any serious regulatory hurdles, either, since it would act not as a common carrier but as a contract carrier for employers. Insurance was a major financial obstacle, however. The state perceived Accel as a taxi or limousine service for insurance purposes and required \$1 million liability coverage, costing \$6,000/van.

Accel first marketed its services to employers in all of DuPage County but has since concentrated its marketing to specific service areas. Accel promoted its services to the private industry council and developers, at Chamber of Commerce meetings and through membership in suburban transportation

management associations. Accel's services were not promoted to retailing firms because of the generally low wages and high employee turnover in that industry. Accel encountered reluctance among some employers to hire LeClaire Courts residents but was able to convince employers that its services would reduce costs for employee recruitment and training and relieve transportation obstacles.

Accel originally marketed its services to its own client base at LeClaire Courts through surveys of unemployed residents. The response to Accel's marketing was enthusiastic, since participating residents would have subsidized transportation to employment and access to day care programs, after-school programs, family counseling, and health services through the Darrow Center. But during the first year of operation about half of the riders were people who already worked in DuPage County but had inconvenient means of transportation. Promotion of the service to the unemployed has been done through newspapers and word of mouth.

Accel developed a relationship with the Chicago Institute for Economic Development, which would screen job seekers for employment by area employers. Accel would then provide the transportation service and design specialized programs for employers, including government-funded wage subsidies and employer tax credits, and consultation regarding work place conflict and employee work habits.

Contracts have been established with hotels, nursing homes, a food assembly plant, maintenance company, and an automobile repair franchise. The criteria for establishing contracts for service with employers were and continue to be

- Employer willingness to hire LeClaire Courts residents;
- Employer location in area being served;
- Employee wages of \$5.25/hr, or more, plus benefits;
- Van trip revenues that cover costs; and
- Available vehicle capacity.

Accel has developed a routing and scheduling plan using maps, data on employer location and travel times, and fares based on distance. Times of operation are based on the shifts worked by the employees. Accel van services depart from the headquarters and other sites on the south and southwest sides of the city within easy access to major expressways. Accel operates from 6:00 a.m. to 12:00 a.m., 7 days a week.

Vehicles were maintained at first through a maintenance contract with an automobile repair firm but now are maintained by an in-house mechanic. Personnel policies have been patterned after the policies of a similar service in another city. Drivers are hired from LeClaire Courts, but driver turnover has been high. Drivers are screened extensively before being hired, and vehicles are checked before each trip.

Accel continually measures its performance in two areas: ridership and financial condition. Accel has been able to cover its costs of operation through employer and employee fare payments, ESP grants, and grants from foundations. Accel's objective for ridership the first year of operation was to carry 90 persons. As specified in the 2-year ESP grant agreement with RTA, Accel's objective for the second year was to carry 120 passengers with 67 percent of operating costs covered by fares, employer payments, and non-RTA (foundation) grants and for the third year to carry 150 passengers with 87 percent

of operating costs covered. After the third year Accel hopes to cover all costs without RTA funding.

Accel has been carrying more than 125 riders a day. The cost per participating employee is \$4.00/day, which is shared equally by the employer and employee. For service beyond a 50-km (30-mi) radius, fees are negotiated with participating employers.

According to the general manager, the most difficult problem encountered by Accel has been the inexperience of the staff in transportation service. Much has been learned through trial and error. Accel has had difficulty maintaining ridership on certain routes and should have been more cautious about expanding service to new areas. Another problem has been the high turnover of drivers, but experience with screening and hiring of drivers has reduced that. An additional problem has been determining the appropriate mix of vehicles.

The general manager described the ESP program as appropriately funding new reverse commute services, but technical assistance is too casual. Reactive technical assistance, as supplied by PPTN, is not sufficient, since many operators do not have the knowledge to ask the appropriate questions. Minorities have been encouraged to initiate new services through the ESP program, but historically they have not been in management positions with transportation services. Thus, according to the general manager, long-term training in marketing and market research and in providing transportation service should be part of the program.

Accessible Services, Inc.

Accessible Services, Inc. (ASI), a transportation brokerage, marketing, consulting, and management services firm, operates the Job Relay System, a reverse commute service in the Philadelphia metropolitan area. ASI contracts van services from various carriers to provide reverse commute service. Thus, ASI has avoided major capital investments as a way to remain flexible in a potentially competitive environment.

The management structure of ASI consists of the president, an operations manager, and schedulers. The president of ASI and family members have operated social service transportation in the area for many years. For an hour a week, a part-time sales representative markets the service to business park employers and developers. The president of ASI is a results-oriented entrepreneur and has a keen appreciation of marketing and promotion and an impatience with institutional obstacles. Because ASI is a small, close-knit family operation, there appears to be good communication.

ASI established the Job Relay System after some developers of suburban office parks had expressed interest in reverse commute services to their locations. ASI contacted business, government, and social service organizations and learned that such a service would be well received. ASI then contacted a professor at the University of Pennsylvania, who assisted in obtaining one of the first ESP grants. The university acted as the public-sector sponsor and funding conduit for the Job Relay System. With the professor's assistance ASI researched the market and evaluated the feasibility of providing service.

The market research showed that several suburban counties, particularly the King of Prussia area of Montgomery County, west of Philadelphia, were experiencing rapid growth

in suburban office and business park development. These parks are in dispersed campus-like settings located near expressways but not well served by the Southeastern Pennsylvania Transit Authority (SEPTA). ASI planned to serve only those parks that could be reached within a 45-min commute time from public housing sites in west Philadelphia; it was estimated that the service would be able to capture 1.5 to 2.0 percent of total park employment.

Other private-sector and inner-city groups competed in this market and elsewhere in the metropolitan area, but it was believed that the area could support several reverse commute services.

ASI encountered no state regulatory problems because the reverse commute service would not compete with SEPTA routes and would be not a common carrier but a brokerage service contracting with carriers. SEPTA did have some initial objections to the service, however. State insurance regulations required carriers to have \$1 million to \$2 million of liability insurance, a cost that ASI would face indirectly through its contracts with carriers.

ASI found that employers would not subsidize a commute service unless employee recruitment was also included, but some employers were reluctant to hire inner-city minorities and preferred suburban students and housewives. ASI was able to show employers that the service would reduce recruiting and other employee costs significantly. The president of ASI met with personnel managers and heads of firms to sell the service on the basis of financial and tax benefits.

ASI then contacted the Urban Affairs Partnership, the civic and social service arm of the Philadelphia business community, for assistance in developing the links to employment, training, and social services organizations that could supply trained labor. The Urban Affairs Partnership had a program, the Community Occupational Readiness and Preparedness Program (CORPP), that would screen and train individuals, as well as contract with other recruiting, referral, and training organizations. CORPP would thus match labor with appropriate jobs.

In practice CORPP was not prompt in supplying recruits that had been certified by the state Office of Employment and Training. For employers to receive \$2,400 in tax credits under the federal Targeted Jobs Tax Credit Program, all new employees had to be certified after being offered a job but before they started work. CORPP and the subcontractor organizations could not provide a steady flow of trained recruits, which meant that ASI could not deliver new employees to suburban employers and would not be paid for transportation service.

ASI then developed its own network of churches, resident-management groups, and 18 to 20 other community-based organizations to recruit and train employees. These organizations are informal grass-roots groups with an abundant clientele of low-wage and unemployed people. ASI still had problems with this new network in obtaining certified recruits in sufficient quantities and in time for employers' needs, but this hands-on approach, though requiring more time and effort, was an improvement.

ASI has contracted with hotels and industrial employers in various business parks. Developers of such parks saw the service as a real advantage in marketing their buildings to lessees and buyers of space. ASI's criteria for establishing

contracts with employers for service were

- No employers, such as retail firms, paying less than about \$5.50/hr;
- No sweat shops, such as sewing contractors;
- No racist employers;
- No fly-by-night employers; and
- No service outside established service areas.

ASI staff schedules service on a demand-responsive basis (since many riders work variable shifts), monitors carrier operations, inspects carrier vehicles, and responds to police complaints of carriers with whom ASI does business. As a brokerage service, ASI has no direct control over the drivers except through the contract provisions with carriers and thus cannot respond to service complaints as quickly as a carrier can. Contract provisions are used to discipline carriers that do not meet service requirements.

ASI keeps track of financial performance through conventional accounting methods. ASI has charged employers \$6.00 and riders \$4.00 for a door-to-door round trip with the employee contribution made through payroll deduction. ASI has been able to earn a profit when there are seven riders per van at \$5.00/trip, because carriers have charged \$25.00/hr per van for an average time of use of 1.5 hr. ASI receives no subsidy except from employers and the ESP seed money.

ASI's ridership is approximately 150 but it has fluctuated greatly. Many riders have dropped out of the service because of promotion to higher-paying jobs and use of automobiles, day care problems, or incompatibility with the work environment. ASI must add from 15 to 30 new riders a week to maintain a stable ridership base.

According to the president of ASI, ESP is a good program that provided much-needed seed money, but there are too many restrictions. One cannot use grant money for marketing materials, only for planning and coordinating the start of operations. ESP grants should not pay after the fact, because many grantees have cash flow problems and cannot wait for reimbursement. Many grants are given not to established providers but to community groups without transportation experience.

Central Transit System

Central Transit System provides reverse commute service in the Orlando metropolitan area. Central Transit has consisted of the president, an assistant, a driver, and on-call, part-time drivers. Communication is facilitated by the firm's small size and informal management style. Central Transit has developed personnel policies regarding compensation and benefits and has instituted programs on training, safety, and drug testing that are being provided by outside vendors. Enthusiasm, desire for results, and willingness to take risks characterize the president's entrepreneurship.

The president of Central Transit had no prior experience in transportation but did have a previous business that was listed in the local telephone company directory under "Van-pools" by mistake, and employers called and expressed interest in an employee shuttle service. Because of this apparent demand for commute service and the lack of success in the

previous business, the president contacted various transportation agencies and attended an FTA conference on ESP grants.

Central Transit researched the Orlando market through review of various sources of demographic data and the want ads, mapped the low-income neighborhoods in the city, and targeted the neighborhoods that were not extensively served by mass transit and the lodging industry serving the various theme parks in Osceola County, south of Orlando. State economic and insurance regulatory provisions were not major barriers to entry.

Central Transit contacted the various job placement agencies in the area as well as the local private industry council, but it found these organizations to be uncooperative and too bureaucratic, essentially unwilling to work with a middleman. Central Transit submitted a proposal to FTA for an ESP grant through Tri-County Transit, the public transit system in the Orlando area, and contacted various neighborhood organizations to market services to the labor force. Through these organizations flyers were distributed that listed available jobs and Central Transit's phone number. Job seekers would call Central Transit and would be screened over the telephone. Central Transit then contacted employers to set up meetings at which the service product was described. Employers were not reluctant to hire minorities, since most were in great need of housekeepers, jobs that have been held historically by minorities. Central Transit dealt only with those employers paying at least \$5.00/hr.

The first contract for service was established with the Marriott Hotel. Marriott agreed to pay \$5.50/employee per round-trip, and each employee paid \$4.00 round-trip. Round-trip distance is approximately 100 km (60 mi). Other hotels have since established contracts for service.

Central Transit leased the first vehicle, a six-passenger van, for 1 month from a vehicle leasing firm. The lease contained provisions for insuring and maintaining vehicles. When the Marriott Hotel paid for the first month's employee transportation, Central Transit was able to continue leasing the vehicle monthly for the first 3 months, until revenues increased sufficiently for long-term leasing. Thus, the vehicle was obtained through very little up-front capital and a positive cash flow.

Central Transit's president operated the vehicle for the first 7 months starting at 6:30 a.m. and ending at 8:30 p.m., 7 days a week; then a driver was hired. Turnover has been high, but there has also been an abundance of available drivers. Central Transit screens prospective drivers extensively and releases them quickly when they do not meet expectations.

Central Transit has concluded that matching low-wage labor to employers has been too burdensome because of the high turnover in jobs and ridership. Targeting low-income areas of the city for labor has not worked well, since many single parents on welfare do not work long term for \$5.00/hr.

As a result of the high rider turnover, Central Transit has made an arrangement with Tri-County Transit to operate a fixed-route service (Employee Transportation Management Program) in Osceola County that would be supported by employers, government, and riders. Tri-County Transit does not serve Osceola County and would in effect contract out such service to Central Transit. State and federal programs for transporting disadvantaged persons would provide funding toward this service.

To manage this new program Central Transit has opened more offices and hired a manager and supervisor of operations at each one. In addition several more vehicles have been leased, including paratransit vehicles. Central Transit has also moved into the transportation management arena by submitting proposals for local specialized services.

According to the president of Central Transit, the first obstacle to service was insufficient capital, but a flexible vehicle lease arrangement overcame it. A second obstacle of driver unreliability and turnover has been lessened by driver screening and an abundance of available drivers. A third obstacle was the absence of support from government and nonprofit employment and training organizations. On the other hand, active local government support for the planned fixed-route service has been a boon to continued survival and future growth.

According to the president, most operators do not have money for marketing, financial studies, and advice when initiating service. The ESP program has provided the needed financial support for operators, but operators without transportation and marketing experience often need long-term advice and assistance. The short-term technical assistance from PPTN requires enough knowledge to ask specific questions. Since many do not have this knowledge, a training and advisory component should be available.

Analysis of Cases

The case studies of reverse commute service have revealed factors that are critical to successful private-sector operation with little or no subsidy. All three reverse commute services are characterized by lean management structures directly involved in marketing and operations. They have as their top managers individuals who are self-confident and oriented toward results and marketing.

Management strategies heavily emphasize market research, promotion, minimal capital investments, and maximum flexibility. According to management at all three services, communication is frequent and unencumbered because of small organizational size and informal management style. The managers monitor financial performance and ridership, information that influences the marketing to employers and riders.

Market research, marketing, and sufficient financial resources are critical to the initial stages of planning and operation, but accurate and detailed market research information was not readily available to the companies. There was also some difficulty obtaining ESP grants at the right time for the needed purpose.

All of the commute services have established contracts with major employers not only for employee transportation but also for recruiting employees. As a result, they have had to form relationships with social service, employment, training, and recruitment organizations (government and nonprofit). Two of the commute services encountered reluctance among some employers to hire minorities. Yet inner-city minorities have been hired, particularly for those occupations that historically have been held by minorities.

The commute services have dealt primarily with manufacturing, distribution, some service, and lodging firms, avoiding retail firms and restaurants because of the low wages and high

turnover among employees. Employers have subsidized employee trips when shown that labor access, recruitment, advertising, and training costs and tax savings can result.

Sufficient ridership and recruitment levels are critical to maintaining successful operation. Two of the commute services have had difficulty establishing links to employment, training, and recruitment organizations. Matching employment opportunities with available labor in sufficient quantities to maintain ridership has been difficult. The organization with historic ties to social service, employment, and training organizations has had more success.

Ridership turnover among low-wage, entry-level workers has been a major problem for the commute services. Many employees stop using a service because of promotions with higher wages and use of automobiles, insufficient financial incentive to work long term, or incompatibility with the work environment. Driver turnover has been the biggest operations problem facing service providers but has been mitigated over time as labor screening has improved.

The two commute services without previous transportation experience learned to operate through trial and error and expressed a desire for a long-term training component. In their opinion, short-term technical assistance, such as provided by PPTN, was not sufficient.

CONCLUSIONS

Private-sector reverse commute services have become established because of public- and private-sector financial support and because they can increase access to jobs at a cost lower than that of public mass transit. However, other factors are critical to success. One should not make sweeping generalities from three cases, and further research is needed, but certain common factors are apparent among the three.

The factors of successful private-sector reverse commute services are

- A lean management structure with dynamic entrepreneurship and communication;
- Strategies emphasizing financial flexibility and marketing (market research to identify promising market niches and promotion that emphasizes cost savings to employers);

- Establishment of contracts with employers for subsidized transportation and matching of jobs with labor;
- Close relationships with employment, training, and recruitment organizations;
- Comprehensive screening of commute service employees; and
- Monitoring of performance.

As a means to promote such services, FTA should implement a training and long-term technical assistance component to complement the financial assistance of ESP.

ACKNOWLEDGMENT

The research for this article was supported by a grant from FTA's University Research and Training Program.

REFERENCES

1. Z. A. Farkas, A. Odumbaku, and M. Ayele. *Low-Wage Labor and Access to Suburban Jobs*. UMTA, U.S. Department of Transportation, Washington, D.C., Dec. 1990.
2. J. L. Crain. *The Reverse Commute Experiment: A \$7 Million Demonstration Program*. UMTA, U.S. Department of Transportation, Sept. 1970.
3. R. F. Teal, G. M. Giuliano, M. E. Brenner, R. B. Rooney, and J. K. Jacobs. *Private Sector Options for Commuter Transportation*. UMTA, U.S. Department of Transportation, 1984.
4. Carter-Goble Associates, Inc. *Expanding the Use of Private Sector Providers in Rural, Small Urban and Suburban Areas*. UMTA, U.S. Department of Transportation, Washington, D.C., 1987.
5. B. N. Nwokolo. *Redesigning Local Transportation Service for Improved Suburban Mobility . . . The Problem of Accessibility for the Elderly and Low Income Residents*. UMTA, U.S. Department of Transportation, May 1990.
6. S. Blake. *Inner City Minority Transit Needs in Accessing Suburban Employment Centers*. National Association of Regional Councils, Washington, D.C., 1990.
7. Z. A. Farkas. Strategic Management of Organizational Turnarounds in the Transit Industry. *Transportation*, Vol. 18, 1991, pp. 223-238.

The paper reflects the views of the author and not necessarily those of FTA.

Publication of this paper sponsored by Committee on Public Transportation Planning and Development.