

## **5. COMPENDIUM OF PUBLIC TRANSPORTATION PRACTICES TO ADDRESS IMMOBILITY**

This Compendium presents 53 brief summaries of best practices to address immobility. It supplements the 11 in-depth practices in the case studies of this research that are presented in Appendix A. The practices are organized according to the type of immobility problem they are trying to solve or the mobility needs of a particular clientele to whom they are directed. It is recognized that this typography is imprecise, because many of the practices overlap in their objectives.

### **COMPENDIUM ORGANIZATION**

- Access to Jobs
- Filling Mobility Gaps
- Coordination with Health and Human Services
- Elderly Services
- Youth Services
- Transit Oriented Development
- Vehicle Programs

Access to Jobs is presented first because welfare reform is a "front-burner" issue throughout this research period, resulting in a wide range of very current practices focused on solutions to unemployment. On the other hand, there is an entire body of information on services for the frail elderly mandated by the Americans with Disabilities Act (ADA) that already exists. Therefore, rather than repeat existing research, this Compendium presents some non-ADA practices directed at the elderly. Many of the practices in Filling Mobility Gaps also benefit the elderly but are primarily ways of making existing public transportation more useable for the general public. Similarly, practices in the section on Coordination could also be placed in the Filling Mobility Gaps section, but are called out separately for their emphasis on collaborating with health and human service agencies. Youth Services illustrates several innovative public and private sector practices that respond to mobility problems of children when parents are working, and the Transit Oriented Development section describes some long-range solutions to immobility.

### **ACCESS TO JOBS**

New demands on public transportation have occurred because of two societal changes, in particular:

- the movement of jobs from the central city to the suburbs, causing a mismatch between residential and employment locations; and
- the federal welfare reform measures passed by Congress in 1996, mandating increased participation in the workforce by many who live in rural or inner city areas far from the suburban jobs.

One result is the many public transportation programs targeted at improving access to jobs. This section highlights 27 of those programs, ranging from comprehensive, federally-funded practices to practices undertaken in individual communities across the country. It describes programs designed to take inner city workers to the suburbs; use of school buses as a pervasive transportation mode available in rural areas; special services to get people to job interviews and to shift work; and programs using vanpools.

## **Reverse Community Services**

### Bridges to Work

Bridges to Work is one of the most systematically organized employment partnerships. The design is based on collaborative planning with job training and placement organizations, transportation providers, community-based organizations, human services agencies, and regional planning institutions. The program, administered jointly by the nonprofit Public/Private Ventures (P/PV), and the U. S. Department of Housing and Urban Development (HUD), consists of:

- *Metropolitan Placement* to help inner-city residents locate job openings, particularly in the suburbs;
- *Targeted Commute* to connect inner-city residents to previously inaccessible employment locations; and
- *Support Services* to mitigate demands created by a commute to distant job locations, including extended child-care arrangements, a guaranteed ride home in an emergency, and conflict resolution with co-workers.

Total funding is \$17 million over 4 years--January, 1997 through December, 2000. HUD is providing \$8 million for operations with \$3 million from the five competitively-selected communities: Baltimore, Chicago, Denver, Milwaukee, Philadelphia, and St. Louis. HUD and three foundations will contribute \$6 million for monitoring, research and evaluation. To test the Bridges to Work design, in all the sites except Chicago, half of the applicants will receive the integrated services described above; the other half will receive only the normal services available in the community.

Each community has designed a program specific to its needs: (53)

### *Baltimore*

Vanpools operated by a private company take residents from the East Baltimore Empowerment Zone, which includes more than 600 units of public housing, to the suburban Baltimore-Washington International Airport, which has nearly 1/3 of all jobs in the Baltimore region.

### *Chicago*

PACE Suburban Bus Company provides express bus service and vanpools to the O'Hare Airport industrial complex and adjacent suburbs from Chicago's West Side and South Side, which includes 9,500 public housing units.

### *Denver*

Participants in a section of Denver's Enterprise Zone and in Old Aurora use free monthly passes to ride express buses, circulator vans and vanpools operated by the Regional Transportation District to the Denver Technological Center, which has the fastest overall industrial and business development growth in the region.

### *Milwaukee*

Near-direct bus or van services with strategic origin and destination sites are provided by private contractors to residents of Milwaukee's north, south, and central neighborhoods. The Washington and Waukesha County destinations are both high-growth areas and rich sources for difficult-to-fill, entry level jobs within reasonable commuting distances.

### *St. Louis*

The public operator, the Bi-State Development Agency, uses fixed route and express buses, augmented by circulator vans provided by the American Red Cross, to take residents of north St. Louis and St. Louis County to jobs at the Spirit of St. Louis Airport and surrounding developments in west St. Louis.

## **Other "Reverse Commute" Services--Central City to Suburbs**

### SEPTAs Shuttle, Pennsylvania

Southeastern Pennsylvania Transportation Authority's Horsham Breeze Shuttle meets buses from downtown Philadelphia to connect to suburban employment centers with major employers, such as UPS and Prudential. Extended

hours of service are paid for by employers, and the county funds midday service. See Appendix A for the complete case study.

#### Accessible Services, Inc., Pennsylvania

Accessible Services, Inc., (ASI) is a private reverse commute service which operates in and around Philadelphia. The service is funded by the Federal Transit Administration's Regional Mobility Program Entrepreneurial Services Program (ESP). ASI began with one of the first ESP challenge grants in 1988. After initial failure, the program was substantially redesigned. ASI developed its own network of community based groups and institutions to identify low-skilled, unemployed individuals who were good candidates for continued employment. As of 1992, the program was operating successfully as a broker for the Job Relay System, contracting with various carriers, including a social service transportation system which uses federally funded paratransit vehicles, to provide reverse commute services. The cost per vehicle service hour allowed ASI to break even with five passengers per one-way trip. (54)

#### Wisconsin's JOB-RIDE Program

The Wisconsin Department of Transportation developed the JOB-RIDE Program to subsidize access to suburban jobs for inner city and minority residents in an attempt to reduce welfare dependency and to alleviate suburban employee shortages in Milwaukee. The program brings together employers and private organizations serving the unemployed. Initially, it funds private, non-profit organizations which provide job development, training, and placement services to obtain or provide transportation alternatives where conventional public transit would be inefficient. Between January 1989 and December 1990 JOB-RIDE filled 1,440 permanent and 598 temporary jobs. During its eight-year term, it provided more than 72,000 trips to work. (55)

#### Destination Jobs, Minnesota

In 1990, the City of Minneapolis funded Loring Nicollet-Bethlehem Community Centers, Inc. to operate a van to the suburbs in order to broaden employment opportunities for inner city individuals. This community-based agency linked with Preferred Products, Inc., an employer located in Chaska, a suburb of the metropolitan Twin Cities, which was having problems finding workers for its jobs. In the face of interest by other employers, the Eden Prairie Chamber of Commerce formed a Reverse Commute Committee to develop a more comprehensive transportation solution and to sponsor a Job Fair. One result is the Reserve-a-Ride Service instituted by Suburban Transit Authority, the public transit provider. Express buses pick up riders in the city and drop them at a suburban transit hub.

Riders who make reservations are then transported by a dial-a-ride shuttle bus to their place of employment. (56)

#### Accel Transportation, Illinois

Accel Transportation is looked upon as one of the most successful programs sponsored by the National Center for Neighborhood Enterprise (NCNE), a national non-profit organization. Accel is a transportation service owned and operated by a subsidiary of the LeClaire Courts Resident Management Corporation, which manages LeClaire Courts, a Chicago public housing project with 3,500 residents. The transportation system serves residents of LeClaire Courts who do not own cars and need transportation to jobs in other parts of the city. Accel has formed a partnership with the Chicago Institute for Economic Development to provide job training, child care and placement services with employers in suburban DuPage County whose facilities are not accessible by public transit. The transportation system operates five 20-passenger vans and serves nighttime shift workers as well as regular daytime employees. Accel carries about 150 riders.

Fares in 1992 were \$6 a day and supplied 45-50% of the revenues. In addition to riders, participating employers and philanthropic organizations contribute to the fare revenue. Riders are primarily women and African Americans working as nurses' aides, in restaurants, or in hotels. They can earn \$1.50-2 per hour more in these suburban jobs than at comparable jobs in the city. (57)

#### Route 1 "Carnegie" Corridor, New Jersey

The Route 1 "Carnegie" Corridor in Mercer County, New Jersey, is an employment concentration located near but not at a commuter rail station along a high speed line serving New York, Newark, and Philadelphia. The area, located 1.4 miles from the Princeton Junction commuter rail station, includes both residential and campus style office parks, which are part of the rapid office growth in Princeton.

The area's developer began the Carnegie Hall shuttle service to enhance the attractiveness of the Carnegie Center and originally paid all of the costs. The service was free to employers. As of 1992, employees rode the shuttle free while local residents paid. Service ran from 6 to 10 a.m. and from 3 to 6 p.m. on a 25-minute headway, meeting all outbound trains.

The Carnegie Hall shuttle service successfully serves multiple markets. The Carnegie Center also includes 550 medium density units which generate traditional suburban-to-center-city commuter rail ridership to New York and Philadelphia; this ridership accounts for nearly 60% of total daily ridership. A 1991 study by

Marchwinski and Fittante found that 75% of riders to Carnegie Center were reverse commuters who traveled an average of 28.5 miles. (58)

#### The Gateway Shuttle, California

The Multi-City Transportation Systems Management Agency (MTSMA), a joint powers agency of eight California cities in northern San Mateo County, secured a \$196,900 grant from the Bay Area Air Quality Management District to consolidate six private shuttles operated by suburban employment sites into a system of three shuttles from the Bay Area Rapid Transit (BART) commuter rail and CalTrain. The existing private shuttles often overlapped shuttle schedules, experienced low productivity of less than six passengers per hour, and averaged about \$4 per passenger trip.

The most successful of these shuttles is the Gateway Shuttle, a partnership between Genentech, a 2,000 employee biomedical firm, and Homart, a property management firm with a large suburban office complex housing 2,500 employees. Both sites are located east of the freeway and have no public transit service. The grant enabled MTSMA to consolidate the existing private shuttles, adding service from the Glen Park BART Station for Homart, and increasing headways to 20 minutes from BART and 30 minutes from CalTrain. Average monthly ridership on the two shuttles is now 5,100 passengers on the BART shuttle and 2,200 passengers on the CalTrain shuttle. Although the free shuttles were originally designed as a commute alternative strategy for all employees, the direct connection to BART provides convenient access to a significant suburban employment site for inner city workers in San Francisco and Oakland. (59)

#### **School Buses for Welfare-to-Work Programs**

##### School Buses for North Carolina's Work First Participants

The North Carolina Board of Education and the Department of Public Instruction passed a resolution in May, 1997 allowing adults in Work First, the state's welfare reform program, to ride school buses. Since 80-90% of the Work First purchased services in rural areas goes to transportation, the resolution was drafted to respond to this mobility challenge. In exchange for the ride, adult passengers must serve as bus monitors. Adults then disembark at the school to go to jobs or to transfer to another vehicle. Regional consultants provide technical assistance to local school boards and social service agencies to set up the school bus transportation program. (60)

### Private Industry Council, East Tennessee

The East Tennessee Private Industry Council convinced the school board in rural Roane County to allow parents who are enrolled in training and education to ride school buses. The school board is paid \$4.22 a day per person. The school board reserved the right to refuse someone with a violent history and prohibits adults on buses with small children. Because the transportation is education-related, insurance is not a problem. Partly because of such creative transportation solutions, the welfare rolls have dropped approximately 50% in East Tennessee. (61)

### Glendale-Azalea School District and Skills Center Transportation, Oregon

See JOBLINKS programs below.

### Chesterfield County Coordinating Council, South Carolina

See the case study in Appendix A.

### Rachel's Bus Company, Illinois

This example is not one of using school bus service as transportation for welfare recipients, but rather as a source of jobs for people leaving the welfare roles. Rachel's Bus Company in Chicago, Illinois provides bus service under contracts with public and private schools. It employs 150 full and part time workers as drivers, mechanics and office workers. Drivers are recruited at welfare offices and job fairs. As high as 40% of the workforce have been welfare recipients. To provide transportation to their jobs at Rachel's Bus Company, three free shuttles start at 5 a.m. picking up employees and transporting them to headquarters. The shuttles return employees home about 5:30 p.m. Single parents are scheduled on routes to schools that their children attend to avoid the need for before and after school child care. (62)

### **Joblinks**

Community Transportation Association of America (CTAA) administers JOBLINKS, a series of demonstration projects testing various means of providing transportation to disadvantaged individuals or those underserved by public transit, particularly welfare recipients transitioning to self-sufficiency. The motto of JOBLINKS, which is funded by the Federal Transit Administration, is "Connecting People to the Workplace." Summaries of three of the ten projects funded in 1995-96 are presented here. The remaining seven projects were in Fresno, California; Portland, Oregon; Blytheville, Arkansas, Seven Counties in Southeast Kentucky;

Cabarrus County, North Carolina; Sault Ste. Marie, Michigan; and Detroit, Michigan.

#### Glendale-Azalea School District and Skills Center Transportation, Oregon

About the same time two lumber mills in this rural area of southern Oregon closed in 1993, the Glendale-Azalea School District established a Skills Center. The Skills Center works in partnership with social service agencies to assist families with children having behavioral problems. When 600 workers were laid off from the lumber mills, the Skills Center established a transportation system to get these displaced parents to the Center for job re-training, to obtain their high school Graduate Equivalency Degree (GED), and to connect them to mental health, counseling, and unemployment assistance. Child care is also provided at the Skills Center.

The system is comprised of three components:

- Gas Vouchers: Assistance for those volunteering to provide carpools.
- School Buses: Adults are picked up at school bus stops along with pupils. The grant pays for mileage and driver time whenever the school bus must deviate off the route for a pickup. The school district covers about an 80-mile radius.
- Volunteer Drivers/Ridematching: Those living too far from a bus stop can get trips from volunteer drivers, who are paid 29 cents a mile. This program was merged with a program to provide medical trips paid for by the State. The school district has accepted financial responsibility for dispatching both medical and employment carpools.

In its first eight months of operation, 350 individuals, or 6% of the entire service area population, had received transportation assistance. A sample of 115 different riders found that 21% found employment and 9% completed their GEDs.(63)

#### Louisville Express Route Increases Job Access

The Kentuckiana Regional Planning and Development Agency (KIPDA) teamed with the Transit Authority of River City (TARC) in Louisville, Kentucky to develop a new express route from West Louisville, an area of high unemployment, to the Bluegrass Industrial Park on the suburban east side of the city. A 40-minute express bus ride replaces what had been a trip of two to three hours on other TARC routes. To publicize the new route, KIPDA worked with employers and a coalition of community-based organizations, which provide job training, employment assistance and homeless services. The project's goal is to prove the importance of transportation in helping people obtain and maintain employment. (64)

## Southeast Arkansas Transportation

To facilitate access to programs and services, the Area Agency on Aging of Southeast Arkansas (AAASEA) began providing transportation for senior citizens in the 1970s. In 1993, the AAASEA created Southeast Arkansas Transportation (SEAT), the rural public transportation provider in Southeastern Arkansas, which serves 13 counties using 100 vehicles.

With the assistance of the JOBLINKs grant, SEAT was able to successfully demonstrate interlining of senior center and job training trips in rural Jefferson County. This interlining of trips has now been incorporated into SEAT operations on a systemwide basis. Jefferson County, with Pine Bluff as the County seat, has a population of 85,000 spread over 880 square miles. Many residents live in small communities that are 10-15 miles from services. The average annual income is \$12,000, and approximately 60% have incomes below the poverty level. When Pine Bluff Transit (the public transit provider in the town of Pine Bluff) had to reduce services at the same time that the State Department of Human Services (DHS) was launching its job training program, SEAT began getting calls about transportation needs. With the cooperation of DHS staff in Jefferson County, SEAT began using its senior center vans to transport DHS clients to job training sites prior to 10 a.m. and after 2 p.m., when the vans were not in use by the senior center. DHS case workers referred clients to SEAT and paid the \$3 round trip fare while the clients were in training. When these clients get jobs they often continue to ride SEAT to commute to work. Job training ridership has grown to about 30% of SEAT's monthly ridership. Four vans were made available only because SEAT was able to negotiate with the State Department of Corrections to have prisoners rehabilitate older vans at a very affordable rate.

At its peak, ridership was about 3,500 passenger trips each month. Operations are funded by federal dollars for rural transportation and by the federal Older Americans Act. Keys to the ongoing success of the project were the cooperation of DHS case workers in referring clients to SEAT, SEAT's willingness to put senior center vans in mixed use, and assistance with start-up costs and advertising provided by the JOBLINKs grant. At the end of the demonstration grant, AAASEA continued to operate one van for the welfare-to-work program, although the demand continues to be greater. (65) (66)

### **Services for Shift Work**

#### PDRTAs 24-Hour Rural Commute Service, South Carolina

Pee Dee Regional Transportation Authority runs a 24-hour commute service linking residents in rural South Carolina with entry-level jobs in the tourist industry at Myrtle Beach. Service operates to meet day and night shifts and is

coordinated with the Marion County Department of Social Services. See Appendix A for the complete case study.

#### MAPTs 24-Hour Commuter Service, Ohio

Muskingum Authority of Public Transit (MAPT) is a small transit system with 11 vehicles serving Zanesville, Ohio, a town of 26,000. A major candle manufacturer with more than 500 employees, located about 12 miles outside of town in an industrial park, was having difficulty recruiting workers for its minimum wage positions. Since June 1995, MAPT has contracted with the candle factory to provide free transportation to its employees. The factory pays a per mile rate for service, assisted by a large state tax break. Transit service is provided to all three shifts on two different routes, averaging about 25 passengers per shift per day. The employee only has to show his or her badge to the driver to ride free. A recent on-board survey found that five existing passengers would have to go back on public assistance if the contract transportation service were not provided. (67)

#### NFTAs Late Night Service, New York

Niagara Frontier Transit Authority in Buffalo, New York operates a request-a-stop program after 9 p.m. To increase safety for night workers, riders can disembark anywhere along the route if the bus can safely stop. (68)

### **Services to Job Training and Job Interviews**

#### Employment Transportation Services, Connecticut

Funded by the Connecticut Department of Transportation (ConnDOT), the City of Hartford established Employment Transportation Services (ETS), an agency responsible for planning paratransit services for job interviews and training and employment programs. Project staff believe that Hartford is one of the first cities with a strategic approach to the issue of unemployment, recognizing that transportation is only part of the problem. ETS has contracted for shared-ride taxis to take inner city residents to job interviews, physical exams, and other social services and for temporary vanpools.

ETS has initiated transportation services to fill a variety of reverse commute gaps, including summer employment and after-work training at Bradley airport. Both the job search and transitional transportation can be initiated by either a non-profit employment agency or an employer and will be provided within a 25 mile radius of the City in areas in which neither Connecticut Transit or the Greater Hartford Transit District operate. Individuals are given free rides to suburban job interviews or training. Once they are employed or accepted into a long term training program, they use the vanpool service for up to six months, provided there are at least four riders going to the same site.

In 1989, ETS make 24,000 one way trips, providing service to almost 900 people. Many of the riders had been unemployed for long periods, and one third of riders had been without a job for over a year. ETS also offers car-pool matching services for inner city residents and provides a van purchasing and leasing program which several employers have utilized. The private contractor provides drivers, operations staff and vehicle storage while City staff are responsible for administration, project development and supervision, and performance monitoring.

This service is part of a larger strategy planned by the Welfare to Work Transportation Access Group of the Capitol Region Council of Governments. The strategy includes improvements in fixed route bus service, new dial-a-ride services, vanpooling and guaranteed ride home programs. The transit operator already has expanded service and extended hours on key routes to employment sites. (69) (70)

#### Statewide Transportation Brokerage, Tennessee

Tennessee's Families First Welfare Program was implemented on September 1, 1996. The new law included a provision that the State of Tennessee must provide transportation to employment sites. Adults receiving welfare are responsible for selecting and utilizing appropriate transportation to get to a job training location, job interviews, and child care as necessary.

Individuals enrolled in job training have the option of receiving:

- \$5 per day if they can transport themselves.
- A gas voucher, equivalent to \$25 per week.
- Bus tokens.
- If none of the above enables a person to get to training, they can utilize the resources of the transportation broker.

With a short time frame for implementation, the State Department of Human Services decided to utilize the existing Job Training Partnership Act (JTPA) contractors as transportation brokers. The state is divided into 14 service delivery areas; there are 14 corresponding transportation brokerage operations. The transportation broker system makes use of any provider willing to participate: urban bus system, rural van services, taxis, senior programs, TennCare Medicaid transportation, and others. Over the first six months of implementation, only 200 trips could not be accommodated with the statewide brokerage system.

Preliminary program results indicate that 77% of job training participants took \$5, 1% received gas vouchers, 10% received transit tokens, 8.5% rode on subsidized vans, and 3.6% utilized other transportation services. (71)

### Job Oasis, Illinois

Job Oasis is a job center operated by Suburban Job-Link in Chicago, which helps people find and keep employment. Coaches work with participants on application and interviewing skills. Suburban Job-Link offers free transportation to Job Oasis and to job interviews. Those who become employed can then commute for about \$2 a ride. Suburban Job-Link does not compete with Pace, the public transit operator, but instead develops employment routes which Pace can assume when ridership is established. As the nation's first effort to overcome both transportation and information barriers to employment, Suburban Job-Link and its Job Oasis were a model for development of the Bridges to Work program discussed earlier. (72)

### **Route Extensions**

#### Route 1 Corridor Extension, Virginia

The Fairfax County Office of Transportation extended its Route 1 corridor bus route 2 1/2 miles to create direct access to job sites that were previously unreachable by public transit. The need for the route extension was revealed when the Fairfax County Department of Family Services in Northern Virginia plotted the residential location of clients, child care providers and potential employers on a regional map, using Geographic Information System computer software. The mapping was part of a detailed process of identifying resources to implement welfare reform. (73)

### **Carpools and Vanpools**

Carpools consist of two or more individuals who share a ride in a private auto. Vanpools are 8-15 passenger vehicles that, typically, are owned and operated by an individual who charges other riders; leased by a group through a regional ridesharing program; or supplied and subsidized by an employer or a community-based organization. Most often the driver gets free transportation to and from work in the van in return for driving the rest of the group to the job site. Sometimes the driver is paid. Several of the practices discussed in this section use vanpools to augment their strategies to provide transportation to jobs. For example, the Bridges to Work programs in Baltimore, Chicago and Denver all incorporate vanpools. Employment Transportation Services in Connecticut, described earlier, has set up a van purchasing and leasing program for employers. In the example below, Fort Worth Transportation Authority considers vanpools as an extension of its fixed route system and subsidizes them accordingly.

## Weed and Seed Program, Texas

The Fort Worth Transportation Authority (The T) organized the Weed and Seed Program to provide transportation to the airport for workers. The T first provided a van to a non-profit agency to transport potential workers to job interviews. A large carpool matching effort evolved, along with three subsidized vanpools. Before participating in the Weed and Seed transportation program, 70% of the workers were on unemployment. Employers are satisfied because the program provides them with good employees who come to work on time. Employers now enjoy an 86% retention rate for these new hires.

In addition, the T also operates a subsidized vanpool program consisting of 130 vans. Vanpooling is part of the area's Ozone Alert strategy for clean air. The underlying concept is that vanpoolers should be subsidized in the same way that bus riders are subsidized; this serves to extend vanpooling to transportation disadvantaged individuals who could not otherwise afford vanpools. The T saved \$150,000 per year by converting bus routes into vanpools when Lockheed downsized its workforce. Guaranteed Ride Home, which assures participants of a ride home in the case of an emergency, has proved to be very effective in marketing The T's vanpool and carpool efforts. (74)

## **FILLING MOBILITY GAPS**

The practices discussed in this section all build upon a basic transportation system. They are strategies to fill the gaps in that basic system by adding services that meet specific time or distance needs, or the particular needs of a target population. The practices include:

- **Feeders:** Demand responsive extensions of fixed route service, used where fixed route is not economical to provide
- **Flexroutes:** Deviations from a regular fixed route to accommodate riders who do not live near enough to a bus stop or to provide increased safety, particularly at night
- **Community-Based Transportation:** Services tailored to the needs of a particular group and operated by local government or non-profit organizations
- **Private Entrepreneurial:** Services tailored to specific needs and operated by the private sector
- **Extended Hours:** Service outside the commute period, particularly for night and weekend riders
- **Free Fares/Vouchers:** Subsidized services, usually for persons who are elderly, disabled or poor

## **Feeders**

### San Diego DART, California

The San Diego Transit Corporation operates DART, a dial-a-ride van system under contract with a family-owned business. Passengers call ahead for a pick-up and are transported to a transfer point, where they have no more than a 10-minute wait to connect to the fixed route bus. Riders can subscribe to the service or call one hour in advance of the trip. Over 30% of the riders are subscribers, although in the peak periods, subscribers make up the majority of ridership. Work trips, followed by school trips, are the most frequent reasons for use of DART. DART operates in suburban and rural areas of San Diego to provide transit coverage in communities where distance and ridership would not justify fixed route service. (75)

## **Flexroutes**

### OmniLink, Virginia

OmniLink is a bus service in suburban Virginia which will deviate from its fixed route within 1 1/2 miles of the bus' corridor. Riders can call 24-48 hours in advance to arrange for the bus to pick them up in their neighborhood, if they do not live near a OmniLink bus stop. Standing orders for repeat trips are also accepted. This flexible routing provides attractive public transportation to the predominantly upper middle class area located 25 miles southwest of Washington, D.C. OmniLink is operated by the Potomac and Rappahannock Transportation Commission (PRTC), which also provides OmniLink feeder buses to the Virginia Railway Express, as well as express buses, commuter rail, and ridematching services. PRTC has received funding to install technology that will allow it to take on-the-spot bus reservations and to plot the best routing. (76)

## **Community-Based Transportation**

### SANTA, Wyoming

The Shoshone and Arapahoe Nations Transportation Authority (SANTA), a community-based agency in Wyoming, provides midday service to the Central Wyoming College in Riverton. Although the College provides its own transportation service in the morning and late afternoon, SANTA increased its service by 360% when it introduced two new routes to fill this midday gap. (77)

### EZ-Rider, North Carolina

The City of Charlotte, North Carolina underwrites the \$300,000 cost of four fixed route vans in the north and west parts of town. The hourly service provides direct connections from inner city neighborhoods to destinations such as social service agencies, jobs, day care and grocery stores. EZ-Rider began in 1993 when the city was approached by community organizations and neighborhood groups whose members could not reach services by conventional transit. For example, a trip to a nearby grocery store on Charlotte's radial route bus system might require two transfers and significant backtracking. Without an auto, inner city residents were spending large amounts of time on conventional transit just for basic necessities, such as groceries. The YMCA was also experiencing a transportation obstacle in getting participants to their literacy program on the north side of town. EZ-Rider routes were designed by social service agencies and neighborhood groups to fill this mobility gap. The service, which costs 25 cents in fare, is underwritten by a half-cent sales tax and a \$25 automobile tax. (78)

### Nickerson Gardens, California

Nickerson Gardens Resident Management Corporation (NGRMC) is a non-profit organization managing a public housing project with over 5,000 tenants in South Central Los Angeles. With local assistance, the NGRMC organized the Nickerson Gardens Vanpool Program to provide residents with low-cost transportation to job training sites, interviews, child care facilities and employment sites. However, because participation was less than expected, the focus of the paratransit service was expanded to carry trips for medical, shopping, work, school, and other personal needs. The van system employs tenants as drivers, dispatchers, mechanics, supervisors and administrators, thus providing additional employment opportunities to residents of the public housing project.

This vanpool program has been successful in meeting several different objectives:  
(79)

- 1) improve the mobility of residents who have no automobile available, or provide them with access to reasonably convenient transit;
- 2) reduce vehicle trips for residents who own cars; and
- 3) provide jobs for Nickerson Gardens residents.

## **Private Entrepreneurial Services**

### Numero Uno Supermarket, California

The Metropolitan Transportation Authority's buses bring customers to the Numero Uno Supermarket in South Central Los Angeles, California, where they can shop and return home with their groceries on free shuttles operated by the market. This entrepreneurial service complements the public transit system and boosts sales at the market. See Appendix A for the complete case study.

### Jitneys

Jitneys are private minibuses which are typically operated within or between communities by various entrepreneurs and not coordinated with public transit service. Depending on the locality, they may be regulated or licensed and the nature of the service may be restricted. Proponents claim jitneys can offer qualities which are lacking in public transit service. These include shorter waiting times, faster trip times, patrons' ability to flag vehicles at any street corner and get off at will, and the drivers' ability to communicate with and assist non-English speaking patrons. Private jitney service providers claim that all these factors serve to generate new customers for the jitneys and serve a market which is only marginally addressed by traditional bus service. Even if a certain overlap exists, jitney proponents claim that parallel and competitive jitney and public transit operations enhance personal mobility and are in the public interest. (80)

Opponents to jitney service contend that jitney operators choose to operate only in the profitable corridors and inevitably "skim" passengers from public transit. They also fear that because jitneys operate only during periods of peak demand, but not during off-peak hours and on weekends, the public transit operator is consequently required to operate "losing" routes and services, without offsetting revenue from peak period service and heavy demand corridors.

### Miami, Florida

Private jitneys originated in pre-World War II days, when minority entrepreneurs began to serve residents of low income neighborhoods in Miami located beyond the reach of streetcars. Although the Florida State legislature enacted statutes prohibiting unlicensed jitneys, enforcement has been largely unsuccessful. A study conducted in 1992 found that Miami's jitneys carried approximately 43,000 to 49,000 weekday riders, equal to about one-quarter of ridership on Metrobus, the public transit system. An independent survey suggested that the Miami jitneys had developed a market of their own, rather than merely siphoning riders from the public bus system. (81) (82)

### Atlantic City, New Jersey

Atlantic City's jitneys began in 1915 as a result of a transit strike and their success forced the trolley operator into bankruptcy. Today there are 170 13-passenger vans providing 24-hour service on three main arteries. The City regulates the jitneys and charges a franchise fee, which was \$160,000 in 1993.

### San Diego, California

Jitneys have been legally permitted in San Diego since 1979. San Diego Transit attempted to coordinate the jitneys and transit routes during the early 1980's when there was competition for passengers. However, since the demise of the military presence in San Diego, jitneys have developed their own niche markets and the two systems no longer compete.

### New York City, New York

Jitneys in New York City first appeared in southeast Queens during the 1980 transit strike. There are now an estimated 2,400 to 5,000 jitneys, operating primarily in neighborhoods of immigrants from Jamaica, Puerto Rico, Haiti and other West Indies islands, where jitneys are commonplace. New York City Transit Authority (NYCTA) has combined increased bus service with strong enforcement against jitneys that operate illegally on bus routes, resulting in NYCTA ridership increases.

## **Extended Hours**

### New Jersey Transit

Adding evening and weekend services increases access to shopping, recreation, and shift employment. New Jersey Transit implemented a total of 15 extended hours bus services and two extended hours rail services. An example of extended rail service is the Main/Bergen County rail line which has extensive connections to transit and ferry service at the Hoboken terminal for New York City and Liberty State Park. Two additional trips were added on Saturday, six round trips were added to Sunday service, and two existing Saturday trips were extended to seven suburban stations. The Main/Bergen rail service had a farebox recovery of 74% after ten months of operations. An example of expanded evening bus service is additional evening runs to a community college in Middlesex County. The majority of these services have received favorable ridership responses. (83)

### After Hours Program and Voucher Service, Florida

After Hours is a program of SpecTran, a subdivision of Palm Beach County Transportation Authority (CoTran) in West Palm Beach, Florida. Under a contract with Yellow Cab, riders who call 24 hours in advance can receive free rides between 6:30 and 11:30 p.m. if there are at least three people requesting service. Another evening program, Voucher Service, operates between 5:30 p.m. and midnight to supplement CoTran fixed route service which does not operate after 9:30 p.m. Passenger fares are subsidized using a county 6-cent gas tax. (84)

### Ann Arbor Transportation Authority

Late night service from 10 p.m. to 6 a.m., called "Night Ride," is operated by the Ann Arbor Transportation Authority (AATA) through a contract with taxicabs. The taxi operator receives a per passenger rate plus the fare. The city's taxicab ordinance requiring metered fares and prohibiting shared rides exempts taxis providing mass transportation services. (85)

### **Free Fares/Vouchers**

#### Logan Utah

In 1992, Logan, Utah implemented a fare-free transit program aimed at increasing the mobility of senior citizens, public school children, and university students at Utah State in Logan. Ridership started at 2,000 trips per day and climbed very quickly within the first year of operation to 3,700 trips per day.

#### Washington State

Washington State has been the nation's leader in implementing and supporting fare-free transit. Island County, the first totally fare-free system, began in 1987 and includes fixed route and commuter links to ferry service.

Link Transit in Chelan and Douglas counties of central Washington started a fare-free system in December 1991. The General Manager noted that transit is viewed as a public utility and as an important part of the community outreach to transit-dependent populations. System ridership has exceeded forecasts by three to four times with an average of 4,500 daily boardings. (86)

#### Sacramento, California

Sacramento Regional Transit District has implemented a discount pass program for persons receiving general assistance benefits within Sacramento

County, California in lieu of a \$20 cash transportation stipend. Regional Transit provides the County with a \$20 transit pass, a 55% discount over the normal pass price. General assistance recipients put a sticker on their welfare photo identification card to ride the bus. The 6-8,000 people on general assistance per month receive greatly expanded transportation opportunities, while Regional Transit receives \$1.5-2 million a year in new revenue. A similar discount program is offered to students at the Sacramento state university. (87)

#### City Rides, Los Angeles

See the Elderly Services section.

#### Immediate Needs Transportation Program, Los Angeles

See the case study in Appendix A.

### **COORDINATION WITH HEALTH AND HUMAN SERVICES AGENCIES**

Immobility is an indicator of other social issues that typically cannot be addressed by transportation alone. Public transportation practices bundled with other support services most effectively address immobility issues related to welfare-to-work, employment, and health care. This research uncovered a number of examples of how transportation agencies have worked with others to bundle services by building effective partnerships with health and human services agencies.

#### Medicaid Metropass, Florida

Metro-Dade Transit Agency in Miami avoids \$10 million annually in paratransit costs through the Metropass program it created in partnership with the Florida Medicare administration. Medicare recipients pay \$1 for an unlimited monthly pass, but give up paratransit, saving Medicare over \$500,000 a month. See the case study in Appendix A.

#### Immediate Needs Transportation Program, California

The Metropolitan Transportation Authority underwrites both taxi vouchers and bus tokens, which are used by clients of 600 social service agencies in Los Angeles. Clients in the Immediate Needs Transportation Program use the assistance for trips to food banks and grocery stores, medical appointments, job training and job interviews, and for emergencies. See the case study in Appendix A.

### Coordinating Council, South Carolina

The Chesterfield County Coordinating Council in South Carolina is increasing mobility for rural residents by layering a fixed route system on dial-a-ride routes and allowing adults to ride school buses. The 43 member agencies have also agreed to share their vehicles. See the case study in Appendix A.

### OATS, INC., Missouri

Volunteers donate 76,000 hours annually, an equivalent of 36 employees, to provide transportation in 87 counties of rural Missouri. Besides federal transportation funds, OATS funding base includes the Area Agency on Aging, the Department of Mental Health, Social Services Block Grants, Medicaid, and contracts with hospitals, clinics, sheltered workshops, nursing homes, dialysis clinics, Head Start, arthritis programs, school districts and cities. See the case study in Appendix A.

### County Transportation Systems Management, Michigan

County Transportation Systems Management (CTSM) is a membership-based organization developing a system of organizing, financing, delivering and evaluating transportation services in a manner that seeks to control costs while delivering high quality services. CTSM has focused in Wayne County, west of Detroit, Michigan, by working with employers, educational institutions, health care systems, and human service providers to identify mobility gaps and plan an integrated, consumer-focused system of transportation. It is in the early stages of implementing federal grants to use technology, particularly the Internet, as a coordination tool. CTSM does not provide service itself but relies on existing providers. CTSM considers itself "the problem solver," with coordination as the outcome. (88)

### Rural Transit Enterprises Coordinated, Kentucky

Rural Transit Enterprises Coordinated (RTEC) serves an 11-county area in southeastern Kentucky, where 32.5% of the 266,000 people have incomes below the poverty level. RTEC, which started by providing transportation for seniors only, expanded to serve the general public in 1990. Funding sources include federal programs for rural transportation, Medicaid and Older Americans, and in-kind donations from cities and counties. As it has expanded, RTEC has obtained additional vehicles by leasing them from social service agencies that wanted to have RTEC provide transportation for clients. RTEC has found that linking people in rural communities to services requires a multi-county transportation service area. The primary need is for non-emergency medical trips, which often involve lengthy

trips to urban areas. RTEC also provides trips to jobs, job training, shopping centers, senior centers, and delivers meals to homebound seniors. In FY 1995, RTEC provided 186,195 passenger trips (4,879 by wheelchair users) using 45 vehicles at an average cost per trip of \$5.12. (89)

#### Daniel Boone Development Council, Inc., Kentucky

Daniel Boone, a Community Action Agency, serves an eight-county area, also in southeastern Kentucky, and provides a variety of services: assistance with locating housing, weatherization, emergency services, job training and development, child care referral, shelters for homeless, and public transportation. Daniel Boone utilizes staff and facilities of Community Action Agencies in its service area to provide transportation, thereby avoiding duplication of costs and administration. The service area is mountainous and isolated from the rest of the State and the population is spread out in small communities. Total population of the transportation service area is 68,000. About 1/3 of the population has a disability, and 43% have incomes below the poverty level. The unemployment rate is about 15%. The specifics vary from county to county but, in general, transportation services are demand responsive and operate 8 a.m. to 4:30 p.m. Monday through Friday. Daniel Boone Transportation averages 6,800 passenger trips monthly with 55 vehicles in service, and a total annual operating cost of \$42,000. About half of trips are for medical purposes. (90)

#### Volunteer Transportation Incorporated, Oregon

In the late 1970's, the Tri-County Metropolitan Transportation District (Tri-Met), in Portland, Oregon, created a non-profit agency called Volunteer Transportation Incorporated (VTI). This volunteer agency was eligible for special education dollars that Tri-Met itself could not access. VTI was also eligible to pursue federal transportation capital and operating funds separate from Tri-Met. Today, VTI has about 30 vans and station wagons, which it assigns to a network of 25 private, non-profit providers, such as the American Red Cross, Metropolitan Family Services, and Volunteers of America. The majority of VTI's operating funds come from Tri-Met. Because clients eligible for the Americans with Disabilities Act (ADA) use up most of the capacity on Tri-Met's own paratransit system, VTI's services assure that there is transportation for those who do not qualify for ADA but who do not have fixed route service available. In this way, Tri-Met has expanded service to a portion of the population without adding costly fixed route service. (91)

### **ELDERLY SERVICES**

The Americans with Disabilities Act (ADA) passed in 1990 requires that surface transportation operators provide wheelchair-accessible, fixed route vehicles

and complementary paratransit services for individuals who cannot use fixed route services. Because there already is a body of information on ADA services available, this section of the Compendium focuses on non-ADA practices directed at the elderly. Practices described below (1) subsidize taxi rides for people on fixed incomes; (2) enlarge transportation options by teaching senior citizens confidence in riding fixed route transit; and (3) design routes to reduce walking distance to bus stops for a less mobile population. (Many of the practices in the sections on Filling Mobility Gaps and on Coordination also benefit the elderly.)

### **Subsidized Taxi Rides**

#### City Ride, California

To supplement paratransit services for the elderly mandated by the ADA, a number of cities offer subsidized trips by taxi for persons who are elderly or disabled. The City of Los Angeles, California administers City Ride, a program of subsidized taxi scrip (vouchers) funded by a local sales tax. Eligible persons can register to receive one free book of sixty taxi scrip per quarter. In order to conserve resources, trips are limited to a maximum distance, and only eight scrip can be used per trip. The Los Angeles Department of Aging also receives 1600 books of scrip per quarter as a way of enhancing the resources available for senior programs. (92)

#### Immediate Needs Transportation Program, California

See the case study in Appendix A.

### **Travel Training**

#### City of Fremont's Peer Training, California

AC Transit District and the Bay Area Rapid Transit District funded group travel training with peers as assistants. Conducted by the City of Fremont, California, the travel training empowered persons who are elderly or with disabilities to shift from paratransit to fixed routes for some of their trips, saving both the transit agencies and riders money. See Appendix A for the complete case study

#### Link Transit, Washington

Travel training teaches individuals to become more mobile in the community by training them to safely and independently use public transit. Travel training is available to all residents of Chelan and Douglas counties in Washington, who reside within the 3,500 square miles of Link's service area and have a physical or mental disability. Clients are referred and served on a first come, first served basis.

A Travel Trainer evaluates participants' mobility skills, needs, and potential so that a specific training plan can be developed for each person. The Travel Trainer first devises the route with the individual and points out bus stops, landmarks, and transfer points. They then begin riding the route together. Instruction is provided in whatever areas necessary for the person to travel safely and independently on the bus. When the person demonstrates the necessary skills, the Travel Trainer will observe the individual by following him or her on the route. If the individual passes this test, the training is completed and the person earns a certificate. If the individual exhibits some difficulty, the training is continued. Training completion skills include: bus recognition; bus boarding/deboarding; handling money/pass/transfers; landmark identification; properly exiting bus; street crossing techniques; emergency procedures; and bus behavior. (93)(94)

### Kitsap Transit, Washington

The Kitsap Travel Training Program was developed based on feedback from senior centers, individual passengers, and from the realization that the percentage of seniors is increasing. Program planning began with the hiring of a Training Specialist in 1991. The first group of six trainers launched the program in the summer of 1992. As of 1995, a total of 14 different travel trainers had helped about 150 clients to become transit users. Countless others have been helped, less formally, by travel trainers who make contact with individuals on a casual basis when riding on a bus.

### **Service Routes**

#### Madison County, Illinois

Service routes are fixed routes designed to reduce the distances that elderly persons and persons with disabilities must travel to get to and from bus stops. Typically, smaller vehicles are used, and vehicles will travel on neighborhood streets or into a mall or to hospital doorways to reduce walking distances. While routes are designed to better meet the needs of persons with disabilities and elderly persons, they are open to the public. Madison County Transit (MCT) has developed the service route concept further than most other systems in North America. It began implementation of service routes in 1989, and currently covers most of its service area with them. Service routes were developed as an alternative to fixed route services.

The service routes reversed the trend in declining ridership and have succeeded in attracting some of the demand from the paratransit service. Development of service routes required a new type of transit planning focused more on individual needs than general planning concepts such as use of population

densities. Routes and schedules, therefore, had to be very flexible to accommodate new needs as they were identified. Service routes were designed to get customers as close as possible to potential destinations. Other factors contributing to the success of the MCT service routes were use of low floor buses, good service coverage, extensive use of time transfers with connecting bus routes, close coordination between the fixed route and paratransit services, and travel training.

The cooperation of human service agencies in Madison County was also critical to the success of the system. Although skeptical at first, these agencies helped to travel train their clients to use the service routes. These agencies are currently strong supporters of the MCT system. Consumers surveyed were very favorable toward the service routes. Although some consumers resisted using the service routes rather than paratransit service, many others praised the service for its reliability and sense of independence it provides. (95)

## **YOUTH SERVICES**

The need for transportation services aimed at youth has grown rapidly with the widespread entry of women into the workforce. In 1960, only 27% of married women with children had jobs outside the home, but by 1986 the number was 61%. At the same time, more women are relying on child care facilities, requiring transportation for children to and from these sites in addition to transportation to and from the women's jobs. In 1977, over 33% of young children with working mothers were cared for in their homes, but by 1988 that number had dropped to 28%. (96) The following are some examples of how both the private and the public sectors are responding with innovative approaches to youth services.

### Kids on Wheels Shuttle Service, California

With so many women now in the workforce, the private sector has identified transportation of children as a new market that didn't exist in the 1950s and 60s when most women stayed home. Kids on Wheels is "a shuttle service just for kids" begun in the mid-1990s by a mother of two children who saw an unmet need. Based in Walnut Creek, California, this firm serves 14 generally affluent communities in an area of over 200 square miles. Kids are picked up and dropped off at school, daycare, and after-school and summer activities, such as sports, dance, art, religion, recreation, camps, karate, music, and swimming. The majority of the clients are individual families who register for pre-scheduled trips under an annual contract, although the company is expanding to meet demands for on-call, single trips. One-way trips cost \$7.50-9.00. Discounts of \$2.00 are given for round trips and discounts of 25% for more than one child in a family. Group rates are also available to churches, schools, organizations and government agencies.

The firm has recently been purchased by Unique Shuttle Services, Inc., which plans to expand into other nearby cities and, eventually, throughout the San Francisco Bay Area. A limited number of other such private companies already exist in some Bay Area communities. Kids on Wheels currently operates three 7-passenger Ford Windstar vans and five 25-passenger buses. Without any marketing program, there is a waiting list of 250 who have already paid the \$26 registration fee. Scheduling, not lack of additional vehicles, is the inhibitor in meeting this demand. Since school and other activities start and end at a specific time, it is difficult to efficiently add more door-to-door pickups on a route without unreasonably increasing time spent on the bus.

Most of the trained drivers are mothers who work part-time, split shifts. Shifts are generally from 6:30-9 a.m., 11:30 a.m.-1:30 p.m., and 2:30-6:30 p.m. Parent drivers are given free transportation for one child and a 50% discount for their additional children. Musical tapes, hand-held games, toys and books are provided on the bus, and snack plans are available. Children range from preschool through elementary school in age. A new service with a different name is being created for junior high and high school ages. (97)

#### Bus Pass Program for Students, Alabama

Public bus drivers in Decatur, Alabama noticed a lot of school-age kids hanging out on street corners during school hours. The bus drivers' concern began an effort by the transit system's staff to find a way to solve the problem. Research by the Community Action Agency of North Central Alabama, Inc. (CAA) showed that many students from this predominantly low-income, minority area had no transportation to school. In most cases, parents didn't have a car or money for public bus fare. The result was a free bus pass program for students whose families meet prerequisites based primarily on income level. Funding from the U.S. Housing & Urban Development Community Block Grant program is received by the City of Decatur, which then turns over a portion to CAA to operate the program. Before the program, students had a 45% higher absenteeism and three times the dropout rate than students from other areas of the city. School attendance rates have shown a 23% increase since implementation of the program. (98)

#### Before-and-After School Transportation, Kansas

An inner-city district within the Kansas City Public School system is establishing before-and-after school care at 10 elementary schools for 1,800 children. To get children to the sites before school, the Kansas Department of Social and Rehabilitation Services will fund taxi cab services, transportation contractors, and parents who transport others' children. In the evening, the state will fund the school district to operate four new routes from the school child care sites to homes. The Boys and Girls Club of Greater Kansas City will provide child

care, and Head Start will fund evening meals for children in the after-school program. (99)

#### Child Care at Transit Stations, California

Transit stations present a logical location for daycare centers. Working parents can conveniently drop their children off rather than making an additional trip to the child care location. This accessibility is especially important since many in-home child care providers are located in low density neighborhoods which may not have a convenient level of transit service. The Transit Tots West Child Care Center and depot at the new Chatsworth Metrolink Station is a joint venture of the Los Angeles County Metropolitan Transportation Authority and the City of Los Angeles. More than five years in the planning, the center opened on April 20, 1996 and is operated by Children's Discovery Centers of America, Inc., which runs more than 200 child care centers nationwide. The center has capacity for 90 children and occupies 5,500 square feet at the depot, with three classrooms and an outdoor play area. Transit Tots West is open to the public for infant and preschool care, but priority is given first to mass transit users and second to parents who carpool. The Chatsworth Center is part of a 14-acre station site that is planned for future development, to include a park, offices, shops, theaters, and apartment housing. (100)

### **TRANSIT ORIENTED DEVELOPMENT**

A key finding of this research is that public transportation agencies can provide leadership in economic development, thereby reducing the costs of immobility. A number of transit agencies are involved in long-term land use changes that can have a more permanent impact on economic development. Below are examples of transit as part of a larger economic development strategy.

#### Fruitvale BART Transit Village, California

The Bay Area Rapid Transit District will revitalize a rail station in a low-income neighborhood in Oakland, California. Its partner, the Spanish Speaking Unity Council, will address immobility by creating a Transit Village at the hub, which features a mix of social services, retail, and residential uses. See the case study in Appendix A.

#### Blue Line TeleVillage, California

The Metropolitan Transportation Authority's Blue Line TeleVillage contains a Telework Center, a computer lab with Internet access, a video conference center, and interactive kiosks. Residents and employees in Compton, California can access

many services without the need to travel. The TeleVillage will be part of a one-stop training center for welfare recipients. See the case study in Appendix A.

#### Neighborhood Travel Center, Texas

A community based Neighborhood Travel Center in Corpus Christi, Texas, was opened in February 1992 in a small neighborhood shopping district. The Regional Transit Authority, working with Project for Open Spaces, a national organization focusing on renewing public places as attractive and useful community assets, has sought to spruce-up the site with improved pedestrian facilities, landscaping and public art to attract riders and serve as a small business incubator. (101)

#### Broadway Manchester Transit Center, California

Joint development by transit authorities has been primarily around rail stations. The Los Angeles County Metropolitan Transportation Authority has allocated funds to plan a Transit Center focused on bus transit in the Broadway-Manchester neighborhood of South Central Los Angeles. The Transit Center will be at the Harbor Transitway, adjacent to a freeway. Preliminary plans call for improved public access to the Transitway, retail development, public services, and a child care center. Employment opportunities for local residents is also a goal. The site is already part of a redevelopment area. (102)

### **VEHICLE PROGRAMS**

The focus of this research has been on public transportation systems, as defined in the Research Problem Statement. This has been interpreted broadly to include publicly operated rail, bus, and light rail systems; school bus systems; social service agency transportation; paratransit; jitneys; private bus systems; and taxicabs.

The definition of public transportation could be broadened even further to include vehicle programs which receive public funding. Two examples of public transportation agencies which also provide vehicle programs, the Ventura County Transportation Commission and the Bay Area Rapid Transit District, are cited below.

State and county social service agencies and community-based organizations involved in welfare reform have also been devising vehicle programs to assist this population. Because sometimes a car is the best solution for a transportation problem, the following includes a sample of vehicle programs that attempt to overcome the insurance and maintenance obstacles for low-income owners. These

programs are aimed at providing mobility to welfare recipients until they become established in the work force.

#### Ventura County, California

The County will offer low-interest car loans, guaranteed by the county and financed by the public credit union. Aging fleet cars will be donated by local businesses and reconditioned by volunteer mechanics. Dealerships will donate free repairs.

Ventura County Transportation Commission is also designing a Smart Car-Sharing program for those who have no transit available or where transit would take more than one hour one-way to work. In this case, people with a driver's license and a clean driving record can "rent" a new car to go to their destination. The car may then be picked up and used by another person before it is returned for the trip home. Car-sharers will be charged for mileage or may be assessed a weekly fee. A Guaranteed Ride Home program will serve as a back-up if there is a glitch in the car-sharing schedule.

#### Bay Area Rapid Transit District (BART), California

BART intends to place rental cars for patrons' use at two of its suburban stations and to place compressed natural gas Hondas at its newest station. Patrons will pay a fee to use the cars to travel from these suburban stations to suburban job sites. The cars could then be available for a fee as pool cars during the day at employment sites, eliminating the need for companies to invest in a corporate fleet. Drivers need licenses, proof of insurance and a clean driving record.

#### Wheels-To-Work, North Carolina

Operable cars are sold to persons transitioning off welfare through the Wheels-To-Work program, a partnership of Forsyth County commissioners, the Department of Social Services, Goodwill Industries of Northwest North Carolina, the Winston-Salem Transit Authority, a local auto dealer, and an insurance agency. Although the Winston-Salem Transit Authority does coordinate carpooling and vanpooling in the area, it is supportive of Wheels-To-Work, because only those who do not have access to bus routes to get to work are eligible for the program. The auto dealer repairs surplus county vehicles, and Goodwill pays the first year's insurance, repairs, taxes, license, and title fees. Participants can own the car after the first year by reimbursing Goodwill, which uses the money to fix up another car for the program.

### Fairfax, Virginia

State money is being used to help former welfare recipients make down payments on used cars, and have the cars inspected and enrolled in routine maintenance programs.

### Virginia's Southwestern Counties

The welfare department bought used government vehicles and leased them to job seekers for about \$100 per month, including regular maintenance.

### Fond du Lac County, Wisconsin

As part of Wisconsin's Work-Not-Welfare demonstration program, low-interest "job access loans" are made to buy cars or make repairs on existing cars.

### Maryland and Texas

These states offer "Wheels to Work" programs that make donated vehicles available at low cost (usually about \$500), and individuals and companies that donate cars receive a charitable tax deduction.

### Contra Costa County, California

Contra Costa County in Northern California has developed a Welfare-to-Work Transportation Action Plan, which includes these additional ideas for vehicle programs. The County's Social Service Department is exploring policy changes and funding sources to implement the programs.

- Loans or Grants to Remove Barriers to Driving. To enable participants enrolled in the County's welfare program, or those at risk of becoming a welfare recipient, to obtain a drivers' license and/or legally operate a car they own, this project would utilize State diversion funds (for those not yet receiving welfare) or the County's Transportation Supportive Services funds (for welfare participants) as follows: loan or grant funds to absent parents to pay child support payments that are in arrears; loan funds to participants so that they may pay off outstanding tickets; and provide funds for emergency car repairs needed to get a vehicle in running condition.
- Low Cost Car Repair and Insurance Resources. Local school, college, and Regional Occupational Programs (ROP) auto shops will be contacted to offer reasonable and/or discounted rates on car diagnostic services, repair, and maintenance to welfare participants with vehicles. Insurance companies and

insurance pools (such as those for municipalities and transit providers) will be surveyed to obtain the lowest possible rates for participants.

- Subsidize Emergency Roadside Service Membership. Welfare recipients may have a vehicle which is unreliable. This program would subsidize welfare participants' membership in roadside service provider clubs or organizations in order to obtain emergency roadside assistance and other benefits such as vehicle diagnostic services. State welfare funds could be used for this purpose.
- Loaner Cars. This project would make loaner cars available for welfare participants to use for transportation to job interviews, to agencies such as the Department of Motor Vehicles to get necessary licenses, etc. Public agencies' vehicles or community-based organizations with a pool of vehicles might be tapped for this purpose.

---

## CHAPTER REFERENCES

- (53) "Bridges to Work Summary and Fact Sheet." See The Welfare Information Network: Transportation Internet Web Site at <http://www.welfareinfo.org/transport.htm>.
- (54) Rosenbloom, S., *Reverse Commute Transportation; Emerging Provider Roles*. U.S. Department of Transportation, Federal Transit Administration, Washington, D.C. (March 1992).
- (55) Rosenbloom, S., *Reverse Commute Transportation; Emerging Provider Roles*. U.S. Department of Transportation, Federal Transit Administration, Washington, D.C. (March 1992).
- (56) Destination JOBS, A Summary of the Hennepin County, Minnesota Reverse Commute Employment Program, Jeffrey S. Hardin, Editor.
- (57) Hughes, M. with Sternberg, J., *The New Metropolitan Reality: Where the Rubber Meets the Road in Antipoverty Policy*, Public Finance and Housing Center, The Urban Institute (December 1992).
- (58) Marchwinski, T. and Fittante, S. R., "Air Quality and Cost-Revenue Impacts of Suburban Employment Center Commuter Rail Connector Bus Services." A paper presented to the 1992 Transportation Research Board Annual Meetings, Preprint #92040 (August 1991).
- (59) Crain & Associates, *Shuttle Planning for South San Francisco Employers Using AB434 Funding*, Final Report (1994).
- (60) "The Link to Employment: Case Workers as Mobility Managers," Community Transportation Association of America (1997). See The Welfare Information Network: Transportation Internet Web Site at <http://www.welfareinfo.org/transport.htm>
- (61) Miller, J., "Welfare Reform in Rural Areas: A Special Community Transportation Report" (October 1997). See The Welfare Information Network: Transportation Internet Web Site at <http://www.welfareinfo.org/transport.htm>
- (62) Etindi, D., "Rachel's Bus Company" (July 1997). See The Welfare Information Network: Transportation Internet Web Site at <http://www.welfareinfo.org/transport.htm>

- 
- (63) Telephone interview by Crain & Assoc. in June 1996 with Teresa Robinson and Shawn Brink, Glendale-Azalea School District and Skills Center, Oregon. Supplementary information from April 1996 article, "Taking People to Work: JOBLINKS Success Stories," by Robert T. Goble, *CTR* feature on The Welfare Information Network: Transportation, Internet Web Site at <http://www.welfareinfo.org/transport.htm>
- (64) Goble, R., "Taking People to Work: JOBLINKS Success Stories," April, 1996 *CTR* feature article on The Welfare Information Network: Transportation, Internet Web Site at <http://www.welfareinfo.org/transport.htm>
- (65) Telephone interview by Crain & Associates with Libby Bunting, Southeast Arkansas Transportation (SEAT), Pine Bluff, Arkansas, June 1996.
- (66) Supplementary Information from "JOBLINKS Post-Project Analysis: 1995-96 Demonstration Projects," Community Transportation Association of America (April 1997)
- (67) Telephone interview by Crain & Associates, April 1997.
- (68) "Best Practices in Employment Transportation," Community Transportation Association of America (June 23, 1997).
- (69) Rosenbloom, S., *Reverse Commute Transportation, Emerging Provider Roles*. U.S. Department of Transportation, Federal Transit Administration, Washington, D.C. (March 1992) pp. 31-32.
- (70) Laube, M., Lyons, W., and vander Wilden, P., *Transportation Planning for Access to Jobs*, U.S. Department of Transportation (August 28, 1997).
- (71) Telephone Interview by Crain & Associates, April 1997.
- (72) "The Link to Employment: Case Workers as Mobility Managers," Community Transportation Association of America (1997). See The Welfare Information Network: Transportation Internet Web Site at <http://www.welfareinfo.org/transport.htm>
- (73) "The Link to Employment: Case Workers as Mobility Managers," Community Transportation Association of America (1997). See The Welfare Information Network: Transportation Internet Web Site at <http://www.welfareinfo.org/transport.htm>

- 
- (74) Catherine Simpson, Employer Services Administrator, Fort Worth Transportation Authority, presentation at TCRP Project B-7, "Strategies to Assist Local Transportation Agencies in Becoming Mobility Managers," Roundtable in Orlando, Florida (May 1996).
- (75) Crain & Associates, Inc., and Pacific Consulting Group, *Strategies to Assist Local Transportation Agencies in Becoming Mobility Managers*, Transportation Cooperative Research Program Report 21, Transportation Research Board, National Research Council, Washington, DC (1997).
- (76) Phone interview by Crain & Associates, April 1997.
- (77) *JOBLINKS Post-Project Analysis*, Final Report, Community Transportation Association of America, Appendix C (April 1997).
- (78) Telephone Interview by Crain & Associates, April 1997.
- (79) Byrd, R., *Empowerment Zones and Enterprise Communities, Transportation Planning Assistance*. U.S. Department of Transportation, Federal Transit Administration, and U.S. Department of Housing and Urban Development, Washington, D.C. (May 3, 1994).
- (80) Hughes, M., *Fighting Poverty in Cities: Transportation Programs as Bridges to Opportunity*. Research Report on America's Cities, National League of Cities Washington, D.C. (1989) pp. 33-40.
- (81) Mobility Corporation, in association with KPMG Peat Marwick, Mundle & Associates, Inc., *The Miami Jitneys*. Prepared for the Office of Private Sector Initiatives, Federal Transit Administration, Washington, D.C. (September 1992).
- (82) Center for Urban Transportation Research, *Jitney Enforcement Strategies*. Metro-Dade Transit Agency, Miami, Florida (June 1994).
- (83) Crain & Associates, Inc., and Pacific Consulting Group, *Strategies to Assist Local Transportation Agencies in Becoming Mobility Managers*, Transportation Cooperative Research Program Report 21, Transportation Research Board, National Research Council, Washington, DC (1997).
- (84) Crain & Associates, Inc., and Pacific Consulting Group, *Strategies to Assist Local Transportation Agencies in Becoming Mobility Managers*, Transportation Cooperative Research Program Report 21, Transportation Research Board, National Research Council, Washington, DC (1997).

- 
- (85) Crain & Associates, Inc., and Pacific Consulting Group, *Strategies to Assist Local Transportation Agencies in Becoming Mobility Managers*, Transportation Cooperative Research Program Report 21, Transportation Research Board, National Research Council, Washington, DC (1997).
- (86) Hodge, D. C., Orrell, J.D., and Strauss, T. R., *Fare-Free Policy: Costs, Impacts on Transit Service, and Attainment of Transit System Goals*, Washington State Transportation Center (TRAC), University of Washington, Seattle, Washington (March 1994).
- (87) Phone Interview by Crain & Associates, April 1997.
- (88) Phone interview with Crain & Associates, April 1997.
- (89) Telephone interview by Crain & Associates with Shirley Cummins, Rural Transit Enterprises Coordinated (RTEC), Mount Vernon, KY, June 1996.
- (90) Telephone interview by Crain & Associates with Frank Jones, Daniel Boone Development Council, Inc., Manchester, KY, June 1996.
- (91) Crain & Associates, Inc., and Pacific Consulting Group, *Strategies to Assist Local Transportation Agencies in Becoming Mobility Managers*, Transportation Cooperative Research Program Report 21, Transportation Research Board, National Research Council, Washington, DC (1997).
- (92) Interview by Crain & Associates with Ann Smith, Director of the Los Angeles Department of Aging, June 1996.
- (93) "Opening Doors to Travel Training Mobility," Washington State Public Transportation Conference, August 24, 1995. Presented by Sandy Northrup, Outreach Coordinator, Link, and Per K. Johnson, Ph.D., Training & Education Coordinator and Pat Lange, Travel Trainer, Kitsap Transit.
- (94) "Travel Training for Seniors, Kitsap Transit," 1995 Washington State Department of Transportation Conference.
- (95) EG&G Dynatrend and Crain & Associates, Inc., *Evaluating Transit Operations for Individuals with Disabilities*. Prepared for Transit Cooperative Research Program, Transportation Research Board, National Research Council, Washington, D.C. (June 1995).

- 
- (96) Rosenbloom, S., "Travel by Women," *1990 Nationwide Personal Transportation Survey, Demographic Special Reports*, U.S. Department of Transportation, Federal Highway Administration, Washington, D.C. (February 1995).
- (97) Telephone interview by Crain & Associates with Joseph Ali, Kids on Wheels, January, 1998.
- (98) "Awards..." *PTI Journal*, (May 1995) pp. 6-7.
- (99) "Child Care Initiatives Across the Country," *Child Care Bulletin*, Issue 15, (May/June 1997).
- (100) "Child Care Center Opens at Metrolink Station." *Passenger Transport*, (May 6, 1996).
- (101) Byrd, R., *Empowerment Zones and Enterprise Communities, Transportation Planning Assistance*. U.S. Department of Transportation, Federal Transit Administration, and U.S. Department of Housing and Urban Development, Washington, D.C. (May 3, 1994).
- (102) Information from Omniversed International, March 1997.

## **6. IMPLEMENTATION AND DISSEMINATION PLANS**

This chapter restates the eight key findings as integral to the implementation of this research. It then describes what strategies should be adopted internally by an organization in order to implement the key findings. A dissemination plan follows, which outlines the audiences for this report and the suggested media and mechanisms for distribution.

### **IMPLEMENTATION PLAN**

The key research findings presented in Chapter 2 outlined factors important to the successful use of public transportation to reduce the economic, social and human costs of personal immobility. These key findings are the cornerstone of an Implementation Plan to move this research into practice. The eight findings are capsulized below. Refer to Chapter 2 for details.

1. Retaining basic public transportation services;
2. Providing community-wide economic benefits;
3. Forming nontraditional partnerships;
4. Blending an array of human and monetary resources;
5. Bundling transportation and support services;
6. Linking with economic development efforts;
7. Planning regionally; and
8. Capitalizing on simple ideas and programs.

As identified in the findings above, coordination with organizations across other strata of society will be needed to enhance options for personal mobility. This chapter describes what an organization can do within its own cultural environment to go forward with implementation. The transportation organizations visited in the case studies had certain strategies in common that have led to their success, which can be replicated by others. These strategies can be summarized in the following checklist for success:

#### Checklist for Success

1. Exert leadership.
2. Win internal support from the staff and the policy-makers.
3. Adopt a mobility management mission.
4. Build community support.

## 1. Exert leadership.

Things happen when a leader takes charge. Leaders experiment; leaders challenge the status quo; leaders inspire others with their vision. The vision of an MTA Board member to use tele-mobility in planning development at Los Angeles light rail stations led to the Blue Line TeleVillage. In Miami, starting the Medicaid Metropass Program required energy and commitment to combat bureaucracy. The Medicaid Program Administrator was not particularly encouraged by the Florida Agency for Health Administration; instead she took it upon herself to work through obstacles in order to implement the program. Her cohort in the Metropass Program, the MDTA Deputy Director, summarized a leader's bias toward action by defining the difference between an administrator and a manager: "An administrator tells you what you cannot do--what the rules are. A manager rewrites the rules to get things done."

Note that the checklist pertains to the internal environment of an organization. There are many external barriers that an organization may face which may be largely out of its control. Some examples are land use decisions, federal funding levels, the political environment in the region, the local economy, and government regulations.

However, even these external barriers can be influenced by leadership. When her community objected to a large parking structure at the Fruitvale BART station in Oakland, the Chief Executive Officer of the Spanish Speaking Unity Council led a planning process to change that land use decision into one supporting a Transit Village. She also overcame the conventional viewpoint in the political environment, which held that infill development in the inner city is infeasible, by putting together a strong funding package to support the development. Another example of combating external barriers is legislation that the Chesterfield County Coordinating Council (CCCC) intends to introduce in South Carolina. The CCCC wants to demonstrate that changing state law to allow adult riders on school buses in rural areas can increase mobility while continuing to safeguard schoolchildren.

Leaders are needed at many levels of society to solve the difficult issues of immobility that have been presented in this research. As these examples demonstrate, the collaborative efforts needed to tackle problems of immobility point to a role for social services agencies, community-based organizations, local governments, and employers, as well as transportation organizations. Public transit cannot tackle immobility alone.

Nonetheless, mobility is the *mission* of transportation organizations. It is proper that transportation organizations be among the first to exert leadership in addressing immobility. If transportation organizations do not take on this role, they may be preempted by others with their own agendas. For example, welfare

reform is a burning issue at the time of this research. It is possible that money could be diverted from mainline transit services to new services directed at welfare recipients entering the job market, instead of integrating those new services into the existing system. Transit agencies need to seize the initiative in their realm of expertise to insure that the best alternatives are implemented. If they fail to exert leadership in addressing immobility, the problems of immobility will worsen, and transportation organizations will have failed in their mission.

## 2. Win internal support from staff and policy-makers.

A leader, by definition, needs followers. If the leader fails to build support within the organization, the innovation will languish or even be sabotaged. In the case of the Blue Line TeleVillage, some within MTA saw trip reduction through use of the Internet, a goal of the TeleVillage, as a conflict with the agency's mission of increasing transit ridership. Because the project was not implemented with operating funds, the internal resistance was overcome. However, as a consequence of the lack of involvement by the operations division, inadequate fiber and connection points for the TeleVillage were laid during construction of the rail line. Although the TeleVillage now operates using ISDN lines, it is not the optimum solution that would have been possible with full agency support.

The culture of any organization hoping to solve immobility problems must nurture an environment in which the key findings can be implemented. This means encouraging staff to exercise leadership by taking the initiative and being creative. It means preventing bureaucracy and hierarchy from stifling innovation. At MDTA leadership for the Metropass came from a transit planner. Her supervisor gave her and her idea the support within the organization to develop the pilot program and expand it. At SEPTA, the Horsham Breeze was successfully implemented because the organization was flexible enough to respond with creative approaches to funding and service. In both these instances, the staff and policy-makers were supportive of experimentation.

## 3. Adopt a mobility management mission.

The definition of mobility management is "an institutional state of mind that emphasizes moving people instead of the mode of transportation." (103) For instance, with Immediate Needs, MTA moves people in a program designed to meet the community's transportation needs rather than attempting to fit those needs into its traditional bus and rail system. Its Blue Line TeleVillage is another example of creating mobility through nontraditional means--in this case, through technology. This type of flexibility will be required as transit agencies design services for those affected by the welfare-to-work reforms.

Mobility managers recognize the customers' needs and design services to respond to them. Numero Uno's free shoppers' shuttle is an excellent private-sector

example of this niche marketing. PDRTA and OATS are two public-sector models of such an entrepreneurial approach. They seek out opportunities and present a menu of service delivery options to the potential customer. Theirs is the opposite of an institutional state of mind that offers a single product with a "one size fits all" approach.

Effective mobility management requires viewing the passenger transportation system as a whole. Specifically, mobility management means brokering, facilitating, encouraging, coordinating, and managing both nontraditional and traditional services to expand the array of transportation services to diverse consumer groups. (104) This is an inclusionary definition which envisions responsibility from many partners to assist public transportation in accomplishing its mission of mobility.

#### 4. Build community support.

Three of the key findings are dependent on this strategy for successful implementation. Organizations cannot form nontraditional partnerships (Finding 3), bundle transportation and support services (Finding 5), and plan regionally (Finding 7) in the absence of community support.

MTA's Immediate Needs Transportation Program and OATS, Inc. are shining examples of building community support using two very different approaches in two extremely different settings--one in the largest county in the nation and the other in a very rural state. As a large bureaucracy, MTA chose not to implement Immediate Needs directly. Rather, MTA built community support for its program *through* respected community-based organizations as brokers. The 600 social service agencies that are participants, along with a waiting list to be accepted into the program, attest to the success of MTA's strategy. OATS has built community support by delegating important functions of the operation to County Committees. An annual 76,000 hours of volunteer work has resulted from the sense of ownership that OATS has thereby created in the 87 counties it serves.

Building community support takes energy and visibility on the part of transit staff. It means not only attending community meetings but also setting up such meetings. In designing increased access to jobs and health care, it means stepping outside the transportation field and learning other industries' terminology and key players. But the rewards can be a wider constituency of support for transit, an enhanced image of transit, availability of new funding sources and human resources, and, consequently, more participation in society by those now afflicted by immobility.

## **DISSEMINATION PLAN**

The results of this research are particularly timely because they coincide with rapid changes occurring in welfare and health care delivery. For this reason, dissemination should be enlarged beyond the traditional transportation audiences to practitioners in the social services and health care fields as well.

The Methodology Guide is a product of the research which has permanent applicability for transportation professionals. It describes methods to quantify the benefits and costs of immobility, as illustrated by specific examples in the case studies. Thus, it is a tool to measure the implications of additions or reductions in service upon the larger community.

### **Audiences**

*Primary audiences for distribution include:*

Federal agencies

- Welfare to Work task force, U.S. Department of Transportation
- Intergovernmental Affairs, U.S. Department of Health and Human Services
- Office of Community Planning and Development, U.S. Department of Housing and Urban Development
- Employment and Training Administration, U.S. Department of Labor

State and County agencies that correspond to the federal agencies listed above

Public transit

- Public transit agencies' staff and governing boards
- Divisions of public transit within state departments of transportation
- APTA and CTAA, and corresponding organizations at the state level
- Private contractors
- Consultants and university researchers specializing in public transportation

*Secondary audiences for distribution include:*

National organizations of government officials and their corresponding state organizations, such as:

- National Governors' Association
- National Association of Regional Councils
- U. S. Conference of Mayors
- National League of Cities
- International City Managers Association
- National Association of Counties

National organizations of social welfare and health care professionals

Civil rights organizations

Empowerment Zones/Enterprise Communities

### **Organizational Responsibility**

Disseminating the results of the research is a role for TRB and APTA, as the cooperating organizations that make up TCRP, as well as for CTAA. Reaching the secondary audiences will require working together with many other organizations. This is precisely the type of coordination called for in the federal welfare reform legislation, the Work Opportunity and Personal Responsibility Act. The mechanisms for coordination being established now for welfare reform at every government level will be a good avenue for dissemination.

### **Content and Mechanisms**

1. *Mass media distribution* Because of the timeliness of this report, mechanisms to distribute the information through mass media should be emphasized. Therefore, the information should be condensed for targeted audiences.

#### Press Releases

A series of one-page, camera-ready stories with pictures should be prepared, each highlighting the strongest case studies according to topic areas. Articles should be sent to newspapers-wire services and to trade and professional magazines representing the primary and secondary audiences listed earlier. Because the report shows transit's proactive response to issues that are very current, mass distribution can enhance the public's perception of transit's value and role in society.

- *Access to Health Care*: One article each on MDTA's Metropass Program and MTA's Immediate Needs Transportation Program
- *Welfare-to-Work*: One article each on SEPTA's Horsham Breeze and PDRTA's 24-Hour Reverse Commute Service
- *Elderly Transportation*: One article each on the City of Fremont's Travel Training Program and OATS
- *Livable Communities*: One article each on the Fruitvale BART Transit Village and MTA's Blue Line TeleVillage; Numero Uno Market Shoppers' Shuttle is also a candidate for this category, particularly for distribution to magazines aimed at retailers

#### *Internet sites*

The same press releases could be installed on Internet sites aimed at the primary and secondary audiences who deal with these various topic areas.

#### *Brochures*

Colorful, illustrated brochures succinctly presenting the key findings and highlights of the case studies could be developed for distribution at conferences and at meetings with elected officials and government staff. Because of their brevity, these same brochures would be the most likely to be read by transit board members.

2. *Traditional methods* In addition, to these mass distribution mechanisms, traditional methods should also be employed:

#### *Executive Summary*

Copies of the Executive Summary should be made available at conferences of TRB, APTA, CTAA and other transportation organizations.

#### *Presentation Materials*

Slides and overhead materials on the key findings should be developed for use in presentations not only at transportation meetings but also at meetings of health care and social welfare professionals.

#### *Methodology Guide*

The Methodology Guide could be available to order as a manual separate from the full report.

3. *Products as outgrowths of the research* Other dissemination mechanisms could be developed, using the research as a foundation, but requiring additional resources to develop:

### *Videos*

Agencies that participated in the case studies could be featured in a video, with key players discussing how their practices were developed and illustrating how they are being implemented today.

### *Roundtable*

Managers of successful practices could be brought together to exchange ideas with others wishing to emulate their services.

### *Training film*

The roundtable described above could be filmed for wider distribution.

---

## CHAPTER REFERENCES

- (103) Crain & Associates, *Strategies to Assist Local Transportation Agencies in Becoming Mobility Managers*, Transportation Research Board, Report 21 (1998).
- (104) Crain & Associates, *Strategies to Assist Local Transportation Agencies in Becoming Mobility Managers*, Transportation Research Board, Report 21 (1998). The paragraph footnoted as (2) is quoted verbatim from the Introduction.

## **APPENDIX A**

### **CASE STUDIES**

Appendix A contained in the research agency's final report is not published herein. It is available on the World Wide Web as TCRP Web Document 7 ([www4.nas.edu/trb/crp.nsf](http://www4.nas.edu/trb/crp.nsf)).

---

## **APPENDIX B**

### **UNPUBLISHED MATERIAL**

Appendix B ("Literature Search: Who Are the Transportation Disadvantaged?") contained in the research agency's final report is not published herein. For a limited time, loan copies are available on request to TCRP, Transportation Research Board, Box 289, Washington, DC 20055.

---

## **APPENDIX C GLOSSARY OF TERMS**

ADA paratransit eligible: 1) Persons, who, as a result of their disabilities, cannot independently board, ride, or disembark from accessible vehicles without the assistance of another person, excluding the driver; 2) individuals who have a specific impairment-related condition that prevents them from getting to or from a boarding or disembarking location; 3) persons with a disability who can use an accessible vehicle, but for whom any desired trip cannot be made because the fixed-route they need to use is not yet accessible.

Captive transit rider: A person who does not have a private vehicle available or cannot drive (for any reason) and who must use transit to make the desired trip.

Captive rider: A person limited by circumstances to use of one mode of transportation.

Central city: The largest city in each metropolitan statistical area (MSA/CMSA) is designated by the U.S. Census Bureau as the central city. Additional cities qualify if specified requirements are met concerning population size and commuting patterns.

Economic cost: A measure of what must be given up in order to obtain something by way of purchase, exchange or production. Economists usually employ the concept of opportunity costs in describing economic costs. (See opportunity costs)

Empowerment Zones/Enterprise Communities (EZ/EC): 1993 Federal legislation authorized the Secretaries of HUD and Agriculture to designate communities to receive significant tax incentives and block grants for job creation and community development. Six empowerment zones (EZ), two supplemental empowerment zones, and 65 enterprise communities (EC) have been designated.

Externalities: Externalities are variously known as external effects, external economies and diseconomies, and spillovers. Externalities arise, in economist terms, because of the non-existence of markets; i.e., there are no markets in clear air, peace and quiet and so on.

Households: Commonly refers to occupied dwelling units. Specifically, a household includes all persons who occupy a group of rooms or a single room which constitutes a housing unit. A housing unit is a group of rooms or a single room occupied as separate living quarters; occupants live and eat separately from other persons in the building and have direct access from outside the building or through a common hall.

Immobility: The inability to make a desired trip due to lack of access to an automobile; and lack of available, affordable and accessible public transportation or other transportation alternative between the desired origin and destination.

Latent travel demand: The number of trips that would probably be made by people who do not now travel because of inconvenience, unawareness, inaccessibility, or unavailability of present modes or the inability to use them.

Metropolitan Statistical Area (MSA): As defined by the U.S. Office of Management and Budget, an MSA must include at least a) one city with 50,000 or more inhabitants, or b) a Census Bureau-defined urbanized area (of at least 50,000 inhabitants) and a total metropolitan population of at least 100,000 (75,000 in New England).

Model: A mathematical or conceptual presentation of relationships and actions within a system. It is used for analysis of the system or its evaluation under various conditions; examples include land use, economic, socioeconomic, and transportation.

Model, demand: A model that relates the amount of travel to the level and price of the transportation service and the socioeconomic characteristics of the potential traveler.

National Personal Transportation Survey (NPTS): In 1969, the U.S. Department of Transportation initiated an effort to collect detailed data on personal travel. The survey was conducted again in 1977, 1983, and 1990. The primary objective of the survey was to collect trip-based data on the nature and characteristics of personal travel.

Opportunity cost: The opportunity cost of an action is the value of the foregone alternative action. Opportunity cost can only arise in a world where the resources to meet wants are limited so that all wants cannot be satisfied.

Personal cost: The personal or private is the opportunity cost to one individual. It is the value to the individual of the foregone alternative action.

Person trip: A trip by one person in any mode of transportation. A person trip is counted regardless of whether the person is a driver or a passenger.

Poverty level: An index based on a range of income thresholds adjusted by family unit size and number of children under 18 years old. Sample 1995 poverty thresholds include \$7,929 for a single person under 65; \$15,455 a family of four with two related children under 18; and \$33,465 for a family unit of 9 with two related children under 18.

Region: A geographical area which according to specified criteria possesses some degree of homogeneity.

Rural: As defined by the Bureau of the Census, the urban population includes all people living in urbanized areas or in places with 2,500 or more inhabitants located outside urbanized areas. By Census definition, the rural population consists of everyone else.

Social cost: The social cost is the opportunity cost to society (i.e., to all individuals in society) rather than just to one firm or individual. One of the major reasons why social costs are different from the observed private costs is due to existence of externalities or external costs (see externalities). In technical terms, the social costs of a given output is defined as the sum of money which is just adequate when paid as compensation to restore to their original utility levels all who lose as a result of the production of the output.

Suburban: A loosely defined term, not defined by the U.S. Bureau of the Census, it is typically meant to suggest the location of any land outside of a regional central business district, generally at least five or more radial miles away.

Transit dependent: Having to rely on transit service instead of the private automobile to meet one's travel needs.

Transportation disabled: In general terms, individuals who have difficulty using fixed-route public transportation. (See ADA paratransit eligible)

Transportation disadvantaged: (Low mobility group, mobility disadvantaged) people whose range of alternatives is limited, especially in the availability of relatively easy-to-use and inexpensive alternatives for trip making. Examples include the young, the elderly, the poor, the disabled, and those who do not have automobiles.

Travel or sample day: Refers to NPTS questionnaire, where the respondent was asked to report all trips of any length by any mode of travel during a 24-hour period.

Urban: Comprising all territory, population, and housing units in urbanized areas and in places of 2,500 or more person outside urbanized areas.

Urbanized area: As defined by the Bureau of Census, a population concentration of at least 50,000 inhabitants, generally consisting of a central city and the surrounding, closely settled, contiguous territory.

The **Transportation Research Board** is a unit of the National Research Council, which serves the National Academy of Sciences and the National Academy of Engineering. The Board's mission is to promote innovation and progress in transportation by stimulating and conducting research, facilitating the dissemination of information, and encouraging the implementation of research results. The Board's varied activities annually draw on approximately 4,000 engineers, scientists, and other transportation researchers and practitioners from the public and private sectors and academia, all of whom contribute their expertise in the public interest. The program is supported by state transportation departments, federal agencies including the component administrations of the U.S. Department of Transportation, and other organizations and individuals interested in the development of transportation.

The National Academy of Sciences is a private, nonprofit, self-perpetuating society of distinguished scholars engaged in scientific and engineering research, dedicated to the furtherance of science and technology and to their use for the general welfare. Upon the authority of the charter granted to it by the Congress in 1863, the Academy has a mandate that requires it to advise the federal government on scientific and technical matters. Dr. Bruce M. Alberts is president of the National Academy of Sciences.

The National Academy of Engineering was established in 1964, under the charter of the National Academy of Sciences, as a parallel organization of outstanding engineers. It is autonomous in its administration and in the selection of its members, sharing with the National Academy of Sciences the responsibility for advising the federal government. The National Academy of Engineering also sponsors engineering programs aimed at meeting national needs, encourages education and research, and recognizes the superior achievements of engineers. Dr. William A. Wulf is president of the National Academy of Engineering.

The Institute of Medicine was established in 1970 by the National Academy of Sciences to secure the services of eminent members of appropriate professions in the examination of policy matters pertaining to the health of the public. The Institute acts under the responsibility given to the National Academy of Sciences by its congressional charter to be an adviser to the federal government and, upon its own initiative, to identify issues of medical care, research, and education. Dr. Kenneth I. Shine is president of the Institute of Medicine.

The National Research Council was organized by the National Academy of Sciences in 1916 to associate the broad community of science and technology with the Academy's purpose of furthering knowledge and advising the federal government. Functioning in accordance with general policies determined by the Academy, the Council has become the principal operating agency of both the National Academy of Sciences and the National Academy of Engineering in providing services to the government, the public, and the scientific and engineering communities. The Council is administered jointly by both the Academies and the Institute of Medicine. Dr. Bruce M. Alberts and Dr. William A. Wulf are chairman and vice chairman, respectively, of the National Research Council.

Abbreviations used without definitions in TRB publications:

|         |  |
|---------|--|
| AASHO   | American Association of State Highway Officials                    |
| AASHTO  | American Association of State Highway and Transportation Officials |
| ASCE    | American Society of Civil Engineers                                |
| ASME    | American Society of Mechanical Engineers                           |
| ASTM    | American Society for Testing and Materials                         |
| FAA     | Federal Aviation Administration                                    |
| FHWA    | Federal Highway Administration                                     |
| FRA     | Federal Railroad Administration                                    |
| FTA     | Federal Transit Administration                                     |
| IEEE    | Institute of Electrical and Electronics Engineers                  |
| ITE     | Institute of Transportation Engineers                              |
| NCHRP   | National Cooperative Highway Research Program                      |
| NCTR    | National Cooperative Transit Research and Development Program      |
| NHTSA   | National Highway Traffic Safety Administration                     |
| SAE     | Society of Automotive Engineers                                    |
| TCRP    | Transit Cooperative Research Program                               |
| TRB     | Transportation Research Board                                      |
| U.S.DOT | United States Department of Transportation                         |