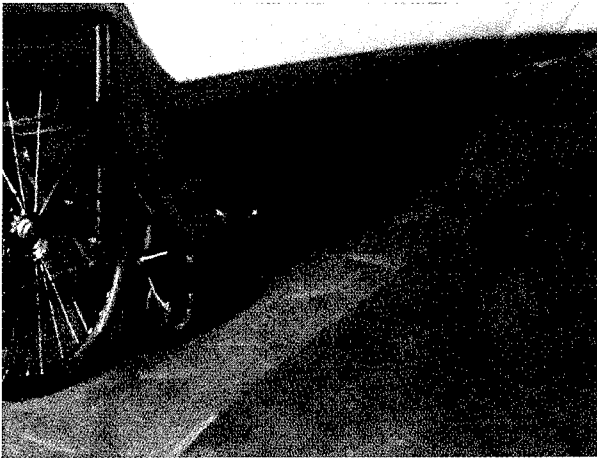




# *ACCESSIBILITY FOR AGING AND TRANSPORTATION-DISADVANTAGED POPULATIONS*



PB2000-102831



*IMPLEMENTATION PLAN*

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## **About the National Science and Technology Council**

President Clinton established the National Science and Technology Council (NSTC) by Executive Order on November 23, 1993. This cabinet-level council is the principal means for the President to coordinate science, space and technology policies across the Federal Government. NSTC acts as a “virtual” agency for science and technology (S&T). The President chairs the NSTC. Membership consists of the Vice President, Assistant to the President for Science and Technology, Cabinet Secretaries and Agency Heads with significant S&T responsibilities, and other White House officials.

Through the NSTC, Federal departments and agencies work cooperatively to ensure that Federal science and technology investments support national goals. NSTC Committees prepare R&D strategies that are coordinated across the Federal Government to form a comprehensive investment package.

Call 202-456-6100 to obtain additional information regarding the NSTC.

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**ACCESSIBILITY FOR AGING AND  
TRANSPORTATION-DISADVANTAGED  
POPULATIONS**

**IMPLEMENTATION PLAN**

**NSTC Committee on Technology  
Subcommittee on Transportation R&D  
Access to Transportation Services Working Group**

**September 1999**

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## 1. INTRODUCTION

In November 1998, the Subcommittee on Transportation Research and Development (R&D) of the National Science and Technology Council (NSTC) released the first Federal *Transportation Technology Plan*. This plan presents initial implementation strategies for the private–public partnerships identified in the 1997 NSTC *Transportation Science and Technology Strategy*. Among these partnerships, that on “Accessibility for Aging and Transportation-Disadvantaged Populations” addresses the accessibility and mobility needs of the elderly, the poor, and persons with disabilities. This concern is a central focus of agencies with transportation responsibilities and an Administration priority.

This *Implementation Plan* presents the planning and programmatic activities of partners in the accessibility initiative. It describes the partnership’s vision, goals, and outcomes and the efforts that will help to achieve them. As such, it provides a framework for ongoing interagency planning and for coordination with the private sector; state, local, and tribal governments; and other organizations.

## 2. BACKGROUND

The United States possesses one of the safest and most extensive passenger transportation systems in the world. Unfortunately, however, the system is unable to provide optimal mobility for selected and growing portions of the population. These segments include the elderly, the physically challenged, and the poor.

Today, 12 percent of the U.S. population is 65 or older. Estimates suggest that by the year 2020, 17 to 20 percent of the population—or approximately 50 million Americans—will be over 65. The fastest growing cohort will be those least likely to have easy access to an automobile—those 85 and older. Yet, the majority of older people today are drivers and, by 2010, nearly all will be licensed. Moreover, about 75 percent of older people now live in suburban or rural areas that are not well-served by public transit. Having come to depend on the level of mobility afforded by the automobile, many older Americans will have to rely on alternative transportation services once they are no longer able to drive.

Likewise, those young or old with physical disabilities have considerable mobility needs. More than 40 million Americans are disabled and many cannot drive or live in areas that are not served by transit. For these Americans, access to medical facilities, schools, training centers, workplaces, and social activities is critical to health and well being.

Finally, welfare reform will require about 830,000 recipients to find jobs. Due to welfare eligibility rules and high vehicle operating costs, most welfare recipients, and others with

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low incomes, do not own a car: only 6 percent of welfare families reported a car as an asset in 1995. Moreover, the “spatial mismatch” that often exists between the locations of jobs (about 70 percent of which are located in the suburbs) and the poor (80 percent of whom live in central cities or rural areas) exacerbates mobility problems. Previously tried transportation alternatives, such as employer- or publicly sponsored vanpools, attempted to provide transportation to service journey-to-work travel alone. Yet, 90 percent of the welfare recipients who will be required to work—and the heads of most poor families—are single mothers. Any effective mobility option must support trip-chaining patterns of working mothers, including work, child care, and other trips that are routine parts of managing a household.

### 3. VISION, GOALS, OUTCOMES, AND PARTNERS

A broad partnership among government agencies, industry, universities, and not-for-profit organizations, this partnership seeks to improve mobility through better management of paratransit operations, advanced transit technologies, and livable communities.

As stated in the NSTC’s *Transportation Technology Plan*, this initiative’s vision is “a transportation system that meets the mobility and accessibility needs of the elderly, the poor, persons with disabilities, and all other Americans without access to a private automobile.” Its ultimate goals are to (1) create transportation systems that serve the needs of older and transportation-disadvantaged people while taking full advantage of existing services, resources, and development patterns; (2) promote development of transit-compatible communities; and (3) expand opportunity by preserving communities and enhancing transit.

Possible measures of success in attaining these goals include the accelerated introduction of new technologies and services, improved effectiveness of services by measure of integration with other critical services, and the initiation of new interagency research, development, and technology programs. Among the near-term outcomes of this initiative are the following from the Department of Transportation (DOT) *FY 2000 Performance Plan*:

- By 2000, increase to 11.68 percent the percentage of urban population living within a quarter-mile of transit stops with service frequency of 15 minutes or less (non-rush hour) from a 1996 baseline of 11.22 percent.
- Increase the percentage of key rail stations that are in compliance with the Americans With Disabilities Act (ADA) from 19 percent in 1996 to 47 percent in 2000.



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- Increase the percentage of bus fleets that are ADA-compliant from 63 percent in 1996 to 82 percent in 2000.
  - Increase the number of employment sites that are made accessible by Job Access and Reverse Commute transportation services.
  - Increase transit ridership from 39.0 billion passenger-miles in 1996 to 40.56 billion in 2000.

The partners will achieve these outcomes through two means. First, partners will coordinate and integrate Federal agencies' efforts to optimize existing transit and paratransit services. Second, they will incorporate state, local, and private efforts and develop innovative transportation alternatives.

The DOT partners in this initiative include the Office of the Secretary (OST), Federal Transit Administration (FTA), Federal Highway Administration (FHWA), National Highway Traffic Safety Administration (NHTSA), Research and Special Programs Administration (RSPA), and Intelligent Transportation Systems (ITS) Joint Program Office. Other Federal partners are the Department of Health and Human Services (HHS), Department of Housing and Urban Development (HUD), and Environmental Protection Agency (EPA).

Among the current and potential non-Federal partners are state, local, and tribal agencies; Metropolitan Planning Organizations (MPOs); Area Agencies on Aging; housing authorities; associations (American Public Transit Association, Community Transportation Association of America, National Association of Housing and Redevelopment Officials, National Association of Regional Councils, National Governors' Association); the private sector (information and communication system vendors, transit providers, employers); nongovernmental organizations and foundations (AAA Foundation for Traffic Safety, Easter Seals, Eno Transportation Foundation); and universities.

The FTA's Office of Research, Demonstration, and Innovation provides overall program management for this partnership. However, the management structure and process make full use of existing mechanisms for interagency cooperation—for example, the ITS Joint Program Office, the Access and Mobility Coordinating Council, and joint FTA/HUD efforts—and incorporate ongoing guidance from non-Federal participants.

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## 4. IMPLEMENTATION ACTIVITIES

Improving the mobility of the poor, the elderly, and persons with disabilities is a national priority. Federal programs support the development of advanced public transportation systems, access-to-work transportation for welfare recipients and others with low incomes, reverse-commute strategies for residents of public housing, and innovative rural transportation services. Nevertheless, there remains a need for greater integration among these programs, for identification of research and technology gaps, and for coordination with organizations outside the Federal Government.

### COORDINATING RESEARCH AND TECHNOLOGY AND RELATED DEPLOYMENT ACTIVITIES

This initiative's broad approach is to develop an ongoing process for coordinating efforts to improve mobility and identifying gaps in research, development, and technology. The first action will be to assure that existing Federal activities are fully integrated and coordinated with state and local agencies, nongovernmental organizations, and industry. The research and technology programs that address mobility are summarized in the paragraphs that follow. *Note: For each program, the plan shows two funding levels for fiscal years 1997 through 1999: the total funding for the activity and, wherever applicable, the portion of this funding specifically allocated for improving mobility (shown in parentheses).*

#### Access to Jobs and Reverse Commute

Created in 1998 by the Transportation Equity Act for the 21<sup>st</sup> Century (TEA-21), the Access to Jobs and Reverse Commute program provides competitive grants to local governments and not-for-profit organizations to connect persons to employment. The Access to Jobs component focuses on welfare recipients and others with low incomes, while Reverse Commute provides access to suburban jobs for people at all income levels. Administered by the FTA, the program requires a 50 percent cost-share for up to \$750 million in capital and operating assistance. Among the activities eligible for funding are developing and deploying new technologies, employer-provided transportation services, and transit voucher programs. Award criteria for the Access to Jobs component include the percentage of population that are welfare recipients, coordination with and use of existing transportation services, coordination with state welfare agencies, and use of innovative approaches.

FUNDING		
FY 1997	FY 1998	FY 1999
\$0*	\$0*	\$75,000,000 (\$65,000,000)**

\*Program began in FY 1999.

\*\*Approximately \$10 million is allocated for Reverse Commute strategies.

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## Advanced Public Transit Systems (APTS)

The APTS program is the transit element of DOT's ITS initiative. Created in 1991 by the Intermodal Surface Transportation Efficiency Act, ITS involves the integration of computer, sensing, telecommunications, and electronics technologies to make surface transportation safer and more efficient. The FTA established APTS to apply these advances to improve public transportation services. Among the resulting innovations are automated fare payment systems, automated dispatching, flexible and deviated routing, automatic vehicle location, and traveler information services. The APTS program has five main components: research and development, system architecture and standards, operational testing and model deployments, technology evaluations, and innovation mainstreaming. A current priority is to apply APTS technologies to develop specialized services for older Americans, people with disabilities, inner city and rural residents, and others with particular mobility needs.

<b>FUNDING</b>		
<b>FY 1997</b>	<b>FY 1998</b>	<b>FY 1999</b>
\$4,581,000 (\$600,000)	\$9,341,000 (\$1,000,000)	\$6,900,000 (\$0)

## Advanced Rural Transportation Systems

Thirty-eight percent of the nation's rural residents live in areas without any transit service; another 28 percent live in areas with negligible service. Moreover, 25 percent of families receiving public assistance live in rural areas. Conducted jointly by the FHWA and FTA and coordinated through DOT's Joint Program Office, this initiative supports the development of an intelligent transportation infrastructure in 450 rural communities. Among other improvements, this infrastructure will support new, innovative transit services and enable existing providers to operate more efficiently. In particular, it will help providers to improve mobility for the 30 million older people, low-income workers, and disabled residents in their service areas.

<b>FUNDING</b>		
<b>FY 1997</b>	<b>FY 1998</b>	<b>FY 1999</b>
\$2,000,000*	\$4,200,000*	\$4,500,000 (\$600,000)

\*Only a portion is transit-related.

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## Autonomous Dial-a-Ride Transit (ADART)

This system will increase the level of transit service available to large geographic areas with dispersed populations. A modernized version of "dial-a-ride," ADART employs fully automated order-entry and dispatching systems that reside on board the vehicle. Because no central dispatch is required, ADART provides more flexible service than conventional dial-a-ride at lower operating costs. The FTA completed Phase I of an ADART demonstration in 1996 and a second phase in 1997. The next steps are to develop a system planning model and a service experiment in Corpus Christi, Texas.

FUNDING*		
FY 1997	FY 1998	FY 1999
\$325,000	\$150,000	\$0

\*Congress earmarked \$1.5 million for ADART in 1996.

## Bridges to Work

This HUD demonstration program links low-income, work-ready households in central cities with suburban jobs. The linkage is being achieved by means of service collaborations that provide time-limited—but integrated—employment, transportation, and supportive services. The demonstration includes a random assignment of participants to an experimental or control group for pre- and post-data collection and evaluation. Five cities are participating in the demonstration, which began in 1996 and will be completed in 2000: Baltimore, Chicago, Denver, Milwaukee, and St. Louis. Provided both by HUD and foundations, funding is completed for all four years. A proposed operational program would award funds for additional service collaborations and provide monitoring and technical assistance.

FUNDING*		
FY 1997	FY 1998	FY 1999
\$0	\$0	\$0

\*Program funded in FYs 1994 and 1996.

## Bus Rapid Transit

This FTA program encourages transit authorities and MPOs to make improvements in bus service infrastructure, operations, and technology. Bus Rapid Transit will improve the speed, reliability, and convenience of bus service; enhance the mobility and access needed for thriving communities; and promote a cleaner, healthier environment.

FUNDING		
FY 1997	FY 1998	FY 1999
\$0	\$310,000	\$1,500,000

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## Jobs Plus

Public housing contains some of America's poorest persons with the lowest levels of mobility. In some central city housing projects, more than 75 percent of households receive public assistance. Funded jointly by HUD, HHS, and private foundations, this demonstration program's purpose is to increase the level of employment of public housing residents from 20 to 60 percent by means of (1) work incentives; (2) community support for work; and (3) linking people with jobs. Seven cities are participating: Baltimore, Chattanooga, Cleveland, Dayton, Los Angeles, St. Paul, and Seattle.

FUNDING		
FY 1997	FY 1998	FY 1999
\$7,500,000*	\$0	\$0

\*\$1 million from HHS and \$6.5 million from foundations.

## Metropolitan and Rural Policy Development

The goals of this FTA research effort are to develop better estimates of transit's condition, performance, and long-term investment needs; identify and evaluate the benefits of transit; explore the relationship between transit and land-use planning; provide technical assistance to encourage the development and use of innovative financing techniques; and conduct outreach on transit's contribution to the future of cities and neighborhoods.

FUNDING		
FY 1997	FY 1998	FY 1999
\$275,000 (\$92,000)	\$1,100,000 (\$367,000)	\$850,000 (\$283,000)

## Project Action

A cooperative effort with Easter Seals, Project Action builds relationships between transit and disability organizations to improve mobility for people with disabilities. The FTA program accomplishes its mission through technical assistance leading to service and technology innovations.

FUNDING		
FY 1997	FY 1998	FY 1999
\$0	\$2,000,000	\$3,000,000

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## Rural Transit Assistance Program (RTAP)

Through the RTAP, the FTA provides training and technical assistance to rural transit operators and supports coordination with human service transportation providers. A major emphasis is promoting greater use among rural transit systems of advanced information and communication technologies.

FUNDING		
FY 1997	FY 1998	FY 1999
\$4,500,000	\$4,500,000	\$5,250,000

## Safe Mobility for Life

Together with other agencies and the private sector, NHTSA is developing and evaluating materials designed to enable older people to have safe mobility for as long as possible. Efforts include an update of the 1988 Transportation Research Board Report, *Transportation for an Aging Society*; a model system for screening and evaluating older drivers; and materials to help older people decide when and whether to curtail their driving and how to maintain an acceptable level of mobility without driving. This program is closely associated with an initiative led by OST (Office of Transportation Policy Development) and NHTSA to establish a *National Agenda for the Transportation Needs of an Aging Society*. Other partners in this effort include the National Institute on Aging, Centers for Disease Control, and nongovernmental and private organizations.

FUNDING		
FY 1997	FY 1998	FY 1999
\$500,000	\$500,000	\$500,000

## Smart Growth Network

Urban sprawl has dominated post-World War II development. Debates on development have pitted pro- and anti-growth forces against each other over fiscal responsibility, environmental protection, and the need for mobility. "Smart growth" links development and quality of life, recognizing that where and how development occurs can determine whether it is a community asset or a liability. Coordinated by the EPA's Urban and Economic Development Division, the Smart Growth Network is a coalition of private and public partners seeking to create smart growth in communities and regions across the country. Partners share information on construction trends, innovative financing, and investments that reap economic *and* environmental benefits. (This effort is also an element of the NSTC partnership for "Transportation and Sustainable Communities.")

FUNDING		
FY 1997	FY 1998	FY 1999
\$1,300,000	\$1,300,000	\$1,000,000

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## Transit Cooperative Research Program

An integral component of the Government's support for transit innovation, this program funds research of significant importance to the transit industry. Emphasis is on near-term research leading to immediate improvements in transit efficiency and safety, customer service, management practices, and planning. An Oversight and Project Selection Committee, an independent governing board, develops a research agenda that is responsive to industry's needs. The Transportation Research Board administers the program and convenes panels of technical experts to define projects' scope, evaluate proposals, and guide efforts through to completion. The American Public Transit Association ensures that research results are disseminated widely to the transit industry.

FUNDING		
FY 1997	FY 1998	FY 1999
\$8,250,000*	\$4,000,000*	\$8,250,000*

\*Only a portion is related to access and mobility.

## Transportation and Community and System Preservation Pilot Program

Created by TEA-21 in 1998, this program provides funding for grants and research to address the relationship between transportation and community/system preservation and to identify private-sector-based initiatives. The program awards grants to states, MPOs, and local governments for planning and implementing projects that (1) improve transportation system efficiency; (2) reduce transportation's impacts on the environment; (3) reduce the need for costly infrastructure investments; (4) ensure efficient access to jobs, services, and centers of trade; and (5) examine and encourage development patterns that meet these purposes. Research will address the relationships among transportation, community preservation, and the environment; the role of industry in shaping such relationships; and evaluation and analysis of projects carried out under the grant program. (This program is also part of the NSTC's "Transportation and Sustainable Communities" partnership.)

FUNDING		
FY 1997	FY 1998	FY 1999
\$0	\$0	\$13,600,000 (\$3,000,000)

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## **OTHER ACTIVITIES AND PROGRAMS**

The following also support improved transportation services and mobility:

### **Access and Mobility Coordinating Council**

This coordinating body provides guidance to state and local transportation agencies, human service agencies, and transit providers on improving mobility through coordination of transportation services. Originally involving the Departments of Health and Human Services and Transportation, the council is being expanded to include coordination with the Departments of Education, Housing and Urban Development, and Labor.

### **Advanced Technology Transit Bus**

This FTA program is developing and testing a prototype transit bus that incorporates an advanced structural design and new passenger information systems. With its no-steps, low-floor design, this bus will improve access for persons with disabilities.

### **JOBlinks Demonstration**

Funded by FTA and administered by the Community Transportation Association of America, this demonstration program is testing transportation strategies linking unemployed persons to jobs.

### **Moving to Work**

A HUD demonstration program, this effort, like Jobs Plus, explores ways that public housing authorities can help recipients of housing assistance move toward self-sufficiency, increase housing choices for low-income families, and achieve greater program cost-efficiency. HUD will select up to 24 housing authorities to participate. Authorities will use their existing HUD funding.

### **NASA Aviation Research**

NASA is performing long-range research to make air transportation more accessible and less expensive. In particular, NASA is developing technology that will extend general aviation and civil tiltrotor service to rural areas, making air transportation more available and affordable in these communities.



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## Welfare-to-Work Program

The 1997 Balanced Budget Reconciliation Act created a new, \$3 billion fund for welfare-to-work grants, with \$1.5 billion available in fiscal years 1998 and 1999. Administered by the Department of Labor (DOL), the funds are delivered through Private Industry Councils in cities and counties. Seventy-five percent of the funding is allocated for formula grants and 25 percent distributed on a competitive basis. DOL is coordinating this program with DOT and HUD.

## ACTIVITIES AND OUTPUTS

### Completed Outputs

Partners in this initiative have completed the following:

- *Regional Seminars on Access to Jobs:* Cosponsored by the FTA, HHS, and HUD, these seminars, conducted June through October 1997, explored proactive strategies for meeting the transportation challenges of welfare reform.
- *Workshop on Defining Next-Generation Smart Paratransit for the Elderly:* Held in December 1997, this workshop brought together interested parties from all levels of government and the private sector to address implementation issues regarding service innovations for the elderly. Participants included representatives of state and local human service agencies, transportation agencies, private transportation providers, public interest organizations, businesses serving the elderly, and information technology companies.
- *National Agenda for the Transportation Needs of an Aging Society:* DOT, the AAA Foundation for Traffic Safety, and the Eno Transportation Foundation are holding a series of forums across the country to initiate a dialog on older Americans' transportation needs. The partners held four such seminars in early 1999.

### Near-term Outputs

Partners will undertake the following activities within the next 1 to 2 years:

- *Focus Groups for the National Agenda for the Transportation Needs of an Aging Society:* Working with DOT, the AAA Foundation for Traffic Safety will sponsor focus groups that bring together older people and their lay caregivers to discuss driving and transportation issues.

- 
- *National Agenda and Strategic Plan to Provide Safe Transportation for a Maturing Society:* This draft agenda and plan, to be developed with the Eno Transportation Foundation, will apply the results of forums and focus groups to (1) establish a blueprint for addressing older people's transportation needs and (2) provide preliminary guidance on programs, professional support, and funding requirements at the national and state levels.
  - *International Meeting on Transportation for an Aging Society:* As part of the Administration's participation in the United Nations International Year of Older Persons, partners will hold an international conference on older people's transportation issues on November 7–9, 1999, at the National Institutes of Health. Conference workshops will refine proposed programs and the draft *National Agenda and Strategic Plan to Provide Safe Transportation for a Maturing Society*.
  - *Coordination of Job Linkage Programs:* The FTA, HUD, and other agencies will coordinate and integrate the services deployed under the APTS, Bridges to Work, and Jobs Plus programs.
  - *Assessment of Mobility Needs:* This FTA effort will address the overall problem of mobility in the U.S. for those without access to an automobile. Using GIS-based and other methodologies, it will assess the extent and specific dimensions of the mobility problem facing older people, welfare recipients and the working poor, and residents of inner cities and rural areas.

### Long-term Outputs

Long-term activities, to be completed within 3 to 5 years, will focus on the integration of ITS and other technologies with job linkage programs, transportation services for older Americans, and other service demonstrations.

