



**ACCESS TO TRANSPORTATION  
IN THE COMMONWEALTH:**

**SUMMARY, OVERALL FINDINGS,  
AND RECOMMENDATIONS**



**COMMONWEALTH OF MASSACHUSETTS  
GOVERNOR'S COMMISSION ON ACCESSIBLE TRANSPORTATION**

**APRIL 1987**

**MICHAEL S. DUKAKIS, GOVERNOR**

**DENISE KARUTH, CHAIR**

March, 1987

Dear Friend:

The Following is one of eight position papers developed by the Governor's Commission on Accessible Transportation. The twenty-two member commission, consisting of legislators, members of the executive branch and consumers, worked diligently over the past eighteen months identifying the transportation needs of our disabled and elderly citizens throughout the Commonwealth.

This series of papers contains not only an in-depth analysis of these citizens transportation needs but also a thorough assessment of the current state of our transportation system as it affects them. I have no doubt that these papers will form the basis of future policy discussions and decisions affecting the delivery of transportation.

I urge all transportation planners and other interested individuals to examine these reports and to work together to create a transportation system truly accessible to all our citizens.

Sincerely,

Michael S. Dukakis

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## INTRODUCTION

Most people take transportation for granted. To get to work or to conduct the business of our everyday lives, we hop in the car, catch the bus, call a friend for a ride, or take a cab. For persons with transportation disabilities, these options may not be available. They may not be able to afford to purchase, insure, and modify a private vehicle; they might not be able to get to the bus stop or there might not be bus stop near-by. Those who are able to get to the bus may find that the bus is not designed to meet their needs. Family and friends may not be readily available to drive them each day to and from work. Many, therefore, travel rarely, if at all.

For the more mobile transportation disabled who do travel, their day is fraught with uncertainty. Will the lift or kneeler on the bus work? Will a train driver announce a service change while in route over a loud speaker which a deaf person will not hear? Will a person who is blind get lost because a stop announcement is not made? Will a door-to-door service user always know where he or she needs to be 24 to 72 hours in advance? Most persons, including the general public, law, policy and decision makers, and transportation providers are not fully aware of the need for affordable transportation services which are dependable and accessible to persons with transportation disabilities.

Massachusetts is the first state to comprehensively examine transportation issues for persons with disabilities and senior citizens in a statewide, inter-agency context. The Governor's Commission on Accessible Transportation was formed late in 1984, with a grant from the Massachusetts Port Authority, in response to disabled and elderly persons' expressed need for transportation. Specifically, the Commission was charged to:

- investigate disabled persons' and senior citizens' reports that they limited (or no) access to transportation;
- determine if and how existing transportation services and systems should be made accessible;
- make recommendations on how accessible transportation programs, services and policies could be developed to fulfill these citizens' unmet needs efficiently and cost-effectively.

The Commission is comprised of 23 persons including elderly and non-elderly persons with disabilities, legislators, and representatives from the Executive Office of Transportation and Construction, the Executive Office of Human Services, and the State Office of Handicapped Affairs (Appendix A). Working with guidance from an Advisory Committee consisting of transportation and human service professional, the Commission conducted public hearings, did research on past transportation policies and efforts, participated in on-going development of local accessible systems, and examined model accessible transportation systems and services throughout the United States, Canada and Europe. These efforts resulted in seven position papers totaling over 300 pages and containing over 200 findings and recommendations.

This final report provides a very general summary of the Commission's major findings and recommendations, and includes:

- a profile of the “transportation handicapped” population;
- an overview of existing transportation services and systems;
- the Commission's major findings and
- overall recommendations for making transportation services and systems accessible to disabled and elderly citizens throughout the Commonwealth.

THE COMMISSION ESPECIALLY WISHES TO THANK THE MASSACHUSETTS PORT AUTHORITY FOR GENEROUSLY PROVIDING FUNDING TO SUPPORT BOTH THE COMMISSION'S WORK, AND THE PRINTING OF THIS, AND ALL OF THE COMMISSION'S PAPERS.

## TRANSPORTATION AND PERSONS WITH TRANSPORTATION DISABILITIES:

The lack of accessible transportation affects peoples' lives in every way. The Commission heard from persons with doctoral degrees who could not work for lack of adequate accessible transportation. People testified that they could not visit friends and families. The Commission heard from people who ran out of food, missed funerals of family members and friends, and spent holidays alone, all for the want of a ride.

The Commission focused its work on the needs of this population, defined as "transportation handicapped." Individuals so described are defined by the United States Census Bureau and the U.S. Department of Transportation as persons who cannot use transportation services offered to the general public (e.g. buses, cabs, trains, etc.) because using these services requires an ability to climb steps, walk distances, stand long periods of time, read signs, hear announcements, or navigate without the benefit of verbal stop announcements. The transportation disabled include:

- frail elders who use canes, walkers or wheelchairs for mobility, or cannot walk long distances;
- children and adults who use wheelchairs and other aids for mobility;
- persons of all ages who are visually or hearing impaired or both;
- persons of all ages with developmental disabilities such as mental retardation, cerebral palsy, autism, and others;
- persons of all ages with hidden disabilities, such as epilepsy, heart conditions, and high blood pressure;
- persons with more than one disability.

There are many estimates of the number of persons with transportation disabilities living in Massachusetts. The 1980 United States Census estimates that 1.7% of persons aged 16 to 64 have transportation disabilities, while 14% of those over age 65 are transportation disabled. A more recent Census Bureau analysis indicates that as much as 20.1% of the total population could be considered to be disabled. The 1978 Annual Health Interview Survey estimates that 14% of Massachusetts residents have a disability or disabilities which limit them in one or more major life activity; 3.5% of the total population has severe disabilities. The

Commission recognizes both the wide variation in these figures and the fact that not all 20.1% of the population which can be considered “disabled” is also “transportation disabled.” The Commission believes that the methodology of the 1978 Annual Health Interview Survey more accurately reflects the population within the disabled and elderly community which is transportation disabled. The 14% of the population identified by this survey as having a disability which limits them in one or more “major life activity” (defined in the 1977 504 regulations as “caring for oneself, performing manual tasks, walking, seeing, hearing, speaking breathing, learning, or working”) will require special consideration with regard to transportation services. Therefore, the Commission used the 14% figure to determine that approximately 792,000 Massachusetts residents are transportation disabled.

## TRANSPORTATION SERVICES, PRIVATE TRANSPORTATION, AND CURRENT LAWS AND POLICIES:

Regional Transit Authorities: Public transportation in 187 cities and towns outside of the Greater Boston area is administered by 14 Regional Transit Authorities (RTAs). Twelve of the RTAs operate buses along fixed-routes on fixed schedules. Ninety-nine or seventeen percent of the 569 buses in the combined RTA fleet are lift-equipped. All fourteen RTAs provide services to local transportation disabled via specialized door-to-door services. During FY'85, RTAs provided 34 million one-way trips on fixed-route services, and 1.4 million one-way trips on door-to-door services. Total operating expense for FY '85 was \$42.2 million, of which \$5.3 million or 13% was spent on door-to-door services. As required by new federal transportation regulations (Section 504 of the Rehabilitation Act of 1973), all of the transit authorities are currently engaged in planning and developing on-going accessible transportation services.

Massachusetts Bay Transportation Authority: Public transportation in the 78 cities and towns surrounding and including Boston is administered by the Massachusetts Bay Transportation Authority. The MBTA operates several heavy and light rail lines, 161 bus routes, and funds door-to-door paratransit services for the transportation disabled. This door-to-door service currently operates in 21 of the 78 cities and towns in the MBTA service area. Approximately 16% of the Authority's fixed route buses are lift-equipped; 14% to 20% of the Authorities heavy rail service is accessible while none of the light rail lines are accessible. The Authority also subsidizes several transportation programs in suburban Boston communities (e.g. commuter bus or in-town service). Four of these 19 programs provide some accessible service. The Authority provides approximately 500,000 one-way trips each workday on fixed route services, and approximately 12,000 trips per month on the paratransit system. The total operating budget for FY '86 was \$335.8 million on which \$10.4 million or 2% was spent on services for the transportation disabled. The Authority is engaged in planning efforts in order to comply with federal accessibility requirements as well as to determine its own accessibility policies and goals.

Other Transportation Services offered by private companies throughout the Commonwealth include approximately 20 intercity bus operators (e.g. buses which travel from city to city), and over 400 taxi-cab, ambulance and chair-car companies.

Human Service Agencies purchase transportation for clients traveling to and from agency sponsored programs, events, and services. The Department of Mental Health (MDH), the Massachusetts Rehabilitation Commission (MRC), and Medicaid (a division of the Department of Public Welfare DPW)), all administratively responsible to the Executive Office of Human Services, purchase these transportation services from a range of public and private providers. The Executive Office of Elder Affairs, local Councils on Aging, and regional Area Agencies on Aging and Home Care Corporations combine efforts to operate or purchase program-specific and/or general purpose transportation services for elders. During FY '85, these human service agencies spent over \$50 million on transportation; 6.4 million one-way trips were funded. Human service transportation budgets have risen by at least \$5 million per year since the end of FY '85.

**Private Vehicle Ownership:** As an alternative to dependence on public or private services, some disabled persons own, or seek to own and/or operate private vehicles. The Commonwealth supports this objective for Massachusetts Rehabilitation Commission clients pursuing vocational rehabilitation goals by funding adaptations to vehicles purchased by clients. Clients are responsible for insuring and maintaining these vehicles once adapted. Some insurance companies charge higher to insure adapted vehicles citing the high replacement cost of vehicles with modifications. Disabled persons point out that these adaptations are vital to their accessing/driving the vehicle and that high insurance rates are often a barrier to owning private vehicles. It should be noted that there are no programs which help fund vehicle purchase. For disabled persons who are not clients of the MRC pursuing vocational objectives, no financial support is provided to fund vehicle adaptations, which often range from \$2,000 to \$18,000.

Laws, Regulations and Executive Orders: Provision of transportation is sometimes guided by laws and policies promoting the general concept of physical and program accessibility and/or transportation access. Laws and policies which may apply to transportation include:

- Article 114 of the State Constitution, which prohibits discrimination based on disability;
- M.G.L. Chapter 272, Section 98, known as the Public Accommodations Law, which prohibits discrimination based on disability in places of public accommodation;
- M.G.L. Chapter 22, Section 13A, which requires full access to any public building or facility, including transportation facilities constructed after 1975, and creates the Architectural Access Board to oversee compliance;
- Executive Order 246 signed by Governor Dukakis in 1984, requiring Executive agencies to make their programs and services accessible to persons with disabilities.

In addition, several state agencies have programs which oversee the safety of transportation services.

## THE COMMISSION'S OVERALL FINDINGS AND RECOMMENDATIONS:

The Commission's seven position papers examine:

1. Paratransit Services provided by Regional Transit Authorities
2. Transportation Services operated or purchased by State Human Service agencies
3. Transportation Services provided by the Massachusetts bay Transportation Authority
4. Fixed-Route Services provided by Regional Transit Authorities
5. Transportation Services designed for Massachusetts Senior Citizens
6. Accessible Transportation: Current Law, Policy, and Enforcement
7. Private Vehicle Ownership and operation for persons with disabilities

Through its work, the Commission is pleased to recognize that understanding of accessible transportation related problems is developing at all administrative, program, and operational levels. Transportation planners, providers and administrators are developing partnerships with transportation disabled persons to identify problems and develop solutions. Results of this work are already evident: the Executive Office of Transportation and Construction is requesting additional funding each year to allow transit authorities to expand services; the Executive Office of Human Services is now providing demonstration grants to support the development of regional human service transportation coordination; RTAs and the MBTA offer far more accessible service in 1987 than was offered in 1985, 1983 or in 1979. The question has changed from "Can we provide accessible transportation?" to "How much can we provide and how can we provide it?"

The Commission's Overall Recommendation: As an increasing amount of accessible transportation becomes available and policy questions become more and more complex, future success in meeting the transportation needs of elderly and disabled persons will depend on the ability of the state to maintain clear accessible transportation goals and objectives. The Commission urges the legislature and the executive branch to support funding requests for provision of accessible services and to oversee development of services which are consistent with the following goals:

1. **Maximum Integration:** Wherever possible, disabled and elderly persons should be provided service which is fully integrated with services provided to the general public. Such an approach supports the accepted goals of independent living.
2. **Multi-Modal Services:** Disabled and elderly persons have varied needs. To meet these needs, varied types of services are needed. Many persons can use and prefer to use fixed-route services. Others, due to their location or the nature of their disability will require more personalized dial-a-ride, door-to-door service.
3. **Coordinator of Services:** Whenever possible, all resources spent on transportation should be used in coordination with other local and area programs so that travel opportunities for all transportation disabled persons are expanded while client needs are addressed.
4. **Consumer Participation:** All programs and services should be designed in cooperation with disabled and elderly persons. Involvement in all aspects of program development is essential including its planning, implementation, and evaluation of services.

With these basic goals in mind, the Commission's findings and recommendations are as follows:

**FINDING ONE: The vast majority of disabled and elderly residents' transportation needs remain unmet despite efforts of government, agencies, and providers.** While many transportation disabled persons are beginning to realize a degree of local mobility, local services are still limited in days and hours of operation, and are generally not able to keep pace with demand. In one study conducted by the Commission, the present level of public transportation made available to disabled persons would allow each to take 1.5 one-way trips per week, or 77 one-way trips per year. In contrast, the average mass transit user takes 2.2 one-way trips per day, 15.4 one-way trips per week, or approximately 800 one-way trips per year. In terms of non-local travel, a wheelchair user wishing to travel from one part of the state to another can expect to pay over \$200.00 round trip to procure private transportation since most cross-state services are not accessible.

## **RECOMMENDATION:**

- 1.1 Expansion in all areas, including fixed-route access, door-to-door services, and private vehicle modifications and utilization, is essential to meet this unmet need. Providers and administrative and funding agencies should continue all efforts to expand services until the gaps between supply and demand are significantly decreased.

**FINDING TWO: In 135 cities and towns there are no transportation services available to disabled persons.** 85 of these communities do not belong to RTAs or the MBTA. 50 of these communities belong to RTA or the MBTA, but do not receive or request service. Some of these communities provide services for elders, but for disabled adults under age 60.

Persons from these communities testified that employment, social activities, or even shopping for food, are often completely out of the question because of the lack of transportation services.

## **RECOMMENDATIONS:**

- 2.1 Communities which are not part of an RTA should be encouraged to join an RTA in order to access available state and federal transportation subsidies. Joining an RTA may be the most cost-effective method for funding local, accessible transportation service.
- 2.2 The MBTA should provide accessible transportation in all 78 cities and towns in the Authorities service area.
- 2.3 Communities which choose not to join an RTA should develop an affordable transportation service for local disabled residents of all ages.

**FINDING THREE: The bulk of public and private transportation services operated in Massachusetts for the general public are not**

**accessible to persons who use wheelchairs or have mobility impairments.** The Commission finds that the use of specialized door-to-door services, to the exclusion of fixed-route access, unfairly isolates this population from the general riding public. Fixed-route services operated by public transit authorities, services of inter-city bus operators, taxi-cabs, tour buses, ferry boats, and even some service operated specifically for the benefit of some transportation disabled persons, are still generally inaccessible to the transportation disabled as a whole. While several public and private providers have made significant efforts to provide accessible services over the past several years, only 17% of the fixed-route buses operated by RTAs are lift-equipped (some of these buses have lifts which do not work or have been disconnected); most fixed-route services operated by the Massachusetts Bay Transportation Authority are not accessible. The Executive Office of Elder Affairs provides financial assistance to some local services which are not accessible to senior citizens who use wheelchairs. Almost all taxi-cabs, inter-city buses, and ferry boats are not accessible.

## **RECOMMENDATION:**

- 3.1 The Commonwealth should set a general long-term goal to make the majority of all transportation services operated for the benefit of the general public accessible to persons with mobility impairments. This goal is critical to providing flexible and spontaneous access to transportation.

**FINDING FOUR: RTAs and the MBTA have chosen specialized door-to-door services to provide the bulk of transportation to persons of all ages with disabilities. As a rule, these services do not provide the same level of service as is available to the general public.** While door-to-door service offers highly personalized transportation, users must usually call 24 to 72 hours in advance to reserve trips, trip purpose is often restricted, and service is not available on evenings and weekends. Many disabled persons could sue fixed-route services if they were accessible, although there are those with transportation disabilities who will always need door-to-door services due to the severity of their transportation disability.

## **RECOMMENDATION:**

- 4.1 Paratransit services should be improved to meet the needs of those who, by nature of their disability and location, have no other transportation options. Trip purpose restrictions should be eliminated, service hours should be increased and advance notice requirements increased.

**FINDING FIVE: Many state human service agencies have developed their own systems to transport clients to and from agency-sponsored programs and activities. These services and the \$50 million spent to operate them could be better utilized to provide coordinated transportation which meets agency and consumer needs. The Commission finds that human service agencies have a major role in funding transportation; it is both inefficient and less effective for them to administer transportation services.** Given the present system, it is possible that two neighbors, clients of different agencies, but traveling to and from the same originating and destination points at the same time, would travel on separate vehicles. This duplication of efforts increases costs. In addition, despite many unmet needs, vehicles operated by many human service agencies sit idle during early morning, late afternoon, and evening and weekend hours.

## **RECOMMENDATION:**

- 5.1 In order to utilize existing funding and resources as effectively as possible, coordinated partnerships should be developed among and between human service agencies and public transit authorities.

**FINDING SIX: Most public and private services are not easily utilized by persons who are transportation disabled by virtue of vision and/or hearing impairments, developmental disabilities, or hidden disabilities.** Many non-wheelchair using transportation disabled persons report having tremendous difficulty using public and private services operated for the general public. They report, for instance, that drivers are not sensitive to or aware of their needs, that letters on signs are too small

to read, that most operators do not make verbal stop announcements, and that system information provided over loudspeakers may not be heard by persons with hearing impairments.

## **RECOMMENDATION:**

- 6.1 The definition of “accessibility” should evolve to include access for persons of all ages with disabilities who do not use wheelchairs. Services should be designed and implemented with adequate employee sensitivity training, large-print, high contrast signs, and spoken and visual display service announcements.

**FINDING SEVEN: Massachusetts has a number of strongly worded laws which require non-discrimination on the basis of handicap, access to public buildings and facilities, and inspection of vehicles operated for the benefit of the general public. However, there are major gaps within and between these non-discrimination laws relative to transportation and some of the broader laws and policies with applicability to transportation remain unimplemented or untested.**

Both providers and consumers often refer to state law and policy for guidance on whether transportation services should be accessible. Given the current gaps and lack of defining regulations, these laws and policies cannot provide the necessary guidance.

## **RECOMMENDATIONS:**

- 7.1 Laws and regulations which address access should be interpreted, implemented, and/or expanded to include transportation. Transportation systems, viewed in their entirety should be usable by persons of all ages with disabilities. Non-discrimination laws and policies should be implemented with the goal of providing station, vehicle, service, and system access.
- 7.2 The legislature should request regulations from designated enforcement agencies which reflect the goals set out in recommendation 7.1. Regulations should call for affirmative steps to make services accessible.

**FINDING EIGHT:** Some disabled persons would benefit greatly from access to their own private means of transportation. However, given the high cost of maintaining and insuring vehicles and installing necessary adaptations, private vehicles are beyond the financial reach of the majority of this population. The cost of supporting accessible public transportation services, as currently administered and designed, is relatively high. In addition, the Commission has found that, given the present level of service provided by the RTAs and the MBTA, each transportation disabled person could expect to receive 1.5 one-way trips per week if a majority of persons eligible for service were to request it. In this context, the use of state funds to support private vehicle ownership, perhaps in the form of low-interest loans, could provide high quality, cost-effective service which allows a high level of personal mobility.<sup>1</sup> This mobility may be essential to competing in the job market and conducting the business of everyday life.

#### **RECOMMENDATION:**

- 8.1 The Commonwealth should develop a grant or low-interest loan program which will assist disabled persons pursuing vocational rehabilitation and/or independent living goals who are seeking to own and/or operate private vehicles. Recipients of these loans or grants should be required to pay, on a sliding scale, for part of the initial costs of the adaptations.

**FINDING NINE:** The Commission has uncovered a wide variety of accessible transportation issues and needs which transcend agency, regional, and provider agendas and mandates, yet need to be addressed. The Commission has found that its strategy of bringing consumers, planners, providers, decision makers, and others together in a statewide forum has led to a substantial increase in the understanding of these issues and significant progress toward addressing them.

## **RECOMMENDATION:**

- 9.1 Given the nature and scope of accessible transportation issues and needs, the Commission recommends that the legislature and executive branch support the creation of a statewide task force on accessible transportation which will work to implement the Commission's many recommendations. Toward this end, the Commission has recommended that \$50,000 be added to the Office of Handicapped Affairs' budget to fund such a task force.

## **CONCLUSION:**

Our society is built on the assumption that individuals will be able to access transportation for work, shopping, appointments, errands, social, civic, and recreational activities. Despite the hard work of many decision makers, planners, providers, and consumers, many disabled and elderly persons are often without access to transportation and remain isolated within their communities. In order to address this pressing need, accessible transportation must be addressed legislatively and programmatically with significant involvement from agencies, providers, planners, and consumers.

The Commission has, in its seven position papers and this overall summary, outlined over 200 recommendations which individually and collectively, would do much to address this need in a cost-effective, workable manner. The Commission hopes that all involved will continue to seriously consider its many recommendations so that increasing numbers of disabled and elderly persons will have the opportunity to actively participate in the many and varied work, commerce, and service activities throughout the Commonwealth.

## ENDNOTE

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<sup>i</sup> The average cost for a one-way trip on a door-to-door transportation service is \$6.00 (most human service agencies and public transportation authorities provide the bulk of service to elderly and disabled persons via door-to-door services). If a person with a disability or senior citizen were to take one round-trip on five of the seven days each week, it would cost \$60.00 per week, \$3,120 per year, or \$18,720 over a six-year period to fund this transportation. However, if this person is capable of driving his or her own adapted vehicle (modification costs range from \$2,000 to \$18,000) and given that in most cases these vehicles remain drivable for an average of six years, it may be cost-effective to support private vehicle ownership for some persons who require accessible transportation. It should be noted that private vehicle ownership offers the potential for far more than five round-trips per week.