

Detectable Tactile Warnings

DOT rules to require detectable tactile warnings on rail platform edges sparked controversy in the disability community and the transit industry. Although transit systems did not oppose the need for tactile strips, they raised concerns about the safety and maintenance of the requisite technology and its application to rail platforms. A related concern is the necessity to make large financial investments in technology, such as tactile strips, which has had limited testing in actual use. Although such technical issues remain unresolved, at the center of the controversy for most disability advocates is a primary concern about the safety of rail passengers who are blind or otherwise visually impaired.

Originally required by July 26, 1993, the prescribed installation of detectable warnings in key stations was suspended by DOT until January 26, 1995, pending results of several research efforts under way. The Access Board will be sponsoring research on the need for detectable warnings and has reserved proposing accessibility guidelines for state and local government entities. The Access Board has also proposed suspending requirements for detectable warnings for entities covered by Title III of the ADA until January 1995.

Conclusion

ADA's ultimate goal to provide equal access for persons with disabilities has far-reaching implications for transportation, particularly public transit. Initial implementation efforts in transportation have been positive; transit systems nationwide, demonstrating a willingness to comply with the letter and spirit of the law, are moving in the right direction. Financial uncertainties have become apparent as providers compare the costs of implementation with limited financial resources. ADA is an expensive federal mandate without designated funding. Implementation is proceeding and it is too early to determine how these emerging issues will be resolved. Problem solving—now primarily in the hands of transit operators, will require creative and innovative solu-

tions, but more importantly, cooperation and collaboration with the disability community.

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Impact of the Americans with Disabilities Act on Bus Service

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In congressional debate over the Americans with Disabilities Act of 1990 (ADA), particular difficulty developed around the issue of access for individuals with disabilities to transportation on buses with a high passenger deck, defined in the act as over-the-road buses (OTRBs). These buses are most often used in scheduled service that takes passengers from city to city, or on local and regional tours and charter trips.

Uncertain about the feasibility and cost of OTRB accessibility technologies, Congress was concerned that the burden of implementing ADA might cripple an already struggling industry, and thus cause the loss of intercity, charter, and tour bus service for many citizens. To ensure that regulations issued by the U.S. Department of Transportation (DOT) would be based on accurate, objective information and fully reflect the needs of both the bus industry and the disability community, Congress directed the Office of Technology Assessment (OTA) to study this issue. OTA released the report *Access to Over-the-Road Buses for Persons with Disabilities* in May 1993.

Within a year of the release of the OTA study, DOT must issue regulations to inform OTRB operators of their compliance obligations under ADA. These regulations take effect for large operators in July 1996 and for small operators in July 1997, although the President may delay implementation for up to one year.

What Is Accessible Service?

OTA found that an accessible OTRB allows persons with disabilities to board and, where applicable, remain with their aids while riding on the OTRB—with only minimal assistance from bus company personnel. Accessible OTRBs have

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- Access to level-change devices (on-board or at stops), including lifts or ramps;
- A sufficiently wide door to accommodate persons with mobility impairments and their aids;
- Two tie-downs to secure wheeled mobility aids and their users while inside the OTRB;
- Movable arm rests on some aisle seats;
- A means to communicate with persons with sensory and cognitive impairments, both on and off the bus;
- An accessible restroom or operational provisions for use of accessible restroom facilities; and
- Personnel trained in both equipment use and people skills.

ADA does not require retrofitting of vehicles; accessibility is phased in as OTRBs are purchased or leased by transportation providers. Because OTRBs last more than 20 years, operators may take that long or longer to turn over their fleets and to complete the phase-in of accessible OTRBs.

Several variables will affect the process of implementing accessible service. First, OTRB service providers may choose between vehicle-based and station-based level-change devices to suit their service patterns. More complicated regulatory strategies will be required for the station-based lift approach, however, because a bus without a level-change device on-board is only accessible when it is at a station with a level-change device.

Second, OTA is confident that, over time, design and production will lead to more reliable and affordable accessibility technologies. However, the area in which technology is least able to offer help is that of accessible onboard restrooms that do not displace additional seats, the only restrooms that ADA allows DOT to require.

Another factor affecting implementation is that ADA imposes different standards on "fixed-route" and "demand-responsive" transportation services. To be consistent with ADA, OTA found that all OTRBs purchased or leased for fixed-route service must be accessible, but demand-responsive OTRB systems can meet ADA standards by providing enough accessible OTRBs to accommodate demand.

Finally, reservation systems can ease the implementation of accessible service before OTRB systems are fully accessible by allowing passengers to notify companies of special needs and by providing advance notice to make accessible equipment available. However, ADA forbids the use of a reservation system primarily for persons with disabilities; a reservation system is acceptable only if it serves all riders.

OTA calculated that the additional cost for one new OTRB to be outfitted with accessibility technologies and operated during its approximately 20-year lifetime ranges from \$18,000 to \$40,000, or approximately 1 percent of its total lifetime capital and operating costs. Because most operators will not purchase accessible vehicles until after ADA regulations go into effect in 1996 to 1997, they will not begin to incur these costs for some time. Operators will purchase accessible vehicles as they turn over their fleet, therefore the cost of implementing accessible service will approach 1 percent of the total operating costs only when the fleet becomes fully accessible.

Moreover, operator choice in purchasing station-based or onboard level-change devices is an important factor in minimizing costs. For example, fixed-route operators in urbanized areas with many express buses are likely to benefit from station-based technologies because many buses can be served by relatively fewer level-change devices. On the other hand, fixed-route operators in rural areas and charter and tour operators with many stops will most likely prefer OTRBs with onboard level-change devices.

What Are the Likely Impacts?

The impacts of ADA cannot be predicted with any certainty. However, OTA estimated the most likely impacts as follows.

OTRB service providers in fixed-route service will face additional capital and operating costs in implementing ADA. Because many OTRB operators are currently experiencing financial difficulties, they are concerned about these costs. Some fixed-route providers have said that they may reduce service, and it is conceivable that some companies already in financial

trouble could choose to end service. Charter and tour operators of OTRBs have somewhat simpler requirements than fixed-route providers under ADA. As their general financial situation is often stronger than that of fixed-route OTRB operators, the cost impact should be less.

Communities, especially rural ones with small passenger buses, could experience reduction in service, but OTA judged the effect to be marginal. Given the proprietary nature of company data and the decline of rural service over the decades before the passage of ADA, it may be impossible to isolate the effects of ADA compliance on rural service even after the fact.

Persons with disabilities and other passengers face a phase-in implementation of full accessibility that could last as long as 20 years. Thus for a number of years, physically assisting riders on board will still be practiced, creating problems for both riders with mobility impairments and OTRB personnel. Costs of providing accessibility that are passed on through increased fares could reduce ridership by those now using OTRBs, especially because the ridership is price sensitive. However, the demand for OTRB service by persons with disabilities will most likely increase as systems become truly accessible and as the population ages.

What Can Congress Do?

Although the language of ADA does not open the door for additional financial assistance for the implementation of the law, Congress may wish to consider government assistance in order to strengthen the industry or accelerate implementation. Regardless of Congressional action, however, DOT can proceed with the development of regulations, and accessible service can be implemented. The OTA study concluded that accessible OTRB service is both practical and achievable.

Reference

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