Transporting large wheelchairs and customers of size is a growing concern for transit agencies. The total weight of a passenger and wheeled mobility device combined can present safety challenges for drivers. This tech brief evaluates some of the issues related to transporting oversized wheelchairs and will evaluate some of the best practices and recommendations for safely securing and transporting oversized mobility devices.

### ADA requirements

Transit providers are **required to transport** wheelchair and occupant if the lift and vehicle can physically accommodate them. If a lift has the minimum design load of 600 pounds, there is no requirement for an agency to transport a heavier occupied device. However, if the vehicle lift has a design load of 800 pounds, the agency would need to transport a 800-pound wheelchair/passenger combination, but not a combination exceeding 800 pounds.

Transit providers are **not required** to transport devices that **do not fit** on the lift or vehicle.

Transit providers **must transport** a wheelchair and occupant if the lift and vehicle **can physically accommodate them**, unless doing so is inconsistent with legitimate safety requirements.

"**Legitimate safety requirements**" refers to wheelchairs of such size that they would block an aisle, would be too large to fully enter a railcar, would block the vestibule, or would interfere with the safe evacuation of passengers in an emergency.

Transit providers **cannot impose a limitation** on the transportation of wheelchairs and other mobility aids based on the **inability of the securement system** to secure the device to the satisfaction of the transportation provider. It would be inconsistent with the rule to deny service to people who use wheelchairs solely because particular devices may be problematic from a securement point of view.

Transit providers are **not required to retrofit vehicles**.

Transit providers are **not required** to procure **vehicles or lifts that exceed the ADA requirements**.

### Revised Wheelchair Definition

Section 37.3 of the DOT regulations implementing the Americans with Disabilities Act of 1990 (ADA) (49 CFR Parts 27, 37, and 38) defines a “wheelchair” as “a mobility aid belonging to any class of three- or more- wheeled devices, usable indoors, designed or modified for and used by individuals with mobility impairments, whether operated manually or powered.”
Potential Issues

Although current research suggests that large and/or heavy wheelchairs are not a significant problem, potential problems reported by transit agencies, state DOTs, vehicle manufacturers, and experts include the following:

- Harm to the passenger, their wheelchair, the lift, the vehicle, the driver, or other passengers.
- Mobility devices not fitting safely on the lift or that are unable to be secured or maneuvered on to the vehicle.
- Securement belts not being long enough to go around the passenger, or the passenger’s size making it difficult to reach attachment points, requiring extension belts.
- Large and/or heavy mobility aids not fitting easily within the securement area on a transit vehicle.
- A clear floor space as large as 33 x 56 inches may be needed to accommodate people with the largest space needs (large power wheelchairs and scooters, people who have limbs that have to be kept in an extended position, equipment that is hung off wheelchairs such as respirators and control devices, and simply large bodies that extend outside the perimeter of the devices).
- Difficulty maneuvering larger mobility devices on transit vehicles, especially on low-floor bus models, due to limited space.
- On paratransit vehicles, maneuverability can be difficult when more than one mobility device is on board.
- Mobility devices that are overweight when occupied (over the 600-pound minimum weight standard that the ADA defines for transit vehicle lift load) have the potential to damage lifts, ramps, and transit vehicle suspensions.
- Not knowing the combined weight of a passenger and his/her wheelchair and having to ask (or perhaps the passenger does not know).
- Having to determine on the road whether the lift can accommodate the weight, and whether the wheelchair will fit – potentially causing delays, resulting in more rushed decisions, and embarrassing the passenger.

Oversized Wheelchairs

Transporting and securing large and/or heavy wheeled mobility devices is an ongoing challenge for some transit providers. Recent changes to ADA definitions continue to cause confusion. Several research projects have examined issues related to transporting oversized/overweight wheelchairs and mobility devices. The recent changes to the ADA definition of wheelchair have alleviated some of the concerns addressed in the reports. However, some of the findings suggest that more work needs to be done and that likely changes in population demographics will be increasingly problematic for transit agencies, operators, and passengers with wheelchairs.
Solutions

While transporting and securing large and/or heavy wheelchairs is a concern, research on the topic has identified strategies that can provide solutions to some of the issues identified. Some of the strategies include updating policies, procuring vehicles and equipment that can accommodate large and/or heavy wheelchairs, updating operational procedures, and providing training for drivers.

Some practices and recommendations

The following list is a compilation of practices and recommendations for securing and transporting large and/or heavy wheeled mobility devices:

**Policies**
- Update policies to reflect current ADA requirements and revised wheelchair definition and remove old language that refers to the old wheelchair definition with specific size and weight limitations from agency’s website.
- Post securement policies, guidelines, system responsibilities/limitations, and statement of assistance provided by operator.
- Provide vehicle operators with clear procedures on determining whether a wheelchair “blocks” an aisle.
- Ensure aisle-blocking policies are disability-neutral.

**Procurement**
- Purchase lifts rated for at least 800 pounds.
- Purchase ramps, when possible, with a maximum slope of 1:6.
- Procure driver-friendly securement systems.
- Conduct a vehicle layout audit with various mobility devices to test prototypes during the procurement process.
- Consult with equipment manufacturers (mobility devices and securement systems) for recommendations on securing large and/or heavy mobility devices.

**Operations**
- Drivers should allow person to board separately from mobility device if possible.
- Provide extension belts if lap belt is required.
- For Paratransit:
  - Adjust scheduling priorities for large and/or heavy wheelchairs.
  - Send another driver to assist.
  - Send a vehicle with a higher rated lift.
  - Procure low floor vehicles.
  - Increase the use of flexible layout.
- Provide new hire and annual driver training on:
  - Hands-on training to drivers on a variety of mobility and securement devices.
  - Proper use and placement of seatbelts.
  - Sensitivity training.
  - Disability awareness training.
- Inventory the characteristics of vehicle fleet.
- Educate riders on limitations of transit fleet.
- Call supervisor for assistance.
Below are some of the references used for this technical brief, as well as additional resources to help transit providers research ADA compliance and transporting large wheelchairs:


Easter Seals Project ACTION – Project ACTION promotes cooperation between the transportation industry and the disability community to increase mobility for people with disabilities under the ADA. They offer numerous resources, as well as training and technical assistance. http://www.projectaction.org/


National RTAP ADA Toolkit, 2014: http://nationalrtap.org/adatoolkit/


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