



Problem solvers

Are you facing a community transport problem? Perhaps you're assessing the implications of recent legislation or considering the specifications of a new vehicle. Whatever your community transport poser, *CTA Journal* can help.

Our problem solver Amanda Eastwood (pictured) is a member of the CTA's advice and information team. Every day the team members field enquiries from across the UK's community transport sector and have

a wealth of knowledge and experience to draw upon.

If you have a problem that you'd like solved on this page, please write to Problem Solvers at *CTA Journal*, Unit 4, 25a Vyner Street, London E2 9DG.

"We are looking to replace our old minibus with an accessible minibus, how much room do we need to secure a passenger in a wheelchair safely?"

The simple answer is "as much space as is needed to ensure the comfort and safety of the passenger", but as this will vary between different types of wheelchair it is useful to establish dimensions that can accommodate the majority of them.

Although accessible minibuses are required to comply with The Road Vehicles (Construction and Use) Regulations 1986, there is no specific UK regulatory requirement covering the carriage of passengers travelling in their wheelchairs on minibuses. However, good practice and recommended wheelchair space dimensions are contained in *The Safety of Passengers in Wheelchairs on Buses* (VSE 87/1, 1987) and the Disabled Persons Transport Advisory Committee's (DPTAC's) *Revised Accessibility Specification for Small Buses Designed to Carry 9 to 22 Passengers (Inclusive)* (2007).

All minibus operators have a "duty of care" to ensure that passengers and equipment are carried in such a manner that no danger is likely to be caused. It would certainly be considered negligent for a passenger travelling in a wheelchair not to be secured correctly.

Wheelchairs should never be carried in a vehicle sideways as they have little lateral strength and it is impossible to restrain the occupant safely. Furthermore, posture restraints and lap belts do not give adequate protection in the case of an incident, so passengers travelling in their wheelchairs must also use a three-point "lap and diagonal" occupant restraint system.

When considering the internal layout of your minibus and where wheelchairs will be located, you need to ensure that there is unobstructed access from every passenger seat to at least two doors – one on the nearside and the other at the rear or the offside. Wheelchairs should not be located in a manner that impedes gangway access. Wheelchair positions and tracking fitted down the centre of the vehicle are unacceptable, unless there is a clear gangway around the wheelchair passenger and restraint systems. Although not specified, a practical guide to the minimum gangway width is 12 inches or 300mm. If there are double doors at the rear, the gangway should lead to the door that opens first (usually the offside door).

VSE 87/1 defines a large or size A folding wheelchair as being 1,065mm long by

660mm wide and recommends a space for it 1,200mm long by 700mm wide, with minimum headroom of 1,400mm. It also states that the maximum wheelchair-carrying capacity can be determined on the basis of carrying smaller-sized wheelchairs needing a space 900mm long by 500mm wide. VSE 87/1 pre-dates the widespread introduction of webbing restraints, which offer many advantages over the clamps commonly in use then, though they do require more space. The 900mm by 500mm space would be inadequate for webbing restraint systems, so the CTA recommends a wheelchair space of 1,200mm by 700mm as the minimum workable space to aim for.

The DPTAC *Revised Accessibility Specification for Small Buses Designed to Carry 9 to 22 Passengers (Inclusive)* recognises the increased space required to locate and secure a wheelchair passenger safely and specifies a minimum space of 1,300mm by 750mm. The CTA recommends that operators measure the space that is actually needed to secure a wheelchair passenger correctly with the restraints they use.

When considering wheelchair positions, you must also consider the larger space requirements needed to restrain electric wheelchairs and scooters safely. Remember that scooter passengers must transfer to a passenger seat and that the scooter might need specific restraints to secure it safely. ■

Further information

Revised Accessibility Specification for Small Buses Designed to Carry 9 to 22 Passengers (Inclusive) (2007) is available on the Disabled Persons Transport Advisory Committee website www.dptac.gov.uk/pubs/smallbus2007/index.htm

The Safety of Passengers in Wheelchairs on Buses (VSE 87/1, 1987) can be downloaded from the CTA website www.ctauk.org/index.aspx?id=104

The Road Vehicles (Construction and Use) Regulations 1986 are available on the Department for Transport website www.dft.gov.uk

The CTA advice and information service

The CTA's advice and information service covers the UK. It is open Monday to Friday from 9am to 5pm. To contact an expert adviser, telephone 0845 130 6195, or email advice@ctauk.org. In Northern Ireland, telephone 028 9040 3535 or email adviceNI@ctauk.org.

NB: Since 1 January 2007, CTA Ireland manages its own service for the Republic of Ireland.