Tramstops

In this section you will find guidance on tramstops, in line with best practice.

For the purposes of this document, the term ‘tramstop’ includes tramstops with a raised platform above footway level and those with platforms at pavement level.

Tramstop location

The needs of passengers, pedestrians and other road users should be reflected in the design of tramstops and associated pedestrian routes. Design factors include (not exclusively):

- Sightlines
- gradients and curvature
- lighting
- pedestrian desire lines, and
- destinations within close proximity such as rail stations, schools, sporting venues etc.

There are a number of factors that should be considered in the siting of tramstops which include (not exclusively):

- adequate visibility of approaching trams and road traffic for people who cross the highway to access a tramstop
- tram drivers have adequate visibility of a tramstop
- tram drivers have adequate visibility of people at or approaching or leaving a tramstop
- other road vehicle drivers have adequate visibility of pedestrians approaching or leaving a tramstop, and
- there is sufficient space for pedestrian flows.

After a risk assessment, if visibility in and around the tramstop is thought to be poor, then crossings equipped with pedestrian signals may be considered appropriate.

When tramstops are located on gradients, consideration should be given to the difficulties that might be created for those who are mobility impaired. Mobility-impaired people are a very much wider group than wheelchair users and include, for example, people with prams and pushchairs that have the same need for level access.

Tramstop Platforms

Platforms are either located at either side of the tramway (‘side platforms') where they serve each direction of travel separately, or ‘island platforms’ where they are positioned between the two sets of tracks.

Side platforms may form part of the footway or other public areas that are accessible to pedestrians.

Island platforms can be designed to accommodate smaller widths of land than side platforms, but have the disadvantage that passengers will always have to cross one track to access them. In addition, there may be limited space for waiting passengers and tramstop facilities such as information on travel direction and timetables etc and so will need careful design to avoid confusion.

Platforms should, where possible, be located on straight sections of track ideally at a radius of no less than 1000m.

Platforms should be provided with a tactile surface and a platform edge marking strip and these should follow DfT Guidance. Platform surfacing should provide contrast to the edge marking and a suitable level of friction.

Platform length should be sufficient to match the passenger door arrangements of the longest tram or normal combination of trams using the part of the system on which the tramstop is located.

The length of the platform should include an allowance for inaccurate stopping.

To ensure compliance throughout the life of the scheme / tramway, adequate wear and maintenance tolerances should be considered in the design of the platform.

Where access for mobility impaired people is provided only at some doors, adequate signage should be provided both within the tram and on the platform to indicate the door or doors where this is provided.

Platform Height

Platform heights in the region of 300 mm are becoming common for low level platforms and therefore this may also be the most appropriate choice for any new tram system.

Where the height difference between platforms and any adjacent footway is more than 400 mm, the non-tramway edge may need to be fenced. Continuous steps may be provided instead of a fence with the appropriate tactile markings.

Differences in height between tram floor and platforms must not exceed 50 mm at doors which are intended to be used by mobility-impaired passengers.

Platform Width

Platform width should give adequate unobstructed space for passengers boarding and alighting from the tram and should also take into account pedestrian movements along the platform and the likely accumulations of waiting passengers, especially if the platform also forms part of the footway. Consideration should be given to congestion that is likely to be caused adjacent to ticket vending machines and underneath any shelters.

The minimum width between the tramway edge of the platform and any structure on the platform, except for the roofs of shelters, should not be less than 1500 mm.

An island platform (one that lies directly between two tramway tracks) should normally be at least 3000 mm wide.

Platform Clearances

Between Platforms and Trams

Horizontal clearance between platforms and door thresholds must not exceed 75 mm at doors which are intended to be used by mobility-impaired passengers. It is recommended that a figure of 40 mm is achieved at installation to help ensure compliance with the RVAR over the life of the system.

The amounts by which the kinematic envelope (see Tramway Clearances section **here**) will be increased to form the SE are speed dependent, therefore, the gap between the tram and the platform is also speed dependent. Constraining this increase by the platform edge may require the imposition of a speed restriction through the tramstop.

No shelter, sign or other structure on a platform should encroach within 450 mm of the edge of a carriageway used by other road vehicles.

Where a side platform has road traffic adjacent to the non-tramway side, a fence or barrier should be provided if normal highway design standards require it.

Vertical Clearance

There should be clear headroom of at least 2300 mm along the tramstop. This applies to any shelters, signs and or any other structures on a platform.

Shelters, signs and other structures on the platforms should be designed to prevent access to OHLE equipment.

Lighting at Tramstops

Tramstops should be adequately and uniformly illuminated during the hours of darkness to a level commensurate with the surrounding area and as required by CCTV.

Lighting levels should be to the levels recommended in the appropriate section of **BS 5489 Part 2: Code of practice for the design of road lighting.**

The illumination of the tramstop may solely be provided by adjacent carriageway lighting.

Access to Tramstops

A safe and convenient access route should be provided to tramstops for all people, including those who are mobility-impaired.

The design of tram infrastructure adjacent to platforms and pedestrian crossings at tramstops should aim to minimise injury in the event that a person is struck by a tram. Therefore, the surrounding surface should be at a level relative to the rail that allows the tram's pedestrian underrun protection to operate effectively, for example, either by ballasting to rail level or other flush surfacing. This surfacing should also extend on the approach and departure to a tramstop for a suitable distance, which is based on the tram braking performance and likely tram speed in the location.

Where access to a tramstop is by ramp from an adjacent road bridge, if the slope is 1 in 20 (5%), the length of the ramp will be in the order of 100 m where the road is over the tramway, and 160 m where it is under it. Intermediate flat landings will increase these ramp lengths by 20 m to 30 m. The total length of such an access may therefore be considered to be excessive by the more elderly or mobility-impaired people and lifts may have to be provided.

For guidance on crossings, see Pedestrian Issues **here** and **LRG 2.0 Guidance on Tramway Crossings for Non-Motorised Users**.