

Traffic Calming Devices for Buses

DoT (PTV) would like to be consulted about any traffic calming devices planned for bus routes.

DoT (PTV)'s general guidelines & advice for Traffic Calming Devices are below:-

Roundabouts

Any roundabouts on bus routes should have swept path analysis undertaken on it, to make sure a standard 12.5m bus can negotiate them. Consideration should also be made for any existing or future bus routes that need to cater for articulated buses or 14.5m rigid buses, (DoT (PTV)'s Network Planning should be able to provide details of any future plans for upgrade to articulated buses/14.5m buses) so if a route is planned to also have these types of buses, the appropriate swept path analysis with this type of bus will need to be undertaken.

Roundabouts are often designed to be mountable for larger vehicles (such as buses), hence for any section of a roundabout that is designed to be over ran by DoT (PTV) buses will be required to have a low profile (less than 75mm) and a fully mountable kerb profile.

Speed Cushions

Speed cushions are highly undesirable traffic calming items on bus routes due to:-

- There is risk that the back wheels of the bus will hit them, creating an uncomfortable ride for our passengers.
- Speed cushions would mean the bus drivers usually need to shift the bus sideways to line up with the cushions, meaning that customers feel discomfort due to the sideways movement.
- There is a risk that car drivers may still park beside the cushions (even if it is banned there), forcing the buses to go straight over the cushions.
- There is greater risk of the buses being damaged, due to going over the speed humps themselves or clipping the kerb when negotiating the speed cushions.

DoT (PTV) will not accept any speed cushions on bus routes unless they are under 1.6m in width and no higher than 75mm (length is not a factor), otherwise they will not meet the spacing of the buses wheels (buses have a double wheel at the back, so driving over the humps are uncomfortable for passengers when going over them on one wheel). Note: this tends to mean many typical vehicles can also traverse these cushions, so councils often opt for speed humps instead on bus routes.

Also the parking either side of the speed cushions needs to be banded for 20m either side to allow the bus to align their wheels of the bus with the gaps in the cushions when approaching and departing.

Speed Humps

DoT (PTV) would only accept quite gentle speed humps on bus routes, otherwise they can cause problems for low floor buses and passengers when going over them.

Speed humps are preferred to be less than 75mm above the normal carriageway height, 2m in length, with gradual ramps gradient over (at least) 1.5m either side [1:20 grade].

Otherwise Speed humps can be as high as the kerb (150mm – such as when an at grade crossing occurs at stations etc) if it is quite a long speed hump (approximately 4m or more) with gradual ramps gradient either side (over approximately 3m either side [1:20 grade]).

DoT (PTV) would prefer speed humps not to be situated where buses are turning (as it causes safety issues and discomfort for passengers, as well as flexing the buses chassis), hence in such situation that the road authority wishes one installed in such locations consideration should be

given to seeing if it can be moved forward or back so that it is on a section where the bus is going straight.

Chicanes and deviation calming measures

DoT (PTV) wouldn't want any chicanes type treatments on bus routes (as they are difficult for bus drivers to negotiate and can be uncomfortable for passengers when going through them).