

4.4 Carriageway Conditions

4.4.1 Carriageway Widths

Research from the UK has found that narrow carriageways are one of the most effective design measures that calm traffic.³¹ The width of the vehicular carriageway is measured from kerb to kerb or from the outside line of a Cycle Lane or from the edges of parking spaces (where the latter facilities are provided).

Designers should minimise the width of the carriageway by incorporating only as many lanes as needed to cater for projected vehicle flows and by reducing the size of individual lanes to meet predominant user needs (see Figure 4.55). In this regard:

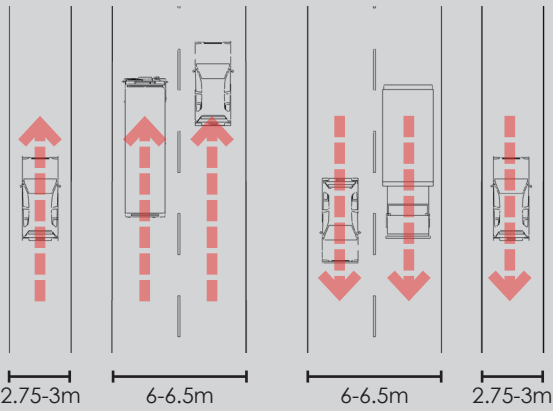
- In new designs the standard lane width on *Arterial* and *Link Streets* should lie in the range of 2.75m to 3.5m. Within this range the preferred values are 3.0m and 3.25m. The selected values within the overall range will depend on the following:
 - the function and context of the street
 - the number of large vehicles using the street
 - access requirements and frequency of accesses
 - the overall number of lanes
 - the need for lane width reductions at pinch points
- The standard carriageway width on *Local* streets should be between 5-5.5m (i.e. with lane widths of 2.5-2.75m).
- Where additional space on *Local* streets is needed to accommodate additional manoeuvrability for vehicles entering/leaving perpendicular parking spaces, this should be provided within the parking bay and not on the vehicle carriageway (see Section 4.4.9 On-Street Parking and Loading).
- The total carriageway width on *Local* streets where a shared surface is provided should not exceed 4.8m.

On heavily-trafficked *Arterial* and *Link* streets with multiple lanes (see Section 3.4.5 Noise and Air Pollution) in urban areas designers should consider the street as *Boulevard* with a median that is no less than 2m wide to provide areas of pedestrian refuge and allow for the planting of large trees.

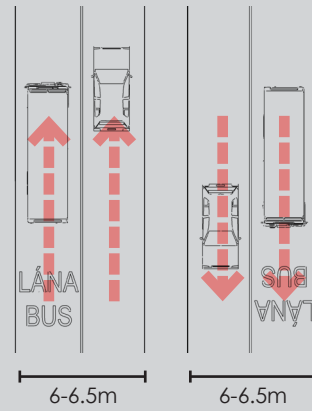
When carrying out upgrades, or traffic-calming works on existing streets, the first priority of authorities should be to narrow existing carriageways where they exceed those standards listed above. This will not only calm traffic, but will free up additional space within the street reserve to widen footpaths, insert cycle lane/tracks, provide bus lanes, street trees and on-street parking (all of which will further contribute to traffic calming).

³¹ Refer to Figure 7.16 of *UK Manual for Streets* (2007).

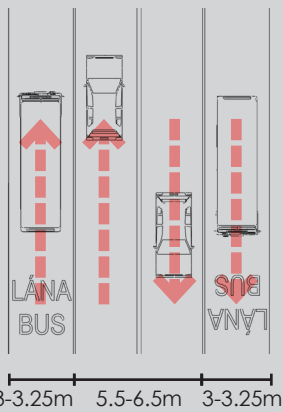
FIGURE 4.55: CARRIAGEWAY WIDTHS
 (note: Illustrations do not include cycle facilities)



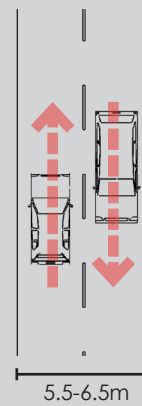
Carriageway widths for heavily-trafficked *Arterial* and *Link* streets in boulevard configuration. Main carriageway suitable for moderate design speeds. Includes access lanes with a lower design speed.



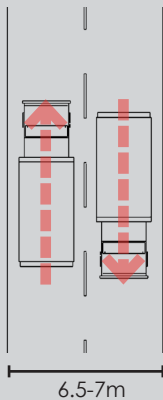
Standard carriageway widths for multi lane *Arterial* and *Link* streets in boulevard configuration, including bus lanes.



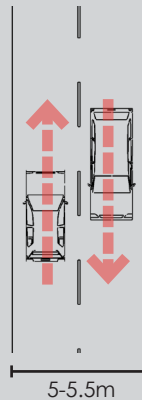
Standard lane/carrageway widths for multi lane *Arterial* and *Link* streets, including bus lanes. Range for low to moderate design speeds.



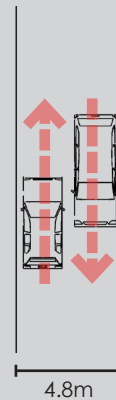
Standard carriageway widths for *Arterial* and *Link* streets. Range for low to moderate design speeds.



Carriageway width for *Arterial* and *Link* streets frequently used by larger vehicles.



Standard carriageway width for *Local* streets



Carriageway width for *Local* streets with a shared surface carriageway.