

Urban Road Safety Program

Compact and Mini Roundabouts

What are compact and mini roundabouts?

Roundabouts are effective in reducing crashes resulting in death or serious injury as they reduce vehicle speed on approach and, therefore, the occurrence of high-severity right-angle collisions. However, roundabouts are often expensive to construct as they require substantial construction work, and occasionally land acquisition, as well as being more likely to impact services and other street infrastructure. Roundabouts can also be unpopular with pedestrians and cyclists, who can find them difficult to navigate.

In urban environments, compact and mini roundabouts can overcome these limitations. They often fit within existing kerb lines, reducing construction costs and time, and thereby minimising disruption to services, while still delivering road safety improvements.

Mini roundabouts are used where available space prohibits the use of a compact roundabout.

What do they look like?

Compact roundabout



Image source: Main Roads



Mini roundabout



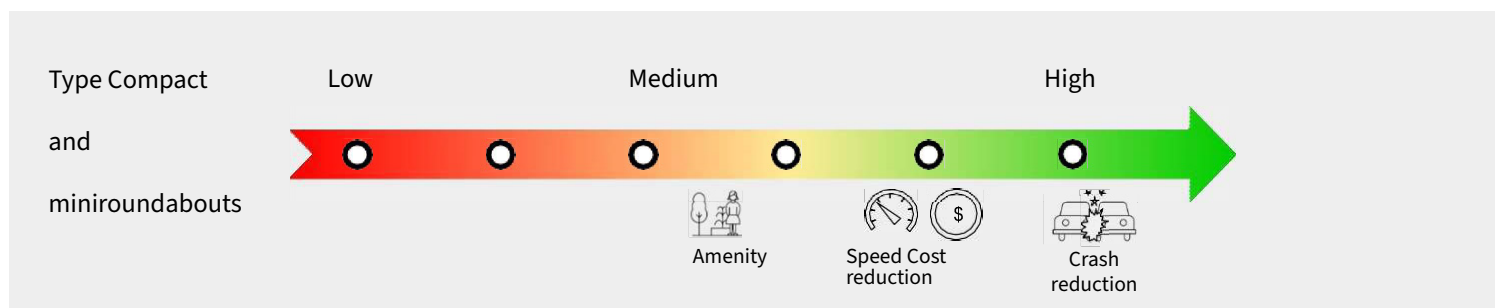
Image source: Google Maps

Mini roundabout

Image source: Main Roads

What impact do they have?

Compact and mini roundabouts general cost more than many other low-cost road treatments but they have a comparatively higher impact on speed and crash reduction, as well as local amenity.



What benefits do they offer?

These treatments offer high-impact, low-cost solutions for existing urban local road intersections on lower-order, lower-speed roads. Mini roundabouts, in particular, can be installed as part of an area-wide program at low cost.

Implementation costs can be kept low by:

- selecting sites with appropriate geometry, requiring minimal changes to the existing road configuration;
- using a standardised design without the need for additional design costs;
- using painted, rather than physical, splitter islands; and /or
- installing low or mountable kerbs (being mindful of asphalt overlays), reducing or eliminating any height variation.

Where can I find further information?

Compact and mini roundabouts are just one of the treatments being constructed on local government-managed roads as part of the Low Cost Urban Road Safety Program, funded by the State Government.

For further information on the program, visit Main Roads website at:

<https://www.mainroads.wa.gov.au/technical-commercial/local-government-funding/road-safety-programs/>

You can also contact us on 138 138 or via: enquiries@mainroads.wa.gov.au