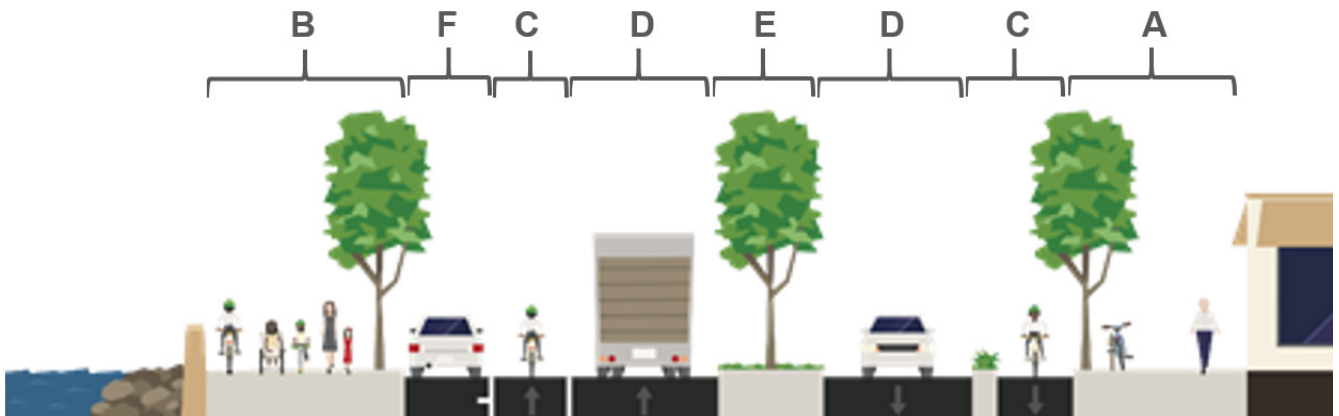


Cross Sections

In New Zealand, road reserves are typically 20.1m wide and there are a number of components and uses to consider when allocating space. This fact sheet will focus on these components and the considerations required to determine an appropriate cross section.



A Footpaths

Footpaths should be provided on both sides of the road in all urban areas. In more rural areas, with low place function, it may be appropriate for one or no footpaths to be provided. A key consideration for footpaths is the width provided and catering for pedestrians of all ages and mobility needs. For more details see Fact Sheet #3.

Solid medians restrict access to driveways and side roads but have significant safety benefits. It is best practice that roads with two lanes in each direction have a solid median for this reason. Solid medians also can be utilised for midblock crossings (as discussed in Fact Sheet #4) and landscaping.

B Shared Paths

In some circumstances, it may be appropriate to construct one path for pedestrians and cyclists to share. A key consideration for shared paths is the width of the facility. Shared paths are not likely to be appropriate on corridors with a high place function or where there is a high density of accesses. They are also not appropriate when cyclist and/or pedestrian volumes are very high. For more details see Fact Sheet #3.

Flush medians assist with access to driveways and side roads. They are particularly useful on roads where heavy vehicles are turning into accesses. Flush medians can improve cycle safety on roads without cycling facilities by providing overtaking space. They can also be utilised for midblock pedestrian crossings as discussed in Fact Sheet #4.

C Cycle Lanes / Separated Cycling Facilities

Cycling facilities should be provided on roads where there are high volumes of existing cyclists or on routes identified as part of a strategic cycle network. For more information on cycling facilities – see Fact Sheet #3.

F Parking Lane

Parking lanes (either parallel or right angle) can be appropriate on most roads, but they have low priority on roads with a high movement function (arterial/primary collector roads). In town centres, parking lanes may be replaced with kerb build-outs to accommodate cycle parking, outdoor dining or landscaping. Parking demand for local activities and the availability of parking nearby should be considered to determine the need for a parking lane.

D Traffic Lanes

Roads with one traffic lane in each direction are typically suitable for volumes up to 20,000 vehicles per day (two-way). Beyond this volume, two traffic lanes in each direction may be required.

When determining the width of the traffic lanes, consideration should be given to the number of heavy vehicles on the road, whether the road is on a bus route and whether cyclists must ride in the traffic lane.

G Shared Space street

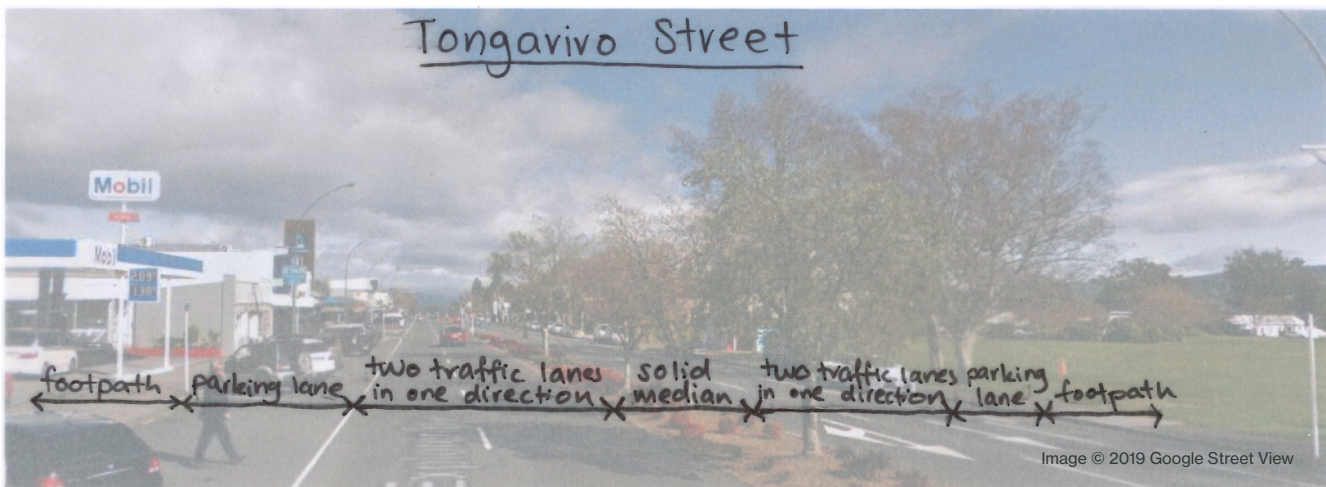
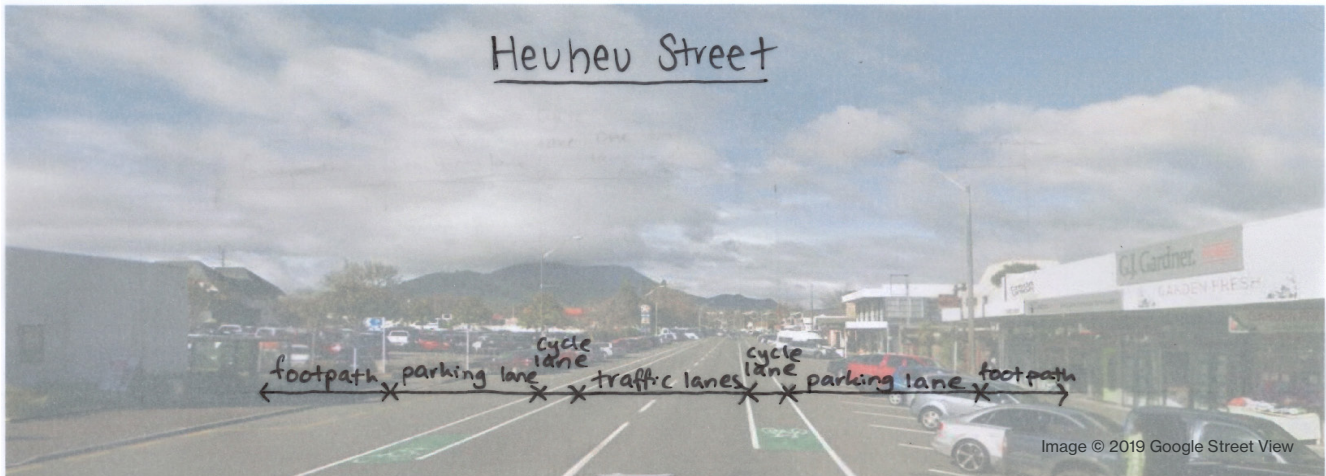


A shared space street is a road without formal footpaths, where pedestrians, cyclists and motorists share the roadway. Shared spaces are only appropriate on streets with a high place function, low motorist volumes and very low vehicle speeds. They rely on the removal of typical street elements including line-markings, signage and kerbs which creates ambiguity and encourages motorists to drive cautiously.

E Medians

Medians can either be solid (raised islands) or flush (paint markings) and are located between opposing traffic lanes. They are generally only appropriate on streets with moderate to high movement function.

Current Local Examples



Additional Components

The road reserve provides space for additional infrastructure. This can include water supply, waste water and storm water systems, other utilities such as fibre, lighting, trees, and street furniture (including bus stop shelters).

Additional Resources:

[NZS 4404-2010 Land Development and Subdivision Infrastructure](#): Provides standards and criteria for the sustainable design and construction of land development and infrastructure. Table 3.2: Road design standards, provides appropriate widths for cross sectional components based on the design environment.