

Pedestrian Crossing Options

The purpose of this factsheet is to provide guidance on which pedestrian crossing options are appropriate or not under different conditions. The benefits, limitations and best practice considerations of different crossing types are explored.

Raised Medians and Pedestrian Refuge Islands

Raised medians and pedestrian refuge islands provide a space in the middle of the road so pedestrians can wait before crossing the rest of the road. They are almost always cost effective and reduce or segment the crossing distance therefore improving pedestrian safety.

Example: Pedestrian refuge island on Lake Terrace, Taupō



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Appropriate Locations

- Where the road has enough width to accommodate a median or refuge island, an isolated section of on-street parking may need to be removed to accommodate them
- Where there is good visibility on each approach
- Urban speed environments

Benefits

- Reduces crossing distance and improves safety performance
- Provide a stopping and rest point for mobility impaired users
- No impact on traffic flows

Limitations

- Can force cyclists closer to motorised traffic
- May lead to false sense of security for pedestrians at the island or median. Turn pedestrians to face oncoming traffic with diagonal cut throughs to address this
- Pedestrians required to find gaps to cross each traffic lane
- Can be an obstacle which may be struck by errant vehicles

Best Practice Considerations

- Crossing distances should be minimised to reduce crossing times and exposure to traffic especially on multi-lane roads and this can be achieved with kerb extensions
- Island size is related to the type and number of anticipated pedestrians

Courtesy Crossings (Raised Platforms)

Pedestrian platforms provide a flat and comfortable crossing surface for pedestrians that is raised above the level of the road surface. Motorists have priority, but should also be courteous and allow for pedestrians to cross.

Example: Pedestrian platform on Tuwharetoa Street, Taupō



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Appropriate Locations

- Low speed environment, short crossing distance locations
- Can also be used on side roads at intersections to create a threshold treatment
- Local and possibly collector roads. Not for arterials except in shopping areas

Benefits

- Focuses motorists on pedestrians crossing
- Easiest to cross for mobility impaired users
- Do not require kerb ramps

Limitations

- Pedestrians required to find gaps in traffic if drivers not stopping
- Traffic delayed if drivers are courteous
- May cause confusion as to who has the right of way
- Associated vibrations and noise

Best Practice Considerations

- Crossing distances should be minimised to reduce crossing times and exposure to traffic, and this can be achieved with kerb extensions
- Not appropriate for multi-lane roads or on curves
- May be preceded by traffic calming measures to ensure low speed environment

Zebra Crossings

Zebra crossings give crossing priority to the pedestrian. They do not reduce the crossing distance unless combined with kerb extensions, but they provide a desirable crossing for high volumes of pedestrians.

Example: Zebra crossing on Spa Road, Taupō



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Appropriate Locations

- Areas with a high pedestrian volume
- Low speed locations
- Areas with variable flow of pedestrians, such as schools

Benefits

- Provides the least delay for pedestrians
- Lower cost; can be retrofitted to existing roads

Limitations

- Traffic delayed if pedestrian flow is steady
- On their own, do not improve pedestrian safety

Best Practice Considerations

- Crossing distances should be minimised to reduce crossing times and exposure to traffic, and this can be achieved with kerb extensions
- Can be used in conjunction with raised platforms
- Crossings should be highly visible to motorists; provide adequate sight distance and restricting parking up to 15m metres upstream of the crossing

Signalised Crossings

Signalised crossings give priority to the pedestrian. They control traffic with traffic signals and provide a safe and comfortable crossing point for high volumes of pedestrians.

Example: Signalised crossing on Deans Avenue, Christchurch

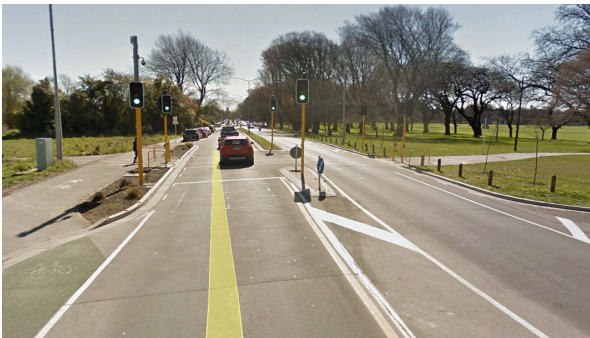


Image © 2019 Google Street View

Appropriate Locations

- Areas with a high pedestrian volume
- Areas with continuous flow of pedestrians
- High vehicular traffic locations
- Can be used on multi-lane roads

Benefits

- Good safety performance
- Minor impact to traffic flows as pedestrian crossing time is consolidated
- Crossing is highly visible

Limitations

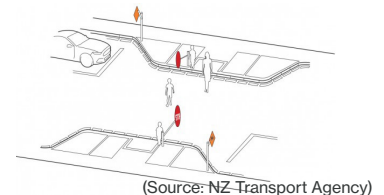
- High cost + ongoing maintenance
- Delay pedestrians more than zebra crossings

Best Practice Considerations

- Not suitable in high speed environments
- Optimise signal timing so all users have minimal delay
- Consider adding a pedestrian island for multi-lane or divided roads. This allows for a multi-phase crossing and minimised delay to motorists.

Kea Crossings

Kea crossings provide an effective crossing point for children at school locations. During peak school travel periods, a school supervisor operates the crossing by swinging out school patrol STOP signs. Kea crossings can be supplemented with kerb extensions.



Grade Separation

Grade separated crossings provide a safe and comfortable crossing point that is completely separated by elevation. These include underpasses or overpasses for either the pedestrian or motorist. Grade separated crossings have a very high cost, but they can be cost effective when planned far in advance or proposed as part of new developments. They can be unattractive for pedestrians when they require additional walking distance, and without good design they can be a barrier for some users.

Additional Resources:

[NZTA Pedestrian Planning and Design Guide](#): New Zealand's national guide to planning and design for walking. Chapters 6 and 15 provide guidance on the selection and design of pedestrian crossings, respectively.

[Australasian Pedestrian Selection Tool](#): An online tool to help select the most appropriate type of pedestrian crossing based on walkability, safety and economic outcomes

[Austroads Guide to Road Design Part 4 – Intersections and Crossings: General: Ch. 8: Pedestrian Crossings](#)