Active Modes Infrastructure

This fact sheet considers pedestrian and cycling facilities including shared paths which cater for both active modes. The benefits and limitations of different facilities are explored.

Footpaths

Footpaths provide for pedestrians including those on mobility devices (wheelchairs, mobility scooters), scooters (including electric scooters), skateboards and toddlers on very small bikes. The desired width of the footpath depends on the adjacent land use and pedestrian flow. Areas of high pedestrian activity such as around schools and in town centres require wider footpaths than lower density residential streets. The following simplified table details appropriate footpath dimensions per the NZTA Pedestrian Planning and Design Guide.

Location	Max. pedestrian flow (p/min)	Footpath through route (unobstructed width)
Town Centre	80	2.4m
Collector Road	60	1.8m
Local Residential Road	50	1.5m

Shared Paths

A shared path is a path that may be used by cyclists in addition to footpath users. The width of the path is dependent on the number of users. The path can be marked with a centreline to define direction of travel or each side could be allocated to either pedestrians or cyclists (segregated path).

Example: Toi Toi Street, Nelson



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Appropriate Locations

- Where the number of intersecting driveways and side roads are low (often through parks or adjacent to waterways)
- Where cyclist and pedestrian volumes are low-moderate

Benefits

 Desirable for less confident cyclists as they are physically separated from motor vehicles

Limitations

- Can create an intimidating environment for pedestrians as the speed differential between cyclists and pedestrians can be significant
- Cyclists do not have priority at side roads
- Collisions can occur when pedestrian and cyclist volumes are high and the path is of insufficient width
- Significant space may be required to provide a facility of suitable width and may have cost implications

Best practice considerations

- Ensure good visibility at intersections and side roads with appropriate lighting and sight distance
- Ensuring adequate width for the pedestrian and cycling demands is critical
- Road markings and signage can help communicate the path is to be shared

Cycling - No facilities

When no cycle facilities are provided, cyclists use the general traffic lanes.



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Appropriate Locations

- Roads with low traffic volumes
- Low volume roads that are parallel to other cycle routes
- Roads where motorists are travelling at a similar speed to cyclists

Limitations

- Can be poor for cyclist safety
- On busier roads, can result in suppressed demand as the perceived safety is low

Best Practice Considerations

 Best if traffic lanes are either narrow (so it is clear motorists must follow cyclists) or wide enough for a motor vehicle to safely pass a cyclist without crossing the centreline. 'Sharrow' markings can help reinforce this by indicating where a cyclist should place themselves in the lane and remind drivers of the presence of cyclists.

Cycle Lanes

Cycle lanes are painted lanes within the carriageway. Cycle lanes can be located adjacent to parking or next to the kerb. Contra-flow cycle lanes may also be provided on one-way streets. Cycle lanes can either be buffered from general traffic (where a small painted area similar to a flush median is installed) or installed adjacent to the general traffic lane. This treatment can be low cost to install if space can be reallocated within the road e.g. by removing parking.

Local example: Spa Road



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Appropriate Locations

· Roads with moderate traffic volumes

Benefits

- Low cost
- Allocates space to cycling

Best practice considerations

- Extra width (or a buffer) should be provided where lanes are adjacent to parking or on streets with a steep gradient
- Cycle lanes should be painted green across major accesses or intersections to highlight the possible presence of a cyclist.

Separated Cycleways

A separated cycleway is a facility exclusively for the use of cyclists. They involve some form of physical separation (vertical or horizontal) from motor vehicle traffic and are usually situated on or adjacent to the roadway. They can either be one-way or two-way.

Examples: Beach Road 2-way cycleway, Auckland



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Appropriate Locations

- On roads with high cycle volumes or located on strategic routes for cyclists
- Where the number of intersecting driveways and side roads are low

Benefits

- Shoulders often get covered in debris and if not adequately maintained can be a hazard for cyclists, these facilities avoid that issue
- Desirable for less confident cyclists

Limitations

- High cost
- Often results in significant removal of car parking along the route
- Cyclists on separated cycleways do not have priority at side roads

Additional Resources:

NZTA Pedestrian Planning and Design Guide: New Zealand's national guide to planning and design for walking. Chapter 14 provides guidance for the design of footpaths.

NZTA Cycle Network Guidance: Best practice guidance for the design of cycleways and cycle networks.

