

The Tactical Urbanism Toolbox provides a range of tools that can be utilized in the delivery of a tactical project. These tools are organized into six categories:



Tools for Pedestrians



Tools for Cyclists



Tools to Reduce Traffic Volume



Tools to Reduce Traffic Speed



Tools for Place Activation



Supporting Tools

Where applicable, each tool highlights potential applications and materials for ‘tactical pop-ups’ and ‘interim installations’.

Examples of permanent outcomes are presented to help project teams make connections between desirable long term solutions and short term pop-ups and pilots. However, this Toolbox does not contain technical planning or design guidance for permanent walking, cycling or traffic calming upgrades, nor does it help you choose the right solution for your location. That information can be found on the Waka Kotahi website at nzta.govt.nz/walking-cycling-and-public-transport; and where applicable, specific references are provided for each tool. Reading this Toolbox alongside the technical guidance is crucial to ensure the details of your permanent designs are safe, attractive and meet best practice.

C.1 | Tools for Pedestrians



Tools for pedestrians are intended to make it easier, safer and more comfortable for people walking through and around local centers and neighbourhoods. Tools for pedestrians include extended footpath facilities, and safer facilities for crossing the street. The tools are designed to improve accessibility for people of all ages and abilities, make more space for people and will help to calm traffic.

For planning and technical design guidance for pedestrians, visit www.nzta.govt.nz.nz/png

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C.1.a | Kerb Build Out (footpath extension)

In instances where the existing footpath is not wide enough to cope with the current pedestrian volume, the footpath is extended either into the road carriageway or toward property boundaries to increase the width of the existing footpath.



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Links to Technical / Legal Requirements

- For more information on best practice footpath widths, visit www.nzta.govt.nz/png

POP-UP INSTALLATION



A pop-up event provides an opportunity to test a widened footpath for increased capacity for pedestrians and to re-imagine the space for other activities, such as seating for a cafe.

Potential Materials

- Spray Chalk
- Reflective Tape
- Road Cone & Bar
- Kerb Ramp
- Rubber Pedestrian Crossing
- Barrier Mesh

INTERIM INSTALLATION



An interim pilot allows time for pedestrians to adjust and develop ownership of the new space, and ensure new activities are fit for purpose. It can also be used to support physical distancing.

Potential Materials

- Planter Box
- Traffic Delineators
- Stencils
- Road Paint
- Spray Chalk
- Reflective Tape
- Rubber Pedestrian Crossing
- Astroturf
- Speed Hump
- Kerb Ramp

Design Considerations

- Footpaths that extend into the carriageway have the added advantage of creating a corresponding reduction in the width of the vehicle lane, calming traffic to safer speeds.
- Explore how place making initiatives can be incorporated into the tool, including engaging local artists to aid in the design of any graphic material.
- There should be a strong emphasis that this is an area for pedestrians, and this can be done by using art, chalk, signage etc. if the pedestrian area isn't made distinct and inviting, people will think it is roadworks and be deterred from using it and possibly even avoid the street.
- Provides good opportunity for landscaping. Native and low maintenance plants or trees with high canopies are recommended to preserve sight distance.
- Properly designed kerb build-outs do not interfere with existing stormwater systems and can be implemented quickly and cost-effectively.
- Carefully locate elements to avoid conflict with existing driveways and underground utility access to boxes, vaults, and sewers.
- If the street is frequently used by larger vehicles, such as buses and trucks, the design should accommodate these.
- Ensure your new space is accessible to people of all ages and abilities by using kerb ramps and sufficient width.

C.1.b | Crossings

Safe and frequent crossings are a foundation of a high quality pedestrian environment. The gold standard for crossings is the raised zebra crossing, which gives clear legal priority and helps reduce traffic speeds. In busier, higher speed environments signalised crossings are likely to be the safer and more appropriate option.

Courtesy crossings are points where pedestrians don't have legal right of way, but can highlight a safer and logical place to cross. They are often incorporated into side street intersections and create visibly prominent crossing locations. Courtesy crossings can be either flush or raised.

The aim of this tool is to test possible locations for permanent raised zebra crossings and to facilitate safer and easier crossing movements.



Links to Technical / Legal Requirements

- Design guidance on pedestrian crossings, including which crossing option is best for your site, can be found at: <https://www.nzta.govt.nz/png>
- Zebra pedestrian crossings are a formal Traffic Control Device and need to comply with the TCD Manual. They are not appropriate for pop-up events.

POP-UP INSTALLATION



The pop-up event can raise awareness and visibility of an existing informal crossing location for cyclists and pedestrians or test a potential crossing location. A crossing at a demonstration event is generally not raised.

Potential Materials

- Spray Chalk
- Sidewalk Chalk
- Duct Tape
- Reflective Tape
- Stencils
- Road Cone & Bar
- Kerb Ramp
- Portable Speed Bump
- Rubber Pedestrian Crossing
- Corflute Board
- Pigtail Ground Spike
- Road Signage
- Street art in the roadway*

INTERIM INSTALLATION



Implementing a temporary crossing at a side road intersection can signal a change in environment from busier, faster arterial roads to slower, local streets. This tool can also provide interim safety and walkability benefits in advance of a permanent upgrade.

Potential Materials

- Resin Bound Aggregate
- Stencils
- Road Paint
- Cold Applied Plastic
- Spray Chalk
- Reflective Tape
- Rubber Pedestrian Crossing
- Speed Bump
- Kerb Ramp
- Street art in the roadway*

Design Considerations

- Courtesy crossings are generally not appropriate in areas with speeds over 30kph
- Carefully locate elements to avoid conflict with existing driveways, stormwater infrastructure and underground utility access to boxes, vaults, and sewers.
- Where possible, temporary raised tables should be elevated to the height of the adjacent kerb to make it accessible for all users.
- Explore how placemaking initiatives can be incorporated into the tool, including engaging local artists to aid in the design of any graphic material.

*Street art in the roadway is any artwork that sits within the traffic corridor.

C.1.c | Signalised Crossings

Signalised crossings are effective tools to provide clear pedestrian priority and reduce conflict with vehicles. These provide safe crossing points on faster and/or busier roads.

New signalised crossings are expensive, however, one of the easiest and cheapest solutions to reduce vehicle traffic and improve the ability for people to cross the street, is to change the signal phasing at existing intersections to prioritise pedestrians.



Links to Technical / Legal Requirements

- Design guidance on pedestrian crossings, including which crossing option is best for your site, can be found at: www.nzta.govt.nz/png
- Signalised intersections, including interim set-ups, involve formal Traffic Control Devices which must comply with the TCD Manual.
- Testing signalised crossings will require a Traffic Management Plan.
- You will need to consult with your traffic operations centre who manage signal phasing on the transport network.

POP-UP INSTALLATION



During the pop-up event “Stop and Go” signs can be used to socialise and test a potential traffic light as the permanent installation.

Potential Materials

- Road Signage
- Temporary traffic management equipment

INTERIM INSTALLATION



Trailer mounted portable traffic lights (PTL) for an interim event can be used to temporarily control an intersection and measure light timing and phasing.

Potential Materials

- Planter Box
- Traffic Delineators
- Road Paint
- Cold Applied Plastic
- Reflective Tape
- Rubber Pedestrian Crossing
- Speed Bump
- Kerb Ramp

Design Considerations

- The impact on the wider traffic network should be considered to ensure the tool will not have negative impacts in neighbouring communities
- Consider the location of other signalised intersections to ensure people do not see through one set of lights to the next.
- Pedestrian countdown timers are recommended.
- If lights are in close proximity to each other, phasing needs to coordinate to reduce delay and ensure they don't negatively affect the surrounding transport network.
- Different phasing regimes can be run during different hours of the day to respond to different user needs, for example, consider school hours to ensure pupils have enough time to cross during the green phase.

C.1.d | Slip Lane Alterations/Plazas

Slip lane alterations involve removing a vehicle turning lane at an intersection. Removing slip lanes reduces vehicular priority at intersections, can shorten crossing distances for pedestrians, and can provide an opportunity for extended public realm or plazas.



Links to Technical / Legal Requirements

- If a slip lane is part of a signalised intersection, you will need to consult with your traffic operations centre who manage network operations
- To install a slip lane alteration/plaza you will need a traffic management plan.

POP-UP INSTALLATION



Slip lanes are removed or altered to increase space for pedestrians and to socialise and test the effect on traffic movements.

Potential Materials

- Spray Chalk
- Sidewalk Chalk
- Duct Tape
- Reflective Tape
- Stencils
- Road Cone & Bar
- Kerb Ramp
- Rubber Pedestrian Crossing
- Barrier Mesh
- Upcycled Furniture
- Picnic Table
- Hay Bale
- Road Signage

INTERIM INSTALLATION



The interim installation allows the impact on the network to be tested over a longer period of time, to monitor changes in behaviour if any.

Potential Materials

- Planter Box
- Traffic Delineators
- Resin Bound Aggregate
- Stencils
- Road Paint
- Cold Applied Plastic
- Spray Chalk
- Reflective Tape
- Rubber Pedestrian Crossing
- Astroturf
- Bench Seat
- Picnic Table
- Speed Bump

Design Considerations

- Explore how place making initiatives can be incorporated into the tool, including engaging local artists to aid in the design of any graphic material.
- The impact on the wider traffic network should be considered to ensure the tool will not have negative impacts in neighbouring communities and alternate routes should be identified where available.

C.2 | Tools for Cyclists



Tools for people on bikes are intended to create more opportunities for people of all ages and abilities to cycle through and around local centers and neighbourhoods. Tools for people on bikes also provide opportunities for cyclists to comfortably and safely lock their bike up, to allow them to shop, meet others, socialise and relax. Tools for cyclists include separated cycleways and end-of-trip facilities.

For planning and technical design guidance for cycling facilities visit www.nzta.govt.nz/cng

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C.2.a | Separated Cycleways

Separated cycleways provide dedicated space for people on bikes that is physically separated from vehicles. The separation could consist of either a physical barrier or suitable degree of horizontal separation by grass or a similar surface. Separated cycleways are usually located adjacent to the road, and are generally implemented on roads with high traffic speed and volume.



Links to Technical / Legal Requirements

- For technical design guidance on separated cycleways, and more about where they should be used, visit: <https://www.nzta.govt.nz/walking-cycling-and-public-transport/cycling/cycling-standards-and-guidance/cycling-network-guidance/designing-a-cycle-facility/between-intersections/separated-cycleways/>
- For marking guidance, refer to: <https://www.nzta.govt.nz/assets/resources/motsam/part-2/docs/motsam-2-section-2.pdf>
- Installing a separated cycleway will require a traffic management plan

POP-UP INSTALLATION



A pop-up event provides the opportunity to reclaim a portion of carriageway to test a cycleway's feasibility, desirability and capability of improving connectivity to the wider cycle network. A pop-up can help people re-imagine the street in a different way and the short timeframe of the test can help reduce fears about the impact of the change.

Potential Materials

- Road Cone & Bar
- Portable Speed Bump
- Barrier Mesh
- Hay Bale
- Straw Wattle
- Road Signage
- Spray Chalk
- Sidewalk Chalk
- Duct Tape
- Reflective Tape
- Stencils
- Road Cone & Bar
- Corflute Board
- Pigtail Ground Spike

INTERIM INSTALLATION



An interim trial allows time for people on bikes to adapt to the new facility and start to attract new users. It also helps identify design issues that may need consideration in a permanent scheme.

Potential Materials

- Planter Box
- Traffic Delineators
- Resin Bound Aggregate
- Speed Bump
- Resin Bound Aggregate
- Stencils
- Road Paint
- Cold Applied Plastic
- Spray Chalk
- Reflective Tape

Design Considerations

- Two-way separated cycleways can introduce new hazards into a street and should be avoided in areas with many driveways and intersections.
- Extra care must be taken when approaching an intersection as it is more difficult to provide physical separation suitable for cyclists.
- Where demand for a pedestrian crossing through a cycleway is likely, ensure the separation device is wide enough to accommodate a resting space for pedestrians to wait before crossing where space allows.
- The width of the cycle lane depends on a number of factors including: adjacent parking spaces, parking turnover rates, road gradient, vehicle speed, vehicle volume and the ability to make road space available given the needs of other road users, and physical constraints.
- Explore how place-making initiatives can be incorporated into the tool for the pop-up event, including engaging local artists to aid in the design of any graphic material.
- Standard cycleway markings, as outlined in the Traffic Control Devices Manual, help communicate how users should navigate an interim facility.
- Contra-flow lanes should only be applied in low speed and low volume environments. And where a suitable transition at each end of the street can be achieved.

C.3 | Tools to Reduce Traffic Volume



Tools to reduce traffic volumes seek to reduce the exposure of pedestrians and people on bikes to motorised vehicles. Tools to reduce traffic volume take the form of constructed barriers that limit automobile traffic access onto streets while allowing access by people walking and cycling. Where required, they must accommodate the access requirements of emergency response vehicles.

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C.3.a | Median Barrier

Median barriers can be used to restrict turning and/or to improve conditions for crossing the street.

Median barriers reduce opportunities for vehicles to turn right across oncoming traffic lanes. Safety at unsignalized intersections may be enhanced by restricting turning maneuvers, typically right-turning traffic. These are commonly used within high traffic volume zones, and allow pedestrians to pause safely when crossing the street by providing a two stage crossing and resting place between the traffic lanes.



Links to Technical / Legal Requirements

- If this tool involves eliminating right and left hand turns, it's likely to require a traffic resolution
- Installing a median barrier will require a traffic management plan

INTERIM INSTALLATION



An interim median barrier can trial the effect on the traffic for a longer period of time.

Potential Materials

- Planter Box
- Traffic Delineators
- Resin Bound Aggregate
- Road Paint
- Cold Applied Plastic
- Spray Chalk
- Reflective Tape
- Speed Bump

Design Considerations

- Median barriers may also be used to eliminate right turns from a side street, making the side street operate as a “left in, left out only” system.
- Where safe to do so, gaps are retained for pedestrian and bike access. This allows cyclists and pedestrians to cross while focusing on one direction of traffic at a time (two-stage crossing).
- Consideration will need to be given to the likely increase in demand for U turns.
- Carefully locate as to avoid conflict with existing driveways and underground utility access to boxes, vaults, and sewers.
- The impact on the wider traffic network should be considered to ensure the tool will not have negative impacts in neighbouring communities and alternate routes should be identified where available.
- The tool provides a good opportunity for low native planting. The choice of planting should be appropriate to the context and maintenance requirements of plants needs to be considered carefully.
- Consider opportunities for placemaking.

C.3.b | Modal Filter

A modal filter creates a low traffic environment by limiting the through access of a street to certain transportation modes, and by reducing undesirable rat running. They are used to improve permeability mainly for pedestrians and cyclists. This can be done in city centres as well as in local neighbourhood streets. Modal filters are an inexpensive way to create safer routes and neighbourhoods for certain modes of transport without requiring new infrastructure.



Links to Technical / Legal Requirements

- Bollards and other barriers intended to prevent motor vehicle access may be hazardous to people on bikes and should be installed according to Access Control Devices best practice guidance, which can be found at www.nzta.govt.nz/cng.

POP-UP INSTALLATION



A pop-up event provides the opportunity to test the viability of restricting through access on a street to some transportation modes and gives people the opportunity to enjoy the street in a new way.

Potential Materials

- Spray Chalk
- Sidewalk Chalk
- Duct Tape
- Reflective Tape
- Stencils
- Road Cone & Bar
- Barrier Mesh
- Astroturf
- Upcycled Furniture
- Picnic Table
- Hay Bale
- Road Signage

INTERIM INSTALLATION



The interim installation allows the impact on the network to be tested over a longer period of time, to monitor changes in behaviour if any, and to determine if a permanent modal filter is possible.

Potential Materials

- Planter Box
- Traffic Delineators
- Resin Bound Aggregate
- Stencils
- Road Paint
- Cold Applied Plastic
- Spray Chalk
- Reflective Tape
- Astroturf
- Speed Bump

Design Considerations

- There are different types of modal filters: bollards/gates/planters, opposing one-ways, bus gates, time-limited/signage enforcement, school streets or width/height restrictions.
- A network of several streets with modal filters can help to create a low traffic neighbourhood.
- Special consideration should be given to service vehicles.
- Consider how the diverted traffic will impact the surrounding network and plan for alternative options.
- Should include signage indicating which transportation modes are allowed to enter the street.
- Consider opportunities for place-making.

C.3.c | One Way Street

A one-way street is a street that requires motorised vehicles to travel in a single direction.

One way streets are used to reduce traffic volume and optimise movements. They can be used to improve safety and give priority to people walking and cycling.



Links to Technical / Legal Requirements

- One-way streets are likely to require traffic resolutions – see the Legislation and Compliance section for more information.

POP-UP INSTALLATION



The pop-up event provides the opportunity to socialise the proposal and test the impact on traffic and pedestrian flow. The short timeframe of the installation can also help reduce fears about the impact of the change.

Potential Materials

- Spray Chalk
- Sidewalk Chalk
- Duct Tape
- Reflective Tape
- Stencils
- Road Cone & Bar
- Barrier Mesh
- Road Signage

INTERIM INSTALLATION



The interim installation allows the impact on the network to be tested over a longer period of time, to monitor changes in behaviour if any.

Potential Materials

- Planter Box
- Traffic Delineators
- Resin Bound Aggregate
- Stencils
- Road Paint
- Cold Applied Plastic
- Spray Chalk
- Reflective Tape
- Rubber Pedestrian Crossing

Design Considerations

- Two-way cycling facilities (contra-flow lanes) can be implemented in a one-way street to provide for cyclists' permeability.
- One-way streets provide a good opportunity for a slow street/shared space.
- The impact on the wider traffic network should be considered to ensure the tool will not have negative impacts in neighbouring communities. Alternate routes should be identified where available.

C.3.d | Street Closure / Pedestrianising a street

A street closure temporarily restricts vehicle access to a street, and opens it up to people. This can be done in city centres as well as in local neighbourhood streets. Closed streets allow the public to re-image streets as public places and create more safe space for walking, cycling, or play.



Links to Technical / Legal Requirements

- Street closures require traffic management plans and need to go through a road closure process - see Legislation and Compliance section for more information.
- Permanently 'stopping' a street or creating a pedestrian mall involves a separate process and is not covered in this guidance.
- Waka Kotahi is piloting new guidance for low-risk local play street events. Contact innovatingstreets@nzta.govt.nz for more information.
- Bollards and other barriers intended to prevent motor vehicle access may be hazardous to people on bikes and should be installed according to Access Control Devices best practice guidance which can be found at www.nzta.govt.nz/cng.

POP-UP INSTALLATION



A one day street closure, often referred to as a street party or 'open streets' event, provides an opportunity for the public to enjoy a street in a new way. The short time frame can help reduce fears around the change and through regularity and strategic communications can grow community support for more permanent changes.

Potential Materials

- Spray Chalk
- Sidewalk Chalk
- Duct Tape
- Reflective Tape
- Stencils
- Road Cone & Bar
- Barrier Mesh
- Astroturf
- Upcycled Furniture
- Picnic Table
- Hay Bale
- Road Signage

INTERIM INSTALLATION



The interim installation allows the impact on the network to be tested over a longer period of time, to monitor changes in behaviour and determine if a permanent closure is possible.

Potential Materials

- Planter Box
- Traffic Delineators
- Resin Bound Aggregate
- Stencils
- Road Paint
- Cold Applied Plastic
- Spray Chalk
- Reflective Tape
- Astroturf
- Speed Bump

Design Considerations

- Special consideration should be given to service vehicles.
- Road closures may include ramps with break-away posts to permit emergency vehicle access.
- Consider street network access, including an analysis of the impacts of diverted traffic.
- Street closures provide a good opportunity for planting. The choice of planting should be appropriate to the context and maintenance requirements of plants needs to be considered carefully. Native, low-maintenance native plants and trees with high canopies are recommended.
- Should include signage indicating people on bikes are allowed to enter the closure if relevant.
- Consider opportunities for placemaking.

C.4 | Tools to Reduce Traffic Speed



Tools to reduce traffic speed seek to improve the safety of pedestrians and people on bikes by slowing down motorised vehicles and raising driver awareness of other road users. Tools to reduce traffic speeds include painted applications and constructed interventions.

Planning and design guidance for traffic calming measures can be found in the AustRoads Local Area Traffic Management guidance here: <https://austroads.com.au/latest-news/local-area-traffic-management-guidance-updated>

You can also refer to the Waka Kotahi Speed Management Toolkit at: <https://www.nzta.govt.nz/assets/Safety/docs/speed-management-resources/speed-management-toolbox-and-appendices-201611.pdf>

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C.4.a | Mini Roundabouts

A mini-roundabout has all the design and operational features of a large roundabout (deflection, low-speed operation, give-way rules), but does not necessarily have a landscaped central island. Instead, the edge of the centre island can be fully mountable. This permits mini-roundabouts to be used in constrained environments where truck and bus access is to be maintained.



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Links to Technical / Legal Requirements

- Technical guidance for roundabouts that are cycle-friendly can be found here: <https://www.nzta.govt.nz/walking-cycling-and-public-transport/cycling/cycling-standards-and-guidance/cycling-network-guidance/designing-a-cycle-facility/intersections-and-crossings/roundabouts/cycle-friendly-roundabout/>
- Roundabouts require markings that comply with the Traffic Control Device Manual. If a single-lane roundabout and its approaches have safe and appropriate engineering measures installed to slow vehicles, and the measured mean operating speeds on the approaches and through the roundabout are 30 km/h or less, the roundabout may operate without the markings

POP-UP INSTALLATION



The pop-up event provides the opportunity to socialise and test the desirability of the tool and monitor the impact of traffic movements and speeds. Delivered in conjunction with a school community, it can also build support for an interim or permanent upgrade.

Potential Materials

- Spray Chalk
- Sidewalk Chalk
- Duct Tape
- Reflective Tape
- Stencils
- Road Cone & Bar
- Rubber Roundabout
- Barrier Mesh
- Hay Bale
- Straw Wattle
- Road Signage
- Street art in the roadway*

INTERIM INSTALLATION



The interim installation allows the impact on the network to be tested over a longer period of time, to monitor changes in behaviour and determine whether a permanent upgrade is possible.

Potential Materials

- Planter Box
- Traffic Delineators
- Resin Bound Aggregate
- Stencils
- Road Paint
- Cold Applied Plastic
- Spray Chalk
- Reflective Tape
- Rubber Roundabout
- Speed Bump
- Street art in the roadway*

Design Considerations

- Consider including kerb build-outs on each approach to reduce approaching vehicle speed and help to facilitate safer pedestrian crossings.
- If fully mountable, ensure the central island is high enough to discourage vehicles traveling straight through the intersection.
- Avoid the use of splitter islands on the approach of mini-roundabouts.
- The tool provides a good opportunity for planting. The choice of planting should be appropriate to the context and maintenance requirements of plants needs to be considered carefully. Native, low-maintenance native plants are recommended.
- Multiple roundabouts at several intersections along a route are more effective at reducing motor vehicle speed than a single roundabout.
- Explore how place-making initiatives can be incorporated into the tool, including engaging local artists to aid in the design of any graphic material.

*Roadway Art is any artwork that sits within the traffic corridor.

C.4.b | Speed Humps + Raised Tables

Placing speed humps or speed cushions at regular intervals prevents vehicles from reaching a high speed. The height of the speed bump can be altered to achieve different design speeds / comfortable mounting speeds. Raised tables are elongated speed humps and provide better outcomes for pedestrians as can also be used as courtesy crossings in the right context.



Links to Technical / Legal Requirements

- For technical design guidance on raised tables, visit www.nzta.govt.nz/png.
- For technical guidance on speed humps including signs and markings, visit <https://www.nzta.govt.nz/assets/Safety/docs/speed-management-resources/speed-management-toolbox-and-appendices-201611.pdf>.

POP-UP INSTALLATION



Slowing down the traffic speed with easily adjustable speed humps provides the opportunity to experiment with distances to find the correct spacing to achieve a desired safe speed.

Potential Materials

- Reflective Tape
- Kerb Ramp
- Portable Speed Hump
- Rubber raised platform
- Road Signage (needs an advance warning sign).

INTERIM INSTALLATION



Durable, semi-permanent speed humps or table installations allow time for drivers to adapt to new conditions, and can be altered if required.

Potential Materials

- Rubber raised platform
- Speed Hump

Design Considerations

- Speed humps are the most cost effective means of reducing traffic speed.
- Speed humps and raised tables slow down all vehicles, including buses and emergency vehicles.
- Raised tables are more comfortable than a speed hump and more suitable for buses.
- Where a bus route has more than 10 speed humps or 5 raised tables, other methods of traffic calming should be used where possible to avoid additional effects on bus service reliability.
- Carefully locate elements to avoid conflict with existing driveways, stormwater infrastructure and underground utility access to boxes, vaults, and sewers.

C.4.c | Pinch Points + Chicanes

Similar to extending the kerb the carriageway, pinch points and chicanes increase the 'friction' for vehicles and encourage a lower speed environment. Instead of blocking one direction's access, traffic in both directions is allowed, but restricted to a single lane, requiring opposing motorists to take turns passing through.



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Links to Technical / Legal Requirements

- For technical design guidance visit <https://www.nzta.govt.nz/assets/Safety/docs/speed-management-resources/speed-management-toolbox-and-appendices-201611.pdf>
- For information about using these tools to create a neighbourhood greenway for people on bikes visit: <https://www.nzta.govt.nz/walking-cycling-and-public-transport/cycling/cycling-standards-and-guidance/cycling-network-guidance/designing-a-cycle-facility/between-intersections/neighbourhood-greenways/>
- If installation of these tools removes parking, a traffic resolution may be required. See Legislation and Compliance section for more information.

POP-UP INSTALLATION



The pop-up event provides the opportunity to socialise and test the impact of pinch points or chicanes on traffic speeds.

Potential Materials

- Spray Chalk
- Sidewalk Chalk
- Reflective Tape
- Road Cone & Bar
- Kerb Ramp
- Portable Speed Bump
- Hay Bale
- Straw Wattle
- Road Signage
- Street art in the roadway*

*Street art in the roadway is any artwork that sits within the traffic corridor.

INTERIM INSTALLATION



The interim installation allows the impact on the network to be tested over a longer period of time, to monitor changes in behaviour and determine whether a permanent upgrade is possible.

Potential Materials

- Planter Box
- Traffic Delineators
- Road Paint
- Cold Applied Plastic
- Spray Chalk
- Speed Bump
- Street art in the roadway*

Design Considerations

- Installation may reduce the availability of on-street parking.
- Preferred by many fire department / emergency response agencies to most other traffic calming measures.
- This type of traffic calming device relies on eye contact between drivers. Take care when implementing to ensure sufficient inter-visibility is available.
- Give-way and appropriate signage on the approach must be implemented to help facilitate use.
- Provides a good opportunity for planting. The choice of planting should be appropriate to the context and maintenance requirements of plants needs to be considered carefully. Native, low maintenance native plants and trees with high canopies are recommended.
- Carefully locate as to avoid conflict with existing driveways, stormwater infrastructure and underground utility access to boxes, vaults, and sewers.

C.4.d | Kerb Build Out (intersection)

Compact intersections reduce conflict between pedestrians and traffic by reducing speed, reducing crossing distances, and increasing visibility for all users. Oversized and complex intersections deter cyclists and pedestrians due to the time it takes to cross, and because of potential conflicts. Oversized intersections take up valuable land, and compromise street life.

Narrowing the width of driveways is also an important aspect of this tool. It requires vehicles to reduce their speed prior to entering and exiting driveways and streets, greatly improving pedestrian and cyclist safety.



POP-UP INSTALLATION



The intersection is tightened to test the maximum space necessary for a turning vehicle, and the impact on conflicts between pedestrians and vehicles.

Potential Materials

- Spray Chalk
- Sidewalk Chalk
- Duct Tape
- Reflective Tape
- Stencils
- Road Cone & Bar
- Kerb Ramp
- Rubber Pedestrian Crossing
- Barrier Mesh
- Upcycled Furniture
- Picnic Table
- Hay Bale
- Road Signage

INTERIM INSTALLATION



During an interim event, test the new configuration's impact on pedestrian / vehicle conflicts, and the accessibility and ease of crossing for pedestrians.

Potential Materials

- Planter Box
- Traffic Delineators
- Resin Bound Aggregate
- Road Paint
- Cold Applied Plastic
- Spray Chalk
- Rubber Pedestrian Crossing
- Astroturf
- Bench Seat
- Picnic Table
- Speed Bump

Design Considerations

- Consideration should be given to driveways and access to properties, and the potential loss of on-street parking. Carefully locate elements to avoid conflict with existing driveways and underground utility access to boxes, vaults, and sewers.
- The tool provides a good opportunity for planting. The choice of planting should be appropriate to the context and maintenance requirements of plants needs to be considered carefully. Native, low-maintenance native plants are recommended.
- Properly designed kerb build-outs do not interfere with existing stormwater systems and can be implemented quickly and cost-effectively.
- If the street is frequently used by larger vehicles, such as buses and trucks, the design should accommodate these.
- Explore how place-making initiatives can be incorporated into the tool, including engaging local artists to aid in the design of any graphic material.
- The impact on the wider traffic network should be considered to ensure the tool will not have negative impacts in neighbouring communities. Alternate routes should be identified where available.

C.5 | Tools for Place Activation



Tools for place activation include events, installations and activities intended to engage the community in a fun and interactive way. Tools for place activation create vibrant social spaces and provide an excellent opportunity to test a number of design elements, to socialise a project with the community and to help build community ownership of the project and desired outcome.

DRAFT

C.5.a | Pocket Park

Creating places where pedestrians can gather and relax and transforming the street from a movement corridor to a place where people can spend time. A pocket park is a small park that provides public space for the community to meet in a safe, comfortable and fun environment. Pocket parks are often created by transforming existing parking spaces into public spaces.

PARK(ing) Day is an annual global event where citizens, artists and activists collaborate to temporarily transform metered parking spaces into a temporary park. In this context, **PARK(ing) day** provides a template to trial a pocket park.



Links to Technical / Legal Requirements

- For an interim installation, a traffic management plan is likely to be required. For a short term pop-up that can be installed without entering the roadway, a simple safety plan is likely to be sufficient.

POP-UP INSTALLATION



A pocket park can be used as a pop-up event to socialise and test the removal of parking to create a public space for community, plus other uses and activities.

Potential Materials

- Spray Chalk
- Sidewalk Chalk
- Stencils
- Road Cone & Bar
- Barrier Mesh
- Barbeque
- Coffee Cart
- Easy-Up Gazebo
- Astroturf
- Upcycled Furniture
- Picnic Table
- Hay Bale
- Straw Wattle
- Games Equipment
- Corflute Board
- Pigtail Ground Spike
- Road Signage
- High Vis Vest
- Children's Umbrella

INTERIM INSTALLATION



An interim pocket park can be tested for impacts to local businesses, public life, and to build a case for alternative parking uses.

Potential Materials

- Planter Box
- Resin Bound Aggregate
- Stencils
- Road Paint
- Cold Applied Plastic
- Spray Chalk
- Reflective Tape
- Astroturf
- Aggregate
- Bench Seat
- Picnic Table
- Play Equipment
- Kerb Ramp

Design Considerations

- Spaces to gather and relax should be safe and secure from motorised vehicles and anti social behaviour to ensure they are comfortable for people of all ages and abilities. This should include physical delineation from the live traffic lane.
- A pocket park is not appropriate in high speed road environments.
- Streets designed for lingering are more likely to attract pedestrians and encourage people to walk and interact with the public realm.
- A pocket park should not disturb pedestrians and car flow. The location of the park should be picked carefully, avoiding places such as “no-stopping” zones, commercial loading zones, commuter lanes or any place in front of a fire hydrant.
- See Parking Day Manual for more information - https://www.asla.org/uploadedFiles/CMS/Events/Parking_Day_Manual_Consecutive.pdf