

# TRIALS AND INTERIM PROJECTS

## ABSTRACT

Auckland Transport (AT) aims to deliver best practise and innovative solutions as part of projects. Some of these solutions may not have been designed, tested or build before in Auckland (or NZ). Trialling is one way of determining whether a solution works.

Currently AT has not a clearly defined process set up to test solutions as part of projects e.g. in form of a trial. By enabling a process, trials could become an efficient and effective way of testing a solution on a case by case basis. This also provides the opportunity for the public to give feedback during the trial period as they can see and experience the solution.

This paper discusses the thoughts and process (at the time of writing) to enable trials.

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## 1. PURPOSE

Auckland Transport (AT) aims to deliver best practise and innovative solutions as part of projects. Some of these solutions may not have been designed, tested or built before in Auckland (or NZ). This could be due to legal requirements, constraints through the Road User Rule or the requirement to use certain traffic control devices (TCD) under the TCD Rule. However there may be benefits of solutions within or outside of these requirements and rules for projects for AT (and potentially NZ). Therefore trials have been identified as one way to assess the benefits of project solutions.

There are processes and tools for trials already in place with New Zealand Transport Agency (NZTA) and AT. However some of these have not been fully utilised yet or tested for interim street designs or trials.

A trial is about testing and monitoring a solution which is not committed to yet, to see whether it fulfils its anticipated function.

An interim design is a cost-effective solution to deliver some of the main benefits of a project while resources and funding is secured for an agreed upon solution. It has more the function of a “temporary placeholder”.

Both are related because there might be the need to trial things to implement an interim solution and an interim solution may reveal issues with the final design that can be remedied before the full upgrade is implemented.

The purpose of this project is to bring available processes together, capture them, refine or amend them for suitability and provide guidance (e.g. tool kit) as to what process would be most suitable for which type of trials and what documentation etc. is required. The further aim is to make this information easily accessible, understandable and implementable for Project Managers and others working on a project. This is to help to reduce and minimise duplication of investigative work.

## 2. OBJECTIVES

### 2.1. Benefits of Trials

The National Association of City Transportation Officials (NACTO) Urban Street Design Guide, Interim Design Strategies states the following:

*“With limited funding streams, complex approval and regulatory processes, and lengthy construction timetables, cities are often challenged to deliver the results that communities demand as quickly as they would like. Interim design strategies are a set of tools and tactics that cities can use to improve their roadways and public spaces in the near-term. They include low-cost, interim materials, new public amenities, and creative partnerships with local stakeholders, which together enable faster project delivery, and more flexible and responsive design. ....*

*..... An interim design can serve as a bridge to the community, helping to build support for a project and test its functionality before going into construction.”*

Trials can assist in a better project outcome because they are a way of testing and assessing whether a proposed solution provides the outcome as expected from the design.

Interim designs can be suitable until the full benefits of a project can be achieved with full upgrade and funding available.

They are of temporary nature, that means they can be quickly removed, amended if required or

they can be converted into a permanent solution. This can assist with gaining political support easier. People are more accepting of trying something new if they see it as temporary in nature.

In most transport projects modelling is used to exactly predict how a solution changes trip patterns, traffic, turning volumes etc. Engineering experience, judgement, audits and assumptions are used to determine whether a design is deemed safe and works for all users operationally. However quite often the real behaviour is somewhat different to what has been modelled or predicted. Trialling a solution before committing to a final design can provide a better way of understanding how users will behave.

## **2.2. Consultation opportunities and benefits**

Trials provide a great opportunity for a better consultation process and community engagement through direct involvement. The consultation can be carried out as part of the trial, which overall provides valuable feedback.

The benefit of testing a solution as part of the consultation process means the feedback provided from the users is based on the physical installation and user experience.

Conventional consultation is mainly based on design drawings and plans, which are either sent out by mail and/or available online. These may be hard for some people to read, understand and interpret what it would look and operate like once implemented. Additionally, conventional consultation is focussed on key stakeholders (e.g. adjacent residents/businesses, interest groups). The users themselves do not normally get to provide feedback until the facility has been built.

By installing the solution as a trial, people can see and experience the “space”. It is easier for them to understand the concept of what AT wants to achieve. The users can provide their feedback based on their experience with the actual facility. AT can take the feedback (positive and negative) to amend and improve the design/layout further or confirm that the design works for users.

The Trial approach allows AT to challenge established practice, test the accuracy of models in practice, get feedback from users and get feedback based on real life physical environment rather than relying on plans and concepts.

## **3. TYPES OF TRIALS**

For the purpose of developing AT's processes three different types of trial categories have been identified. A single trial may involve aspects of all three categories.

### **3.1. Operational trials**

Operational trials include testing potential road layouts, road closures and creation of pedestrian plazas and malls and restricting traffic movements.

Any trials in this category would be about choosing the most effective solution within available treatments and rules (e.g. aligning with TCD Rule requirements) and established practices.

The purpose of these types of trials is to assess the impact reallocation of space, alternative layouts and traffic movements has on user behaviour rather than trialling specific physical devices.

Potential trials and designs within this category could include (but not limited to):

- Changing road layout (e.g. convert parking or traffic lane into cycle lane, remove flush median and reallocate space for other use)
- Closing/removing a turning movement/lane at an intersection
- Allowing 2-way cycling in a one way street
- Testing appropriate widths for separator and buffer zones
- Closing a road (by dead ending) but keeping a link open for pedestrians and people

- on bikes
- Closing a road and converting the road it into a pedestrian only space

### 3.2. Traffic Control Devices trials

Trialling new Traffic Control Devices require NZTA approval. These types of trials are more about getting permission to use solutions that require national level approval.

Potential trials within this category could include (not limited to):

- Bicycle Barnes dance
- Small cycle signal aspects
- Using road mounted LEDs instead of painted markings to allow for variable controls
- other trial ideas (which may come out of the Update of the Cycle network planning and design guideline and suggested Road User Rule changes)

Examples of this type of trial in Auckland are the recently completed trial on the Sharrow markings or the Beach Road shared path marking.

The Sharrows marking trial was a national trial (lead through some Road Controlling Authorities (RCAs)) to find out how to apply Sharrow markings and if they are an appropriate traffic control device in NZ (see

Figure 1). The Sharrow markings have been approved as a new road marking and will come into legal use through the TCD in July 2016.



Figure 1: Auckland, Sharrows marking trial

The Shared path signage trial on Beach Road is another trial AT is running to reduce the large number of required legal signage when a footpath or cycle path changes to a shared path and vice versa. The trial uses marking rather than signs to indicate shared paths (see Figure 2).



Figure 2: Shared path signage trial

### 3.3. Trialling new designs treatments

This is about trialling physical design treatments which are allowed under national legislation, but which haven't been done yet or are just starting to emerge. The purpose of these types of trials is to establish whether combinations of relatively cheap treatments (e.g. road markings, planter boxes, flexi-bollards) can achieve the same or similar outcomes to expensive standard treatment like new kerb and channels or full surface treatments. One example here would be Tactical Urbanism: "A city and citizen-led approach to neighbourhood building using short-term, low-cost and scalable interventions to catalyse long-term change" (<http://tacticalurbanismguide.com/>)

Potential designs within this category could include (not limited to):

- Using chalk type paints to create a cycle lane along a road as a quick trial/check, short notice
- using road markings (with/without vertical elements) to create new kerb lines
- painting in the road space to create or reinforce shared zones in the road corridor using temporary platforms to extend the footpath
- new types of cycle lane buffers and separators
- temporary bike corrals or parklets

Auckland Council (AC) has initiated a Park(ing) day (see Figure 3) on Lorne Street in September 2015. This received positive feedback from the community and support from surrounding businesses. AC is currently investigating whether a longer-term parklet space can be created there.





Figure 3: Auckland council Park(ing) day, September 2015, Lorne Street

Some overseas examples within this category are shown in the figures below.

The example from New York City shows how an underutilised road space was converted into a public space with road marking, paint and some planters. This is just one example of many successfully converted spaces in NYC for pedestrians, which were implemented within a very short time frame.



Figure 4: Example from Tactical Urbanism Vol. 2 (Broadway near Columbus Circle NYC before/After) - Reclaiming underutilized pavement as public space.

The Adelaide example on Bank Street shows a road supergraphic at a key pedestrian crossing (see

Figure 5). A supergraphic is a large –scale painted art in bold colours, typically using geometric or typographic design. Other elements as part of this change of road (not visible in the picture) are the change of the road corridor to a one way chicane based road with contraflow bike lane, raised crossover and parklets. These elements transformed the street into a vibrant, activated, pedestrian-friendly environment.



Figure 5: Bank Street – road supergraphic, Adelaide

## 4. PROCESSES

### 4.1. Existing Processes

NZTA provides a process for trialling new TCDs as laid out in the Traffic note 10 guideline. Typically these trials have been managed by the specific team that requires the change. The team, often supported by external consultants, would liaise directly with NZTA. AT is refining its process to attempt to ensure each trial is coordinated through a single AT team.

However solutions which do not require a change to the TCD Rule e.g. operational trials or new design treatments, but still requiring a test or trial, have a less clearer process laid out within AT.

The established AT process for obtaining approval for changes to transport controls is the Traffic Control Committee resolution process. This process has been designed primarily to deal with permanent changes and event type traffic management controls but has not been set up to facilitate trials and interim solutions.

There are existing legal powers available to RCAs that allow making changes to the operation of a road and/or temporary usage of roads, to close off streets or part of streets or let RCAs stop roads and temporarily prohibit traffic on roads. These are for example regulated through the Local government Act 1974, Schedule 10 (stopping of roads and the temporary prohibition of traffic on roads). However these powers are not currently exercised by AT.

Other existing AT processes that may help enable trials are Event TMPs (closing a road temporary for an event), Arts TMP (allowing temporary artwork installation on roads).

As part of the guidance the appropriate process needs to be identified.

## 4.2. Proposed AT process

The proposed AT process to better enable trials are laid out below.

### What

- Synergise existing processes
  - Use the best of each currently available process rather than developing a new one. Collect feedback on how processes worked which were used in previous trials. It may even be that existing processes are already sufficient, but clearer guidance is required to let PMs know about available techniques and processes.
- Framework and Template
  - Once the process has been agreed on, a framework and template should be developed to guide PMs and to enable consistent approaches within AT to set up a trial.
- Consultation Plan and Monitoring Plan
  - A specific consultation and monitoring plan to survey, monitor, document and assess the success of the trial needs to be established.

### How

Below a brief overview is given about the anticipated process to set up the trial procedure within AT.

1. *Develop the trial procedure*
  - Develop a Process framework and template/guide
  - Check if there are any legal impediments
  - Develop Consultation and Monitoring Plans
2. *Test the procedure*
  - Use a project to develop and trial the framework, templates and consultation/monitoring plans
3. *Refine the process*
  - Use learnings from the test trial to refine and finalise the framework, template, consultation and monitoring plans
4. *Implement the process*
  - Include the process in AT's toolbox of delivering projects (e.g. Project Management Framework, Communication Strategy, Traffic Control Committee)

## 4.3. Example Project – Federal Street

The Federal Street project would be used as the example project to identify gaps in the processes and to assist AT (and Auckland Council) to set up a process to easier incorporate trials in future projects.

The Federal Street is a collaborative project between AC and AT. The project is to provide short term, temporary and low cost improvements to make Federal Street safer, more comfortable and easier to navigate as a pedestrian and cyclist (until it becomes a shared space).

It originated from the Auckland Council City Centre Interventions and Pilots (CCIP) programme, a new programme which has the following objectives:

- Deliver low-cost, small-scale, easy-to-implement interventions
- Gap filler (physical, budget and programme gaps)



- Pilot and measure
- Continual improvement and momentum
- Being agile - “Lighter, quicker, and cheaper” approach is the overriding principle

That project consist of the following elements, some of which would require a trial. These elements are currently in discussion and part of the work in progress. They may be further defined or amended over the next period of time:

- Road markings that are not currently permitted under the TCD Rule
- Road markings that are not currently used by AT but aren't prohibited
- Kerb extensions that rely on paint and vertical elements rather than new physical kerbs
- Contraflow cycle lane marking
- Potentially cycle lane separators

Currently the design for the Federal Street project is being developed. It is intended to implement the project in 2016.

## **5. SUMMARY**

AT recognises that trials can be a useful tool for some projects to assist in testing and finding appropriate solutions. Through trials new design ideas can be tested and innovating can be supported. Previous and current trials have been helpful in further developing and refining a design. However it has been recognised that there is not a clear procedure laid out within AT to better enable trials. AT is working on setting up a process for trials which can be easily followed and implemented as part of projects, where required.