Tactical urbanism
Sale Street intersection

Safe System
case study

Figure 1: Bird's eye view of Sale Street intersection improvements (Photo: Auckland Council)

Tactical urbanism helps test safer urban environments for everyone

Many of us in urban areas want to live in vibrant neighbourhoods, where we can easily get to work, and access shops and services. We want to feel safe and comfortable moving around, in ways that are good for our health and take care of the planet.

Tactical urbanism can be used to make quick progress by testing and piloting projects to help demonstrate their value to the community.

To test a safer environment for people walking and cycling, temporary tactical urbanism style improvements were made to the intersection of Sale and Wellesley Streets in Auckland Central. They included:

- a narrower vehicle entrance into Sale Street
- more pedestrian space and a shorter crossing distance on Sale Street, and
- speed humps and polka dots indicating a slow traffic area (Figure 1).

As there were wide traffic lanes that encouraged high speeds, the core aim was to slow vehicles moving through the Sale Street area, especially those turning left into Sale Street from Wellesley Street. This would improve the safety and amenity of the area for people walking and cycling. All improvements were achieved using temporary materials such as planter boxes, paint and plastic speed humps. Using valuable insights gained from the trial, these will be followed by permanent changes to narrow the road, increase pedestrian space and signalise the intersection.

Testing interventions via tactical urbanism is part of the Safe System approach to road safety

The Safe System approach aims to create a forgiving environment and to reduce harm from mistakes road users make.

On Sale Street, physical changes tested on the road support a Safe System by slowing vehicles down and giving people more time and opportunity to make safe decisions.

Slower vehicle speeds give people more time to react to mistakes and reduce the likelihood of a crash occurring. If a crash does happen, slower vehicle speeds also mean there is less chance of a crash resulting in harm, because the crash forces involved are lower and therefore more likely to be survivable.

The permanent changes will further improve road safety at this intersection by introducing a signalised intersection with a barnes dance (people can cross in all directions at once) crossing phase for pedestrians.

nzta.govt.nz/safety/safety-resources

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How long did it take to implement the temporary interventions at Sale Street?

The intersection improvements were planned over 12 months (including some project delays) and took two weeks to install. They were completed in September 2019.

What did the tactical urbanism treatments cost?

The temporary improvements cost around $100,000 to design, install, and maintain to date. This includes the PlaceKit planters, which cost $20,000 and can be reused in other projects, as well as planter maintenance, which can cost up to $600 per month.

How effective were the trial interventions?

Compared to before the intersection improvements were made, traffic speeds along Sale Street are now much slower, and people walking can cross the road more quickly.

85th percentile speeds – the speed at which 85% of vehicles travel at or below – dropped by 8km/h westbound and 4km/h eastbound along Sale Street, and by 5km/h for vehicles turning left into Sale Street from Wellesley Street (Figure 2). The number of vehicles going faster than the speed limit also decreased from 6% to 1% of vehicles.

Figure 2: 85th percentile vehicle speeds on Sale Street before and after intersection improvements

It also takes people less time to cross the road now because crossing distances are shorter (Figure 3).

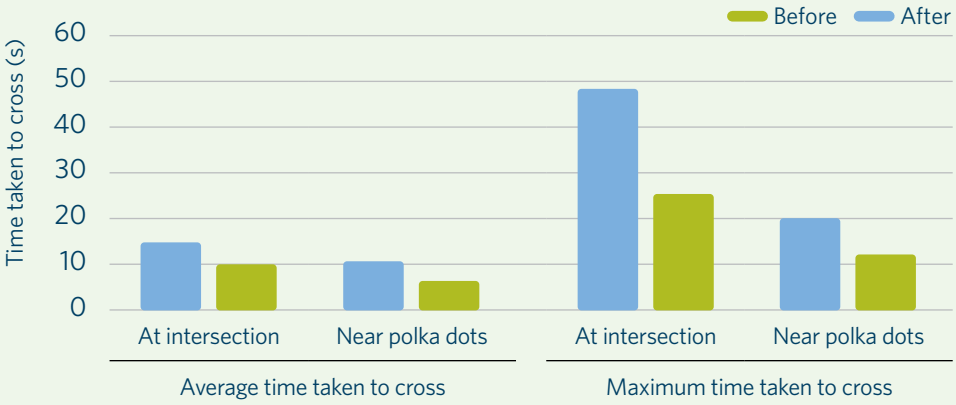

Figure 3: Average (mean) and maximum time pedestrians take to cross Sale Street before and after intersection improvements

Key tips for practitioners

Trialling safety interventions in a live context means that results can be understood and designs adjusted before investing in permanent upgrades.

- While people walking can recognise an area feels safer or easier overall, they often don't notice the specific features of their crossing experiences that have improved. Engagement and communication might focus on how the changes will improve safety and amenity.
- Likewise, the connection between temporary, playful street improvements and road safety is not intuitive; many pedestrians interviewed did not realise the changes were intended to improve road safety. The links may therefore need to be emphasised if community understanding is sought.
- The paint finish used was difficult to install in September as it relies on dry weather, meaning some issues needed touching up following installation.
- Internal engagement and approval processes are not yet tuned into the tactical urbanism approach used in this project and may take more effort than more conventional infrastructure changes.

Pedestrians interviewed after the changes mostly thought the changes had been effective in making the area safer (Figure 4) and almost three quarters (73%) rated the area as safe or very safe overall since the changes. However, there were still some concerns around the speed of vehicles turning left into Sale Street from Wellesley Street, which will be addressed in the permanent upgrade to a signalised intersection.

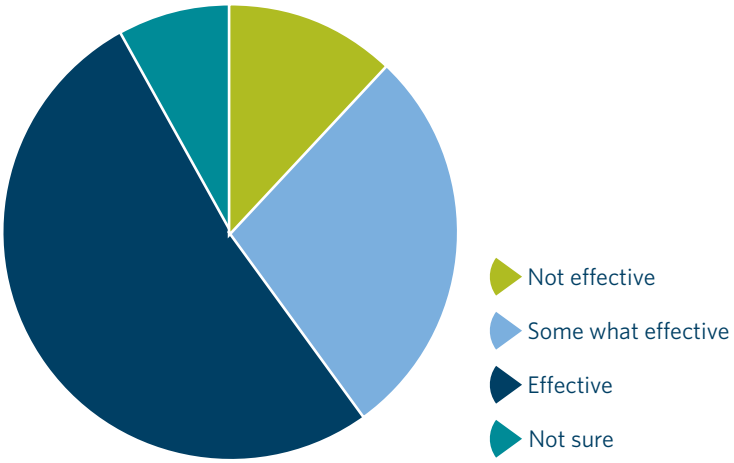

Figure 4: Pedestrian perceptions of Sale Street intersection improvements (n=98)

For more information

www.nzta.govt.nz/roads-and-rail/innovating-streets/case-studies/sale-street-intersection/

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