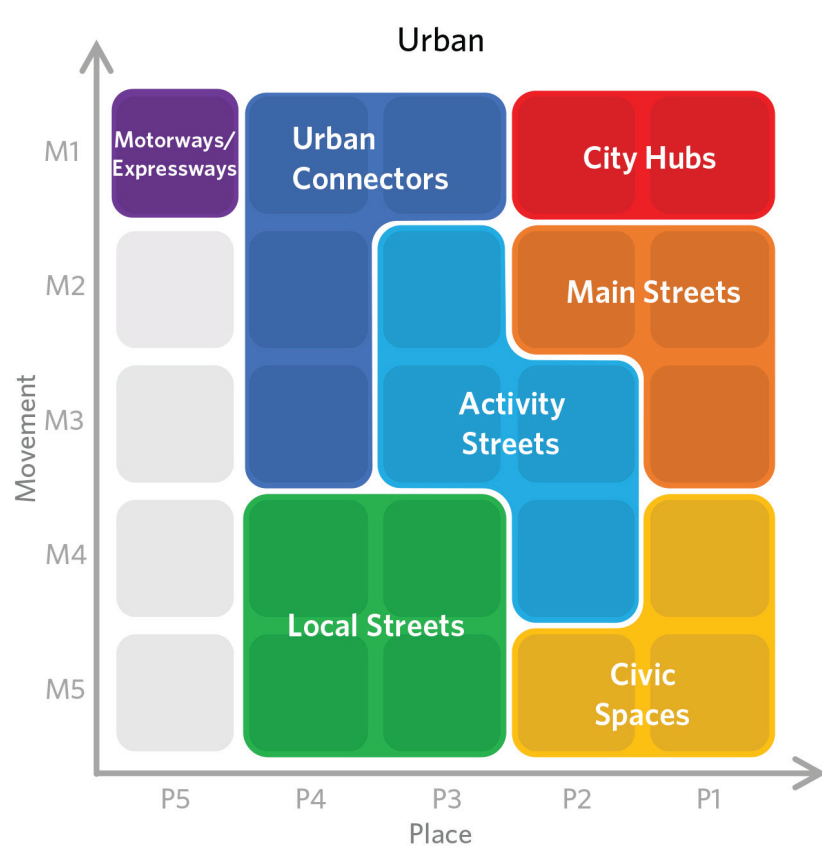


# Assessing LOS for walking

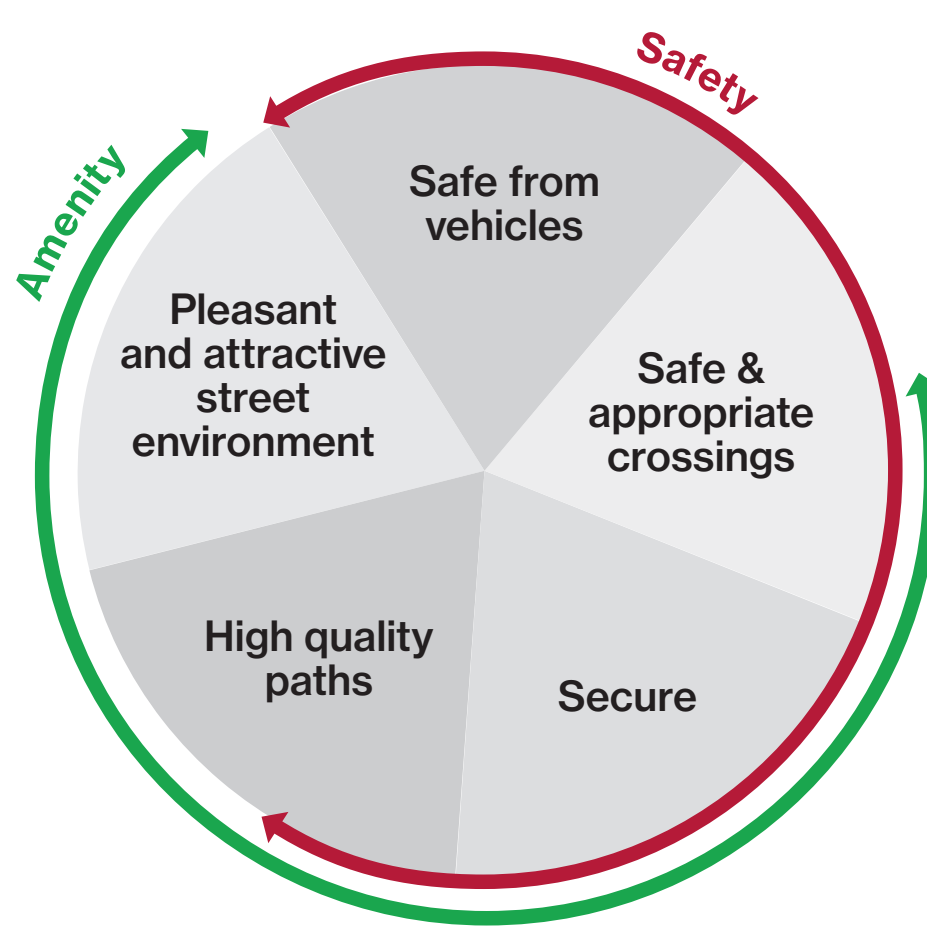


Abley recently undertook research for Waka Kotahi to develop a walking level of service framework. The framework seeks to support better decision making by focusing on the barriers and motivators to walking. The framework and accompanying online tool for assessing streets were informed by customer insights and developed with transport practitioner input.

The framework applies to street families within the One Network Framework and recognises that there are different walking needs and expectations on different streets.



Five outcomes contribute to overall Pedestrian LOS. These relate to the overall considerations of safety and amenity. Safety was identified as the main barrier for people's walking choices, while a pleasant and attractive street environment motivates people to walk.

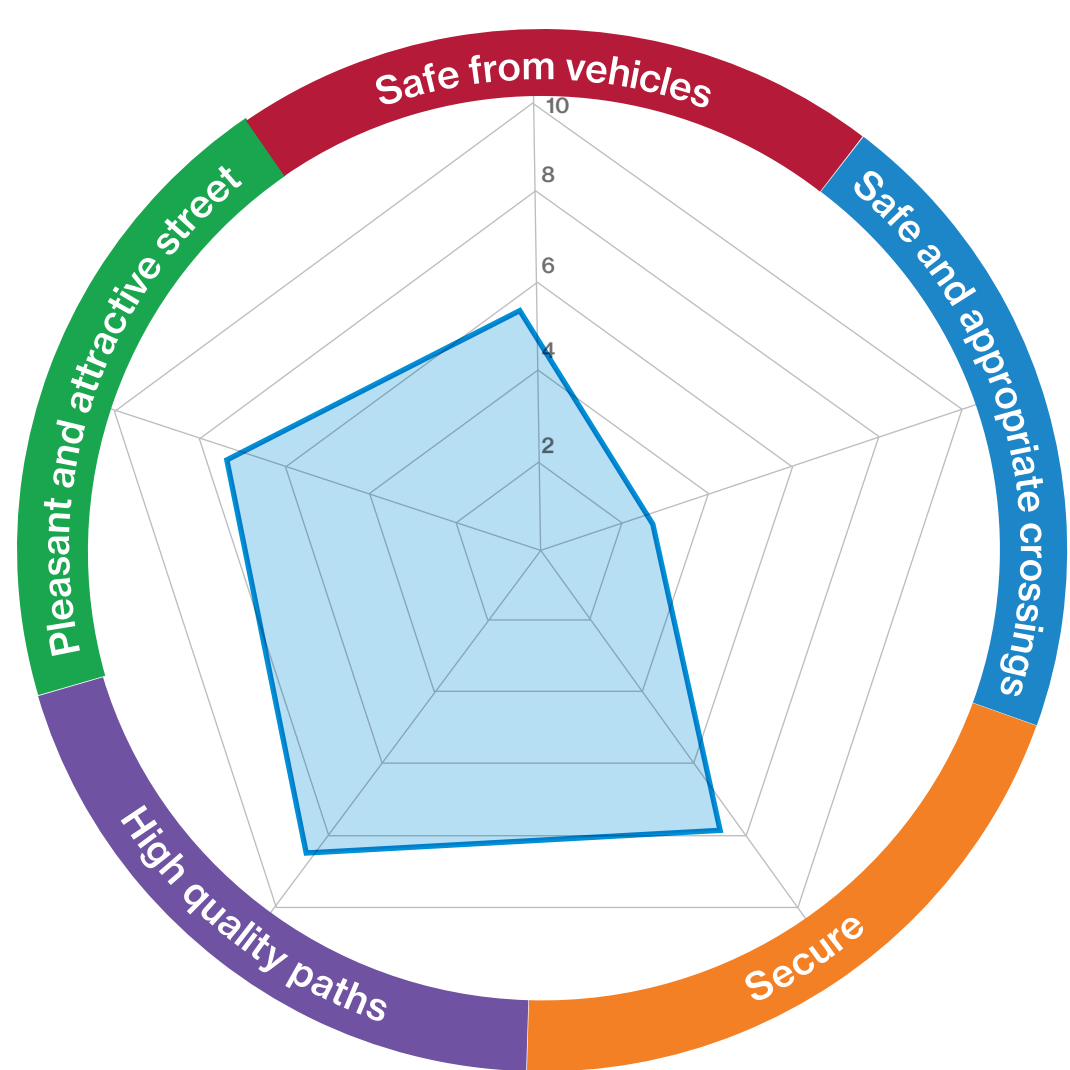


Street environments are assessed against 19 metrics, which contribute to the five outcomes:

- Footpath width
- Surface quality
- Gradient
- Crossfall
- Separation from moving traffic
- Traffic volume
- Heavy vehicle volume
- Traffic speed
- Crossing the street – frequency and type
- Crossing the street – quality
- Crossing side streets – frequency and type
- Crossing side streets – quality
- Vehicle accessways
- Mix of path users
- Surveillance
- Lighting
- Greenery
- Comfort features
- Engaging surroundings



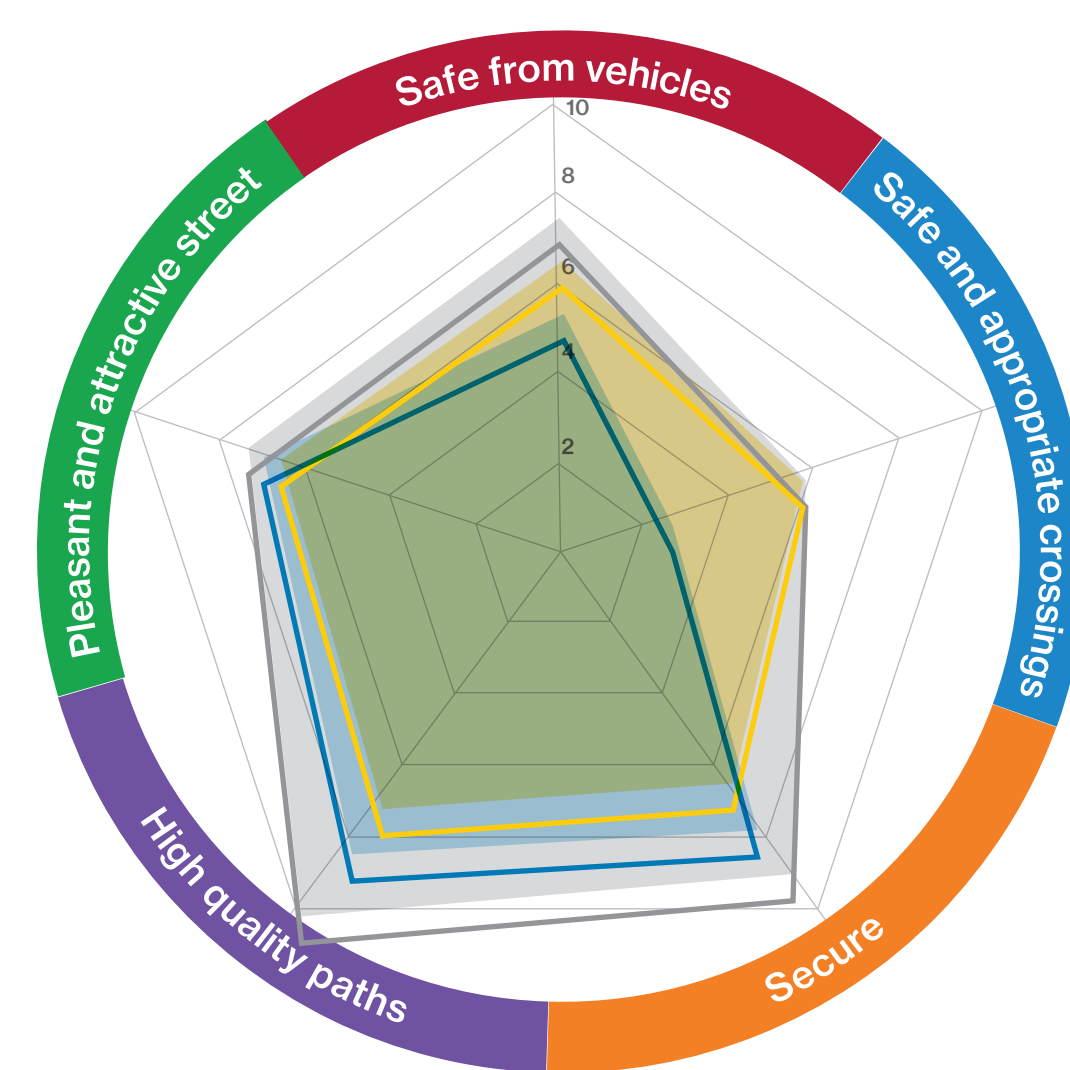
## Uses



Critical deficiencies (metric score of zero)  
Traffic speed crossing the street - frequency and type of crossing

### Identify deficiencies

- Assess individual streets using the Street Assessment Tool
- Identify key deficiencies and opportunities for improvement
- Outcome scores – for example, the assessment on the left identifies Safe and Appropriate Crossings as a priority for improvement
- Critical deficiencies – for example the assessment on the left identifies traffic speed and crossing the street (frequency and type of crossing)

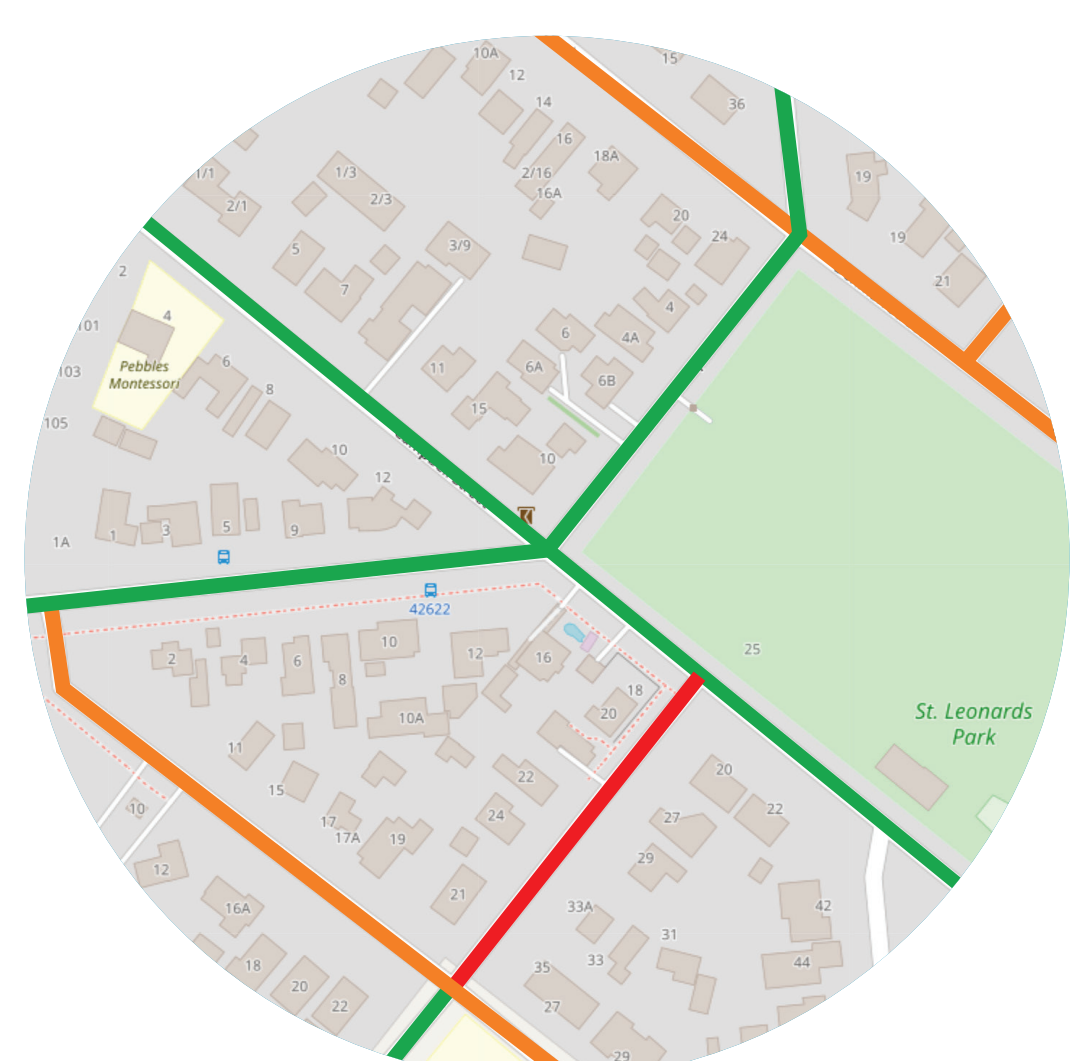


### Compare options

- The Street Assessment Tool provides three levels of results: Overall scores, outcome scores and metric scores. These can be easily compared for different options.
- The image on the left shows a comparison of the outcome scores for three options.
- Compare upgrade options to the existing street environment, and other options
- Assess the impact of recent changes on Pedestrian LOS

### Analyse your network

- Identify gaps in the network
- The framework takes into consideration the movement and place function of streets in your network
- Prioritise improvements – for example on the left, the red (worst overall pedestrian LOS score) is a key priority as it is a key link between a school, shops and park, and is worse than surrounding links.



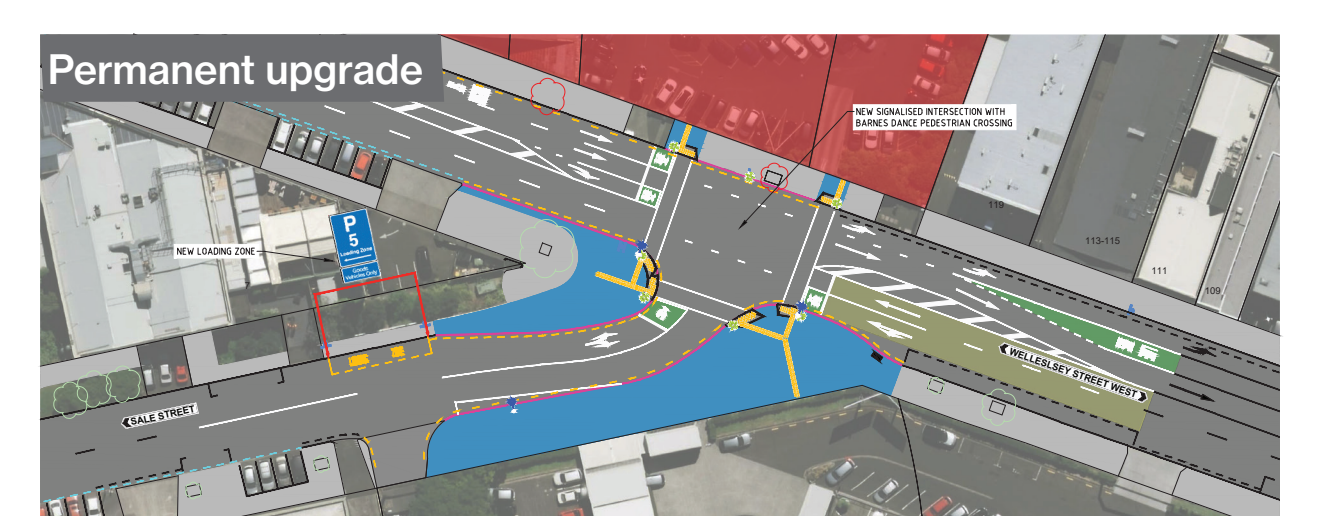
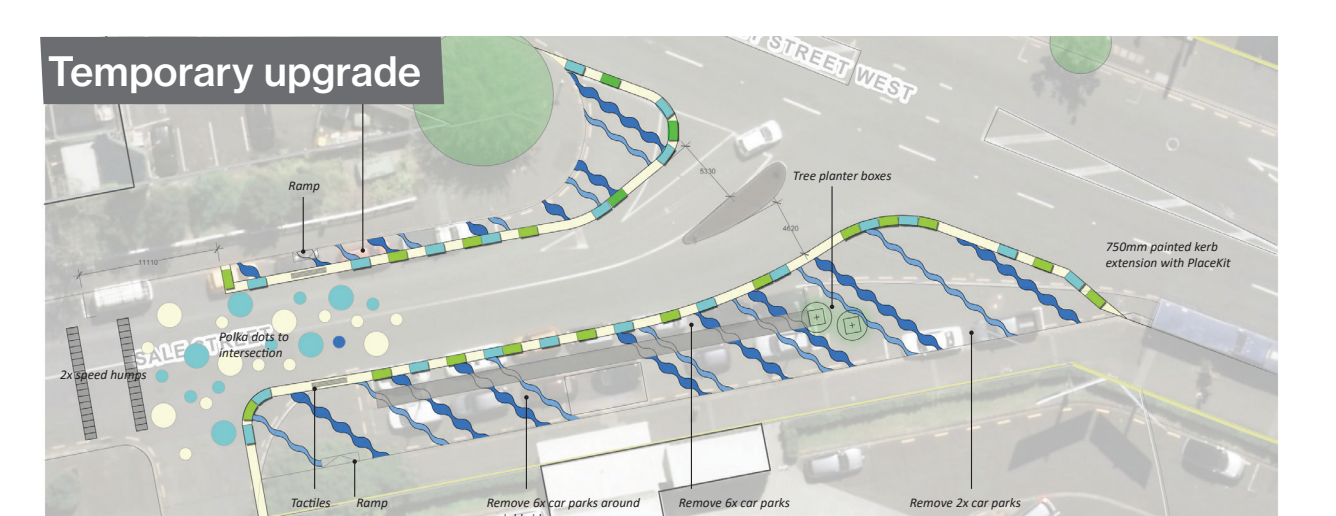
## Street Assessment Tool



Here's an example of how the Pedestrian LOS Street Assessment Tool can be used to assess a street environment and compare options.

Sale Street, an Activity Street in Auckland CBD, was initially upgraded with temporary improvements to reallocate road space and slow traffic. Permanent changes have now been made, including signalised crossings at Wellesley St West.

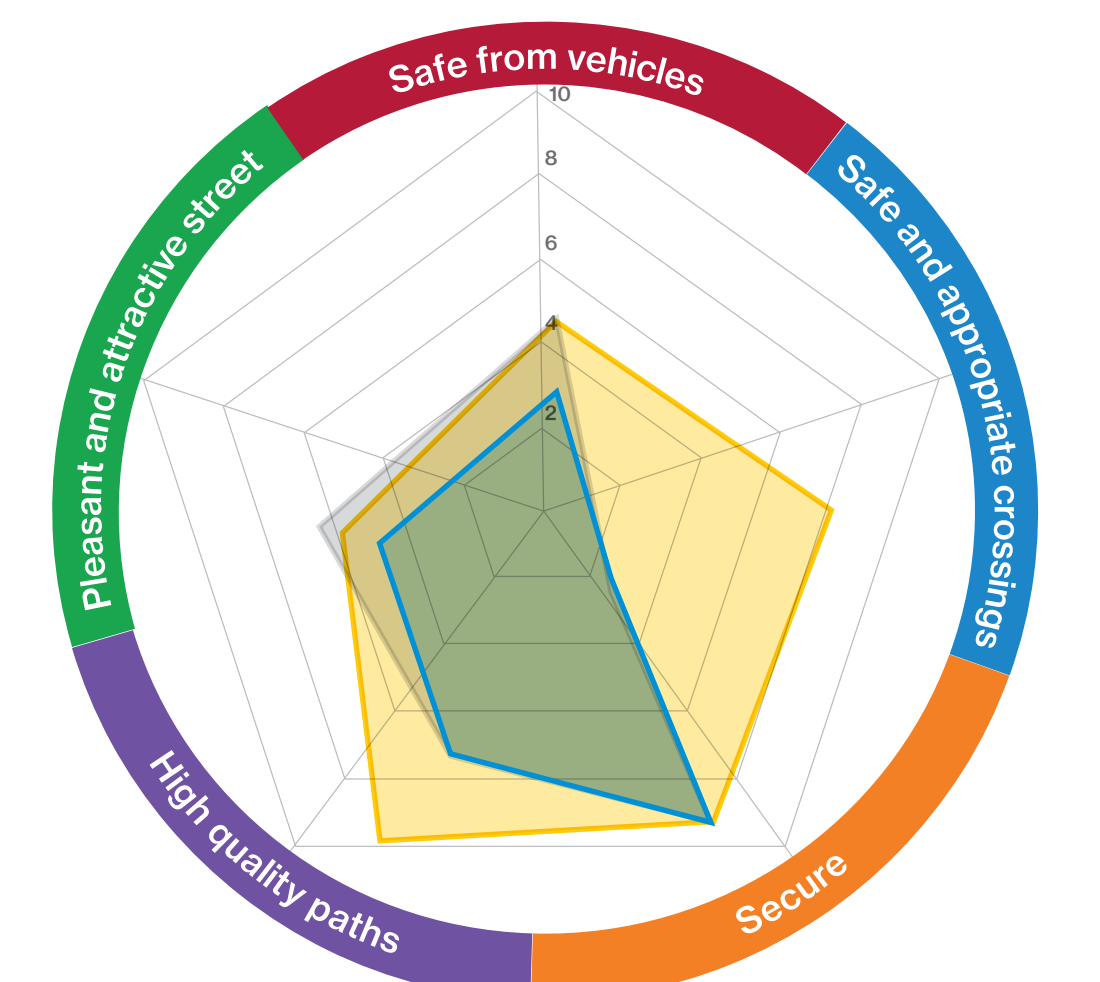
The three stages have been tested using the Street Assessment Tool.



Source: Auckland Council

### Results

The assessment tool demonstrates that there were significant issues at Sale Street near Wellesley Street West before the upgrades. The temporary upgrade made minor improvements to the street environment, safety from vehicles and crossings. The permanent upgrade significantly improves the pedestrian level of service, particularly crossings and path quality.



#### Overall pedestrian LOS score (max. 10)

Pre-upgrade: 3.8  
Temporary upgrade: 4.9  
Permanent upgrade: 6.3

#### Critical deficiencies

- 5 pre-upgrade (4x crossings and 1x surfacing)
- Reduced to 3 in temporary upgrade (2x crossings and 1x surfacing)
- All are removed in the permanent upgrade

#### Opportunities for improvement

- Safe and appropriate crossings were the major opportunity for improvement in the pre-upgrade street environment and in the temporary upgrade. The permanent upgrade significantly improves this.
- There are further opportunities to improve all pedestrian level of service outcomes

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