

## Road safety in the city centre

File No.: CP2018/17763

### Te take mō te pūrongo / Purpose of the report

1. To receive an update on Auckland's road safety crisis.
2. To endorse Auckland Transport's programme to reduce the high rates of death and serious injury in the city centre.

### Whakarāpopototanga matua / Executive summary

3. In 2017, 64 people died and 749 others were seriously injured on Auckland's roads.
4. Road safety performance in Auckland's city centre has worsened over the last five years due to various factors. The road environment and safety system have not kept up with population growth, new demands on the road network, and growth in people walking, cycling and motorcycling.
5. The Tāmaki Makaurau Road Safety Governance Group has been established to provide leadership for improving safety and reducing the high number of death and serious injuries on the Auckland road network. This group has a strong national and regional mandate to drive safety outcomes and the partners include Auckland Transport, New Zealand Police, the New Zealand Transport Agency (NZTA), Accident Compensation Corporation (ACC), Auckland Council, the Auckland Regional Public Health Service, and Ministry of Transport.
6. Auckland Transport's long-term goal of Vision Zero emphasises that no loss of life on our road network is acceptable. It is a proven approach from jurisdictions where road designers and operators take greater responsibility in creating forgiving infrastructure that prevents road trauma.
7. The Vision Zero approach also accepts that road users are people who make mistakes and therefore all parts of the transport system need to be strengthened through a safe road environment, safe speeds, safe vehicles and safe road use, so that when mistakes occur, it does not lead to deaths or serious injuries.
8. As Auckland Transport moves to the Vision Zero approach, it is fast-tracking implementation of a speed management plan, developing a strategic road safety plan and delivering an ambitious 10-year \$700 million safety infrastructure programme. The combined impact of these programmes is estimated to reduce death and serious injury (DSi) by 60 per cent over ten years from the 2017 baseline, as well as contribute towards additional congestion reduction benefits and increased health and environment benefits (the initial three-year target is to reduce deaths and serious injuries by up to 18 per cent). The Regional Fuel Tax will enable this investment and improve a larger number of high-risk intersections and routes.
9. Auckland Transport is working with the Ministry of Transport who are developing a new national road safety strategy due for release in 2019. They are exploring Vision Zero principles for the strategy. The Auckland strategy and a programme business case for longer-term investment in road safety will be informed by the national strategy. Auckland Transport has received endorsement from Auckland Council's Planning Committee on its Safety and Speed Management programme, and will continue to engage with the Waitemata Local Board.
10. One of the fastest and most cost effective ways to reduce road trauma is to implement speed reduction measures. Auckland Transport is currently working to identify areas and roads around the Auckland region to set safe and appropriate speed limits. The city centre is a high priority for investigation, as it has one of the region's highest levels of foot traffic and people cycling. As detailed later in this report, 84 per cent of all city centre DSi involve vulnerable road users (making up 2.2 per cent of all DSi in Auckland), and a large proportion of streets record a high level of risk for road users.

11. City centre and roads across the region will be added to the Schedule of Speed Limits and drafted into the bylaw. The bylaw will be consulted on Auckland-wide (planned to be held in November 2018). Consultation will cover the entire programme of works for the Auckland region at a strategic level. Post-consultation, the bylaw will need to be approved by the Auckland Transport Board, after which the new lower speed limits will become legally enforceable.

## Ngā tūtohunga / Recommendation

That the Auckland City Centre Advisory Board:

- a) receive the update on Auckland's road safety crisis
- b) endorse Auckland Transport's programme to reduce the high rates of death and serious injury in the city centre.

## Horopaki / Context

12. Auckland's rapid growth has resulted in a number of challenges including housing, transport and public health. The recent increase in road trauma is both a transport and public health issue for the region with significant economic and social costs. More importantly, the after-effects of road trauma on the victims' whānau, friends and community are devastating.
13. In the three years from 2014 to 2017 Aucklanders experienced a 78% increase in road deaths and a 68 per cent increase in serious injuries, with deaths rising from 36 to 64 and serious injuries from 447 to 749.
14. In light of these tragic results road safety has been identified by the government as a priority in the Policy Statement on Transport and in turn by Auckland Transport and Auckland Council as a strategic priority for planning and investment.
15. Setting safe and survivable speed limits, and moving towards a vision zero approach, aligns with the vision of the City Centre Masterplan and the Auckland Plan.
16. In November 2017, the Auckland Transport Board commissioned an independent road safety Business Improvement Review that made 45 recommendations, which the board adopted in full. One of the key recommendations was setting evidence based, safe and appropriate speeds for Auckland as a first priority.
17. In June 2018, the Auckland Transport Board endorsed an accelerated Speed Management Programme that proposes a \$24 million investment over the next three years.
18. Speed management is a central part of the Vision Zero approach for reducing speeds to survivable levels for road users, particularly in Auckland's city centre streets where there are large numbers of vulnerable road users (people not in cars – people walking, cycling and motorcycling).
19. Speed determines both the likelihood of a crash occurring and the severity of the outcome. Regardless of what causes a crash, whether someone walks away or is carried away will depend on the speed vehicles are travelling. For example if a person is hit by a vehicle travelling at 30km/h, they have a 90 per cent chance of surviving, compared with only a 20 per cent chance of surviving at 50km/hr. Cities around the world that have committed to Vision Zero have changed their city centre speed limits to 30km/h as a result.
20. There is good evidence that setting 30km/h speed limits in city centres has a positive impact on keeping people safe. Christchurch City reduced the city centre limit to 30km/h in 2016. Analysis has shown a 17 per cent reduction in crashes and a 22 per cent reduction in all injuries. New York City introduced a Vision Zero Plan in 2014 and has reduced crash-risk through a combination of lowered speed limits (20-25mph) across the city, street design, safety cameras and on-street enforcement which has resulted in a 28 per cent reduction in all road deaths and 48 per cent reduction pedestrian deaths.

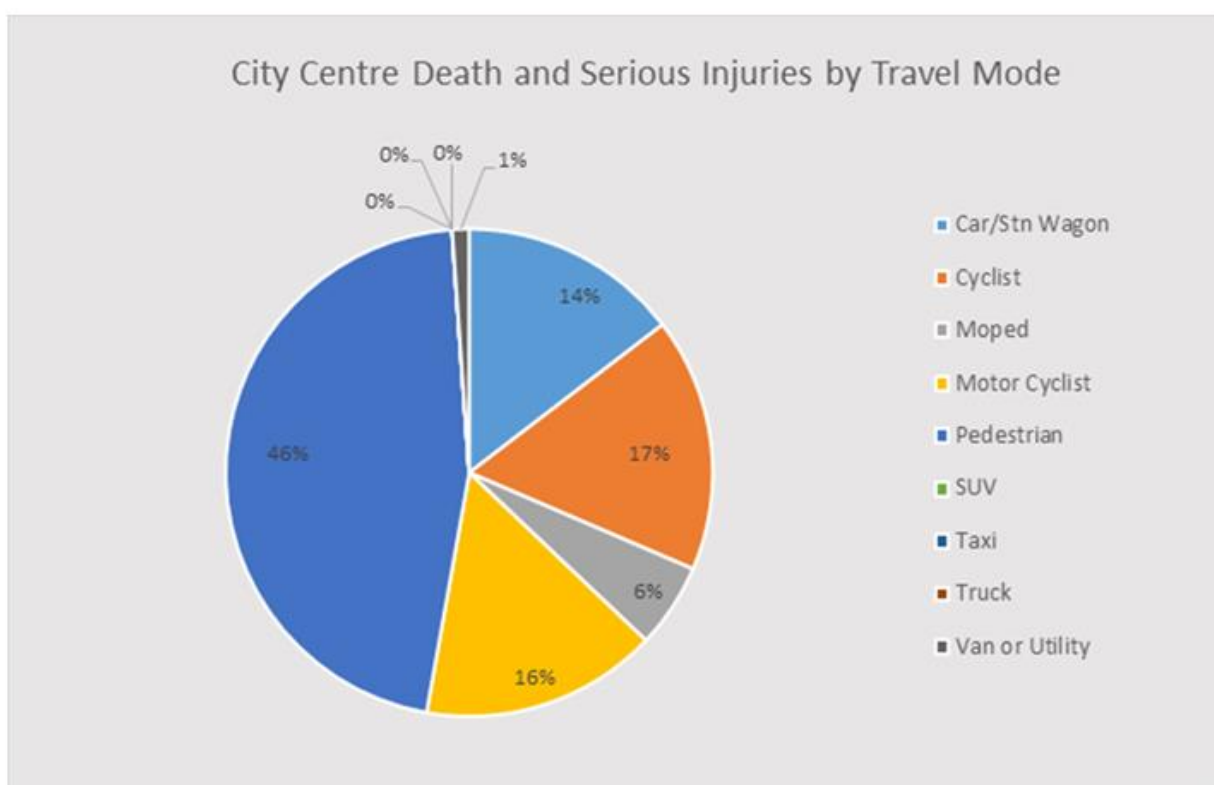
21. Whilst some people fear that reducing the speed limit in urban areas will dramatically increase journey times, research indicates this is not the case. In Christchurch journey times have not reduced significantly and business concerns about drop-off in trade have also not occurred. In New York journey times for all road users have improved.

## Tātaritanga me ngā tohutohu / Analysis and advice

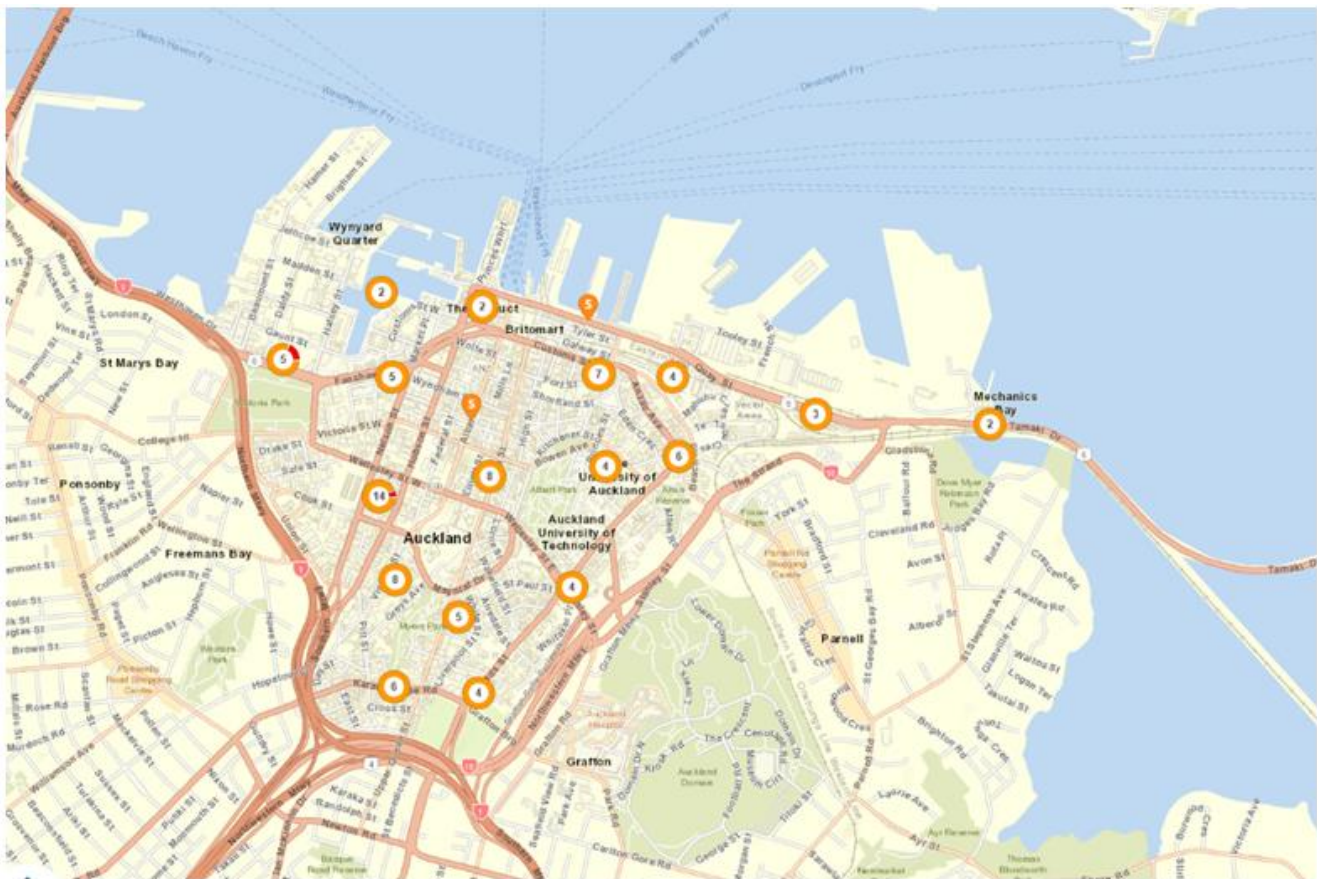
22. Auckland's death and serious injury rates have increased by 67 per cent from 486 in 2013 to 813 in 2017 as outlined in the table below.

Auckland region	2013	2014	2015	2016	2017
<b>Deaths</b>	48	36	52	46	64
<b>Serious injuries</b>	438	447	568	618	749

23. The city centre represents 2.2 per cent of all DSI in Auckland, and 84 per cent of city centre DSI involved vulnerable road users.



24. Road crashes are investigated by New Zealand Police and then mapped by NZTA. The map below highlights locations of the Auckland city centre's DSI from 2013 to 2017. Red indicates deaths, while orange indicates serious injuries.



25. Road death and serious injury locations are also analysed to identify high-risk intersections and routes that have a high collective crash-risk (number of deaths and serious injuries per kilometre or intersection) and personal crash-risk (rate of deaths and serious injuries per vehicle kilometres travelled). This methodology identifies a small percentage of the network carrying a large percentage of the road trauma.

<b>High risk intersections in the city centre</b>				
Ranked in the top 100 high risk intersections in the Auckland Region (2012-2016 data)				
<b>Regional Ranking</b>	<b>Route Name</b>	<b><sup>1</sup>Collective Crash Risk</b>	<b><sup>2</sup>Active Road User Collective Crash Risk</b>	<b>Motorcycle Collective Crash Risk</b>
2	Karangahape Road / Mercury Lane	High	High	Medium
3	Upper Queen Street / Karangahape Road	High	High	High
13	Tangihua Street / Tinley Street	High	Medium High	Medium High
18	Symonds Street / Grafton Bridge	High	High	Medium
28	Gundry Street / Karangahape Road	Actual High	Low Medium	High
32	Fanshawe Street / Halsey Street	High	Low Medium	High
33	Short Street / Anzac Avenue	Actual High	High	Low
48	Symonds Street / Wellesley St East	High	High	Medium High

<sup>1</sup> Collective Crash Risk = total number of fatal and serious crashes or estimated deaths and serious injuries within 50metres of an intersection or within 1kilometre of a corridor in a 5-year crash period

<sup>2</sup> Active Road Users (ARU) = Pedestrians and Cyclists

49	Symonds Street / City Road	High	Medium High	Medium High
55	Symonds Street / St Martins Lane	High	Medium High	Medium High
63	Vincent Street / Hopetoun Street	High	Medium High	Low Medium
64	Cook Street / Hobson Street	High	Medium High	Low Medium
74	Victoria Street West / Hardinge Street	High	Medium High	Medium High
83	Wellesley Street West / Sale Street	Actual High	Medium High	Medium High
84	Wellesley Street West / Albert Street	Medium High	Medium High	Low Medium
85	Vincent Street / Cook Street	Medium High	Medium High	Medium
87	Cook Street / Nelson Street	Medium High	Medium	Medium High
92	East Street / Karangahape Road	Medium High	Medium High	Medium
98	Victoria Street West / Queen Street	Medium High	High	Low

High risk routes in the city centre				
Ranked in the top 100 high risk routes in the Auckland Region (2012-2016 data)				
Regional Ranking	Location	<sup>3</sup> Collective Crash Risk	<sup>4</sup> Active Road User Collective Crash Risk	Motorcycle Collective Crash Risk
1	Karangahape Road	High	High	High
3	Queen Street	High	High	High
4	Symonds Street	High	High	High
7	Hobson Street	High	High	Medium High
11	Victoria Street West	High	High	High
18	Beach Road	High	High	High
21	Albert Street	High	High	High
24	Wellesley Street West	High	High	High
41	Nelson Street	High	Medium High	High
44	Anzac Avenue	Medium High	High	High
61	Symonds Street	Medium High	High	Medium
65	Kitchener Road	Medium High	Medium	High
81	Grafton Road	Medium High	Medium	High
84	Quay Street	Medium High	Medium	High

26. Auckland Transport has embarked on a programme to reduce the incidence of death and serious injury by 60 per cent in a 10-year period. The initial three-year target is to reduce the incidence of death and serious injury by up to 18 per cent from the 2018/2019 financial year.

<sup>3</sup> Collective Crash Risk = total number of fatal and serious crashes or estimated deaths and serious injuries within 50metres of an intersection or within 1kilometre of a corridor in a 5-year crash period

<sup>4</sup> Active Road Users (ARU) = Pedestrians and Cyclists

27. The tables below highlight some of the engineering improvements, speed management changes, and behaviour change activities that will be delivered in the city centre as part of the 2018-2021 Auckland Transport programme.

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### Minor safety improvement projects 2018/2019

Princes Street - Eden Crescent intersection	New raised zebra crossings with kerb build-outs.
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### Pedestrian safety and cycling network expansion 2018-2021

Wellesley Street East footpath	New footpath from Princes Street to Grafton Road.
Karangahape Road Upgrade	Construction programmed to begin in February 2019.
Victoria Street Cycleway	Construction programmed to begin in 2019.
Cook Street	Pedestrian crossing facilities (including Drake Street, Sale Street and Cook Street).
Hobson Street between Wellseley and Cook	Signalised mid-block crossing for pedestrians.

### Speed management investigations 2018/2019

City centre – 30km/hr within an area approximately bounded by the motorways

### Road safety and school travel behaviour activities 2018-19

Travelwise school programme
Driver distraction campaign and checkpoints with New Zealand Police.
Motorcycle and scooter safety workshops.
Safe speed awareness campaign.
Red light running campaign and Educational events with New Zealand Police.
Deliver a learner license community programme.
Cycle training and bikes in schools.

## Ngā whakaaweawe ā-rohe me ngā tirohanga a te poari ā-rohe / Local impacts and local board views

28. Auckland Transport staff presented to the Waitemātā Local Board on road safety, and the speed management programme for the city centre in July and September 2018.
29. The programme will provide significant benefit to local people, in setting survivable speed limits for the city centre.

## Tauākī whakaaweawe Māori / Māori impact statement

30. Auckland Transport is committed to meeting its responsibilities under Te Tiriti o Waitangi, and its broader legal obligations in being more responsible or effective to Māori.
31. Māori residents in Auckland experience a much higher risk of road traffic injury than other ethnicities, across all age groups.
32. Māori are also over-represented in road deaths and serious injuries related to speed, making up 22 per cent of all speed-related DSi.