
Auckland Transport's Road Safety and Speed Management programme for Kaipātiki Local Board 2018-21

File No.: Attachment E

Te take mō te pūrongo / Purpose of the report

1. To update the Kaipātiki Local Board on Auckland Transport's (AT) Road Safety and Speed Management Programme.

Whakarāpopototanga matua / Executive summary

2. Auckland has a serious problem with people needlessly dying and being seriously injured on our roads and streets. In 2017, 64 people died on our roads and an additional 749 were seriously injured.
3. Road Safety performance in the Kaipātiki Local Board area has also worsened over the last five years due to various factors. These include economic and population growth, new demands on the unforgiving high speed rural road network, and growth in people walking and on motorcycles.
4. The Tāmaki Makaurau Road Safety Governance Group (TMRSG) has been established to provide leadership for improving safety and reducing the high number of death and serious injuries (DSi) on the Auckland road network. This group has a strong national and regional mandate to drive safety outcomes and the partners include AT, NZ Police, NZ Transport Agency (NZTA), Accident Compensation Corporation (ACC), Auckland Council (AC), Auckland Regional Public Health (ARPH) and Ministry of Transport (MoT).
5. As AT moves to the Vision Zero approach, it is also proposing an ambitious safety infrastructure acceleration programme estimated to reduce DSi by up to 18% over an initial three year period. It will work closely with its partners to deliver on the Vision Zero goal for Auckland.
6. This follows the New Zealand's Government's commitment to deliver a new road safety strategy as outlined in the Government Policy Statement on Land Transport.
7. There is a strong focus on safety at AT. The Board and Executive Leadership Team have recently endorsed an increased three-year investment in road safety engineering, a Speed Management Plan and behaviour change activities to reduce road trauma, including in the Kaipātiki Local Board area. The Auckland Road Safety Capital Programme 2018-28 is a systemic response to improve road safety outcomes and create a more forgiving road network. Investment will be lifted by an additional \$550 million over ten years. The Regional Fuel Tax will allow AT to improve a larger number of high-risk intersections and routes by installing roundabouts, red-light cameras, and segregated facilities. The combined impact of these accelerated programmes is estimated to reduce DSI by 60% over ten years from the 2017 baseline, as well as contribute towards additional congestion reduction benefits and increased health and environment benefits. Our aspiration is to move towards zero deaths or serious injuries on Auckland's roads.
8. One of the fastest and most cost effective ways to reduce road trauma is to implement speed reduction measures. AT is currently working to identify areas and roads around the Auckland region to set lower speed limits. These roads will be added to the Schedule of Speed Limits and drafted into the bylaw. The bylaw will be consulted on Auckland-wide (consultation on the entire programme of works for the Auckland region at a strategic level). Post-consultation, the bylaw will need to be approved by AT's Board, after which the new lower speed limits will become legally enforceable.

9. The primary road safety focus areas in the Kaipātiki Local Board area for the next three years include safe intersections and roads, safe speeds, vulnerable road user safety (pedestrians and people on bikes), and sober driving. These areas will be addressed through a combined annual programme of investment in safety engineering, speed management, education and training of road users and enforcement of safe road user behaviour with NZ Police.
10. A senior AT representative will present a PowerPoint presentation at a workshop with the local board.

Ngā tūtohunga / Recommendation/s

That the Kaipātiki Local Board:

- a) receives the report entitled Auckland Transport's Safety and Speed Management programme 2018-21.

Horopaki / Context

11. 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 costs. More important, the after-effects of road trauma on the victims' whānau, friends and community are devastating.
12. AT's long-term Vision Zero goal is about being more people-centered and emphasises that no loss of life on our road network is acceptable. Road designers and operators need to take greater responsibility for preventing road trauma.
13. 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 people dying or being seriously injured.
14. Speed management is a central part of the Vision Zero approach for reducing speeds to survivable levels for road users, particularly on unforgiving rural roads and in urban streets where there are large numbers of vulnerable road users. For individuals, the risks of a severe crash might seem small, but from a societal point of view there are substantial safety gains from reducing average speeds on streets.
15. Speed management is a low-cost area-wide treatment that will deliver substantial savings including reduced deaths and serious injuries, increased walking, cycling and public transport use, and increased public health benefits. Speed is currently responsible for 30% of all road deaths and serious injuries, and small reductions in average speeds of 1% or a few kilometres per hour can reduce the risk and severity of crashes by up to 4% (Speed and Crash Risk, ITF, 2018).
16. 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 hit by a vehicle travelling at 30km/hr, a person walking has a 90% chance of surviving when compared with only a 20% chance of surviving when hit at 50km/hr. Speed also determines the braking or stopping distance and the time it takes for the driver to react to take evasive measures. A small increase in travel speed corresponds to a relatively large change in stopping distance. The higher the speed the longer the braking or stopping time.
17. AT and its partners have a Road Safety Action Plan (RSAP) in place that identifies key actions from partners for addressing Road Safety Focus Areas in the Kaipātiki Local Board area, including speed management. The RSAP is developed collaboratively by AT, NZ Police, Accident Compensation Corporation and NZTA. It covers the NZ Police districts of

Auckland City, Waitematā and Counties Manukau. The document is updated quarterly and a new one for the current financial year is being developed.

18. AT is investing in an ambitious road safety programme including safety engineering, speed management and behaviour change over the next ten years that will contribute towards a 60% reduction in road trauma across Auckland.

Tātaritanga me ngā tohutohu / Analysis and advice

19. Auckland's DSI rates have increased by 67% from 486 in 2013 to 813 in 2017 as outlined in the table below.

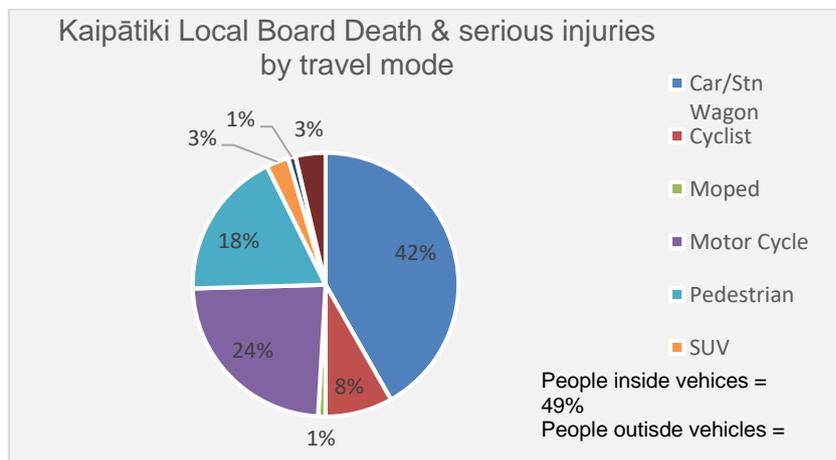
Auckland Region	2013	2014	2015	2016	2017
Deaths	48	36	52	46	64
Serious injuries	438	447	568	618	749

20. Kaipātiki Local Board road deaths and serious injuries (DSi) have increased 93% from 2013 to 2017 and made up 3% of Auckland's total DSI in 2017. Kaipātiki Local Board had the 15th highest level of DSI among all local boards in 2017 and the sixth highest rate of serious road injuries per capita, out of all local boards in 2016.



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

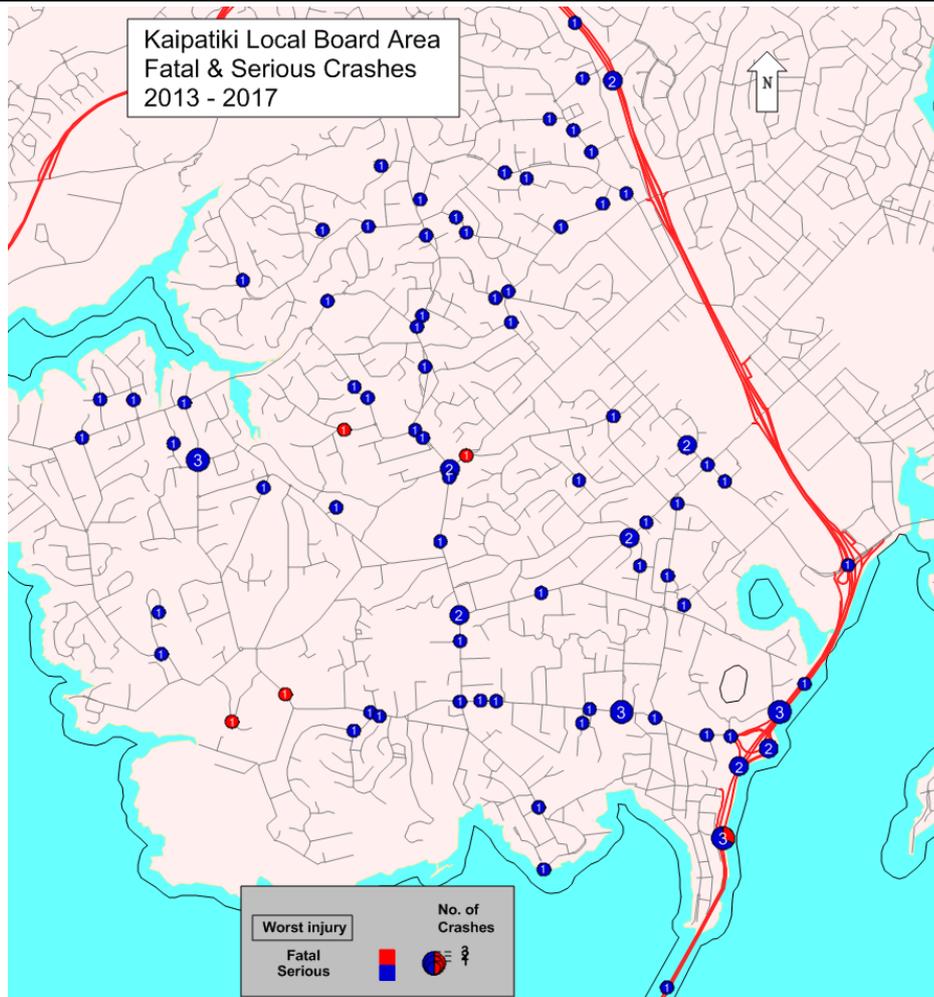
21. In the Kaipātiki Local Board area 51% of all DSI involved vulnerable road users.



22. AT's Road Safety Action Plan for 2018-19 covers the Kaipātiki Local Board area. Below is an excerpt from the action plan showing five-year DSi trends from 2013 to 2017 for the Kaipātiki Local Board area. The primary safety intervention measures include aspects from the Safe Systems approach: improving the safety of the roads and intersections, improving safety for people on motorcycles and people walking, speed management and enforcement of sober driving (shaded in red in the table below). Please note that DSi Focus Areas overlap i.e. one DSi can appear in multiple focus areas.

Road Safety Focus Areas for Kaipātiki 2018-19											
Focus areas		Five year Road Death and Serious Injury (DSi) trend						Interventions			
Increase Focus	Safe System Management	2013	2014	2015	2016	2017	Total	Waitematā Police Road Safety Action Plan.			
	Safe Intersections	4	9	7	10	11	41	Safety engineering, enforcement and campaigns.	Safety engineering, enforcement and campaigns.	Safety engineering, enforcement and campaigns.	Safety engineering, enforcement and campaigns.
	Safe Roads	13	15	18	27	22	95	Safety engineering, enforcement and campaigns.			
	Pedestrian Safety	2	2	4	7	5	20	Travelwise zschools, walking school bus routes, safe crossings and Safer communities.			
	Motorcycle Safety	5	5	2	10	5	27	Safety engineering, checkpoints, enforcement and campaigns.			
	Safe Speed	1	1	5	4	8	19	Speed management, education and enforcement campaigns.			
Maintain Focus	Alcohol/Drugged Driving	1	3	2	5	4	15	Education and enforcement campaigns.			
	Young Drivers	0	0	3	5	2	10	Young driver training, education and enforcement campaigns.			
	Cycle Safety	1	2	2	2	2	9	School cycle training.			
Emerging Focus	Restraints	0	0	1	1	2	4	Restraint education and enforcement, including child restraints.			
	Older Road Users	0	1	3	3	1	8	Development of a 2018-21 programme.			
	Distraction and Fatigue	1	3	1	5	2	12	Safe travel stop education and enforcement campaigns.			
	Maori	2	0	6	5	2	15	Marae-based learner licence workshops, speed management Hui.			

23. The table also highlights how AT and its partners combine their resources and programmes to address high-risk areas and road user groups through a combination of safety engineering, speed management, education, training and enforcement activities. While a majority of these activities are planned, the action plan is revised quarterly to be more responsive to emerging trends.
24. Road crashes are investigated by NZ Police and then mapped by NZTA across the Kaipātiki Local Board. The map highlights the location of Kaipātiki fatal and serious crashes from 2013 to 2017.



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 DSi per km or intersection) and personal crash-risk (rate of DSi per vehicle kilometres travelled). This methodology identifies a small percentage of the network carrying a large percentage of the road trauma.
26. Within the Kaipātiki Local Board boundaries there are four high-risk intersections and three high-risk routes (based on 2012 to 2016 data). All of the high-risk routes are also high-risk for motorcycles. All high-risk routes and intersections currently have 50 kph speed limits.

High Risk Routes in the Kaipātiki Local Board Area ranked in the Top 100 High Risk Routes in Auckland Region (2012-2016 data)					
Regional Ranking	Route Name	Speed Zone	Collective Crash Risk	Active Road User Collective Crash Risk	Motorcycle Collective Crash Risk
31	Onewa Road	50	High	Medium	High
78	Wairau Road (150m west of Woodall Place to 225m north of Northcote Road)	50	Medium High	Medium	High

85	Glenfield Road (High Road to Pupuke Road)	50	Medium High	Medium	High
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High Risk Intersections in the Kaipātiki Local Board Area ranked in the Top 100 High Risk Intersections in Auckland Region (2012-2016 data)					
Regional Ranking	Location	Speed Zone	¹ Collective Crash Risk	² Active Road User Collective Crash Risk	Motorcycle Collective Crash Risk
26	Bentley Avenue / Chartwell Avenue	50	High	Low Medium	Medium
44	Wairau Road / Tristram Avenue	50	High	Low	Low Medium
91	Tristram Avenue/ Crofffield Lane	50	Medium High	Medium	Low Medium
96	Birkenhead Avenue /Highbury Bypass	50	Medium High	Medium High	Medium

27. AT has embarked on a bold programme to reduce the incidence of death and serious injury by 60% in a 10-year period. The initial three-year target is to reduce the incidence of death and serious injury by up to 18% from the 2018-19 financial year.
28. The tables below highlight some of the engineering improvements, speed management changes, and behaviour change activities that will be delivered in the Kaipātiki Local Board area in 2018-19 as part of the 2018-21 AT programme.

Safety engineering improvement projects 2018-19	
Hamilton Place / Chivalry Road	Glenfield School - intersection safety improvements.
Chartwell Ave / Bentley Ave	Glenfield School – intersection safety improvements.
Kauri Glen Road	Northcote College pedestrian safety facilities.
Rodney Road / Queen street	Pedestrian zebra crossing and traffic calming measures.
Chivalry Road	Glenfield School - Speed tables x 2.
51 Birkenhead Ave, Birkenhead	Pedestrian Zebra Crossing.
1 Hammond Place, Birkenhead	Pedestrian Zebra Crossing.
12 Compton St, Hillcrest	Pedestrian Kea Crossing.
5 Sylvia Road, Hillcrest	Pedestrian Kea Crossing.

¹ Collective Crash Risk = total number of fatal & 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

² Active Road Users (ARU) = Pedestrians and Cyclists

Other safety improvement projects in 2018-2019

100 Hinemoa Street, Birkenhead	Raised pedestrian zebra crossing between Glade Place and Rugby Road
Archers Road / Coronation Road intersection, Glenfield	Roundabout to slow down vehicles and improve traffic flow. Speed cushions, central islands and side islands on approaches to the roundabout to reduce speed. Pedestrian refuge island on Coronation Road to provide a safe crossing point for pedestrians.
Wairau Road / View Road intersection, Wairau Valley	Signalisation of the intersection to reduce delays for vehicles turning into and out of View Road. Installation of pedestrian signals on all four legs to provide safe crossing facilities.
Bruce Street – Onewa Road intersection, Northcote	Installation of a new side island and modification to the shape of the central island on Bruce Street to prevent cars from illegally turning right onto Onewa Road.

Speed management investigations 2018-19

Investigation into safe and appropriate speeds on local roads

Road safety and school travel behaviour activities 2018-19

17 active Travelwise School Programmes and 30 active active walking school buses, along with re-engaging inactive Travelwise schools and active walking school buses.

Driver Distraction Campaign.

Motorcycle and scooter safety workshops.

Safe speed awareness campaign.

Red light running campaign and educational events with NZ Police.

Drive drink free campaign and compulsory breath testing operations with NZ Police.

Cycle training and bikes in schools.

29. Speed has an impact on both the likelihood of a crash occurring and the severity of injury, should a crash occur.
30. Therefore, one of the fastest and most cost effective ways to reduce road trauma is to implement speed reduction measures. Research shows that there is a very strong relationship between speed and road safety. It is difficult to think of any other risk factor that has a more powerful impact on crashes or injuries than speed.
31. A Vision Zero or Safe System speed is defined as the maximum survivable speed upon impact where the chance of death is less than 10%.
32. Speeds of 30 km/h are the maximum any vulnerable or unprotected road user (pedestrians and people on bikes) can withstand without sustaining death or serious injuries. Although this speed is common on local roads in Europe, it is uncommon in New Zealand.
33. Speeds over 50km/h dramatically increases the chances of death and serious injury in the event of a crash between two vehicles at an intersection.
34. Contrary to popular belief, the majority of Auckland road deaths and serious injuries occur on 50km/h urban roads, involving vulnerable road users.
35. While a smaller percentage of speed related crashes occur on rural roads, the ones that do happen are more likely to result in death.
36. Many people fear that reducing the speed limit in urban areas will dramatically increase journey times. However, research shows that lower speed limits only marginally increased

journey times. An NZTA study tracked travel times along six different routes in New Zealand. It found that when driving at the maximum posted speed limit wherever possible, drivers arrived at their destination as little as 1.08 minutes faster than when they drove 10km/h slower.

Tauākī whakaaweawe Māori / Māori impact statement

37. AT is committed to meeting its responsibilities under Te Tiriti o Waitangi, and its broader legal obligations in being more responsible or effective to Māori.
38. Māori residents in Auckland experience a much higher risk of road traffic injury than other ethnicities, at all age groups.
39. Māori are also over-represented in road deaths and serious injuries related to speed, making up 22% of all speed-related DSI.
40. The Te Ara Haepapa Road Safety programme is AT's response to reduce death and serious injuries involving Māori and Rangatahi Māori. The programme is intended to focus delivery through whānau, hapū, iwi, and marae, kohanga reo, kura kaupapa Māori and Māori communities.
41. Kaipātiki Local Board area has seen an upward trend in Māori-related DSI and some Māori communities will be engaged with the Te Ara Haepapa Road Safety programme.

Ngā ritenga ā-pūtea / Financial implications

42. There are no financial implications for the local board.

Ngā raru tūpono / Risks

43. There are no risks for the local board.

Ngā koringa ā-muri / Next steps

44. AT welcomes input from the Kaipātiki Local Board to help address the road safety challenge that is generating such a significant burden on road users and their families.
45. Getting aligned with our partners and stakeholders (Local Boards, Councillors, Ministers, MoT, NZ Transport Agency, NZ Police, AA, Walk Auckland, Bike Auckland, Road Freight Association to name a few) is imperative for the success of the AT road safety and speed management programme in the Kaipātiki Local Board area.
46. Aucklanders and Local Boards have indicated their support for an increased road safety and speed management programme in the recent Regional Land Transport Programme (RLTP) consultation, to help address Aucklands concerning increase in road trauma.
47. The RLTP has committed to investing in an accelerated speed management programme, of which the first year will include treatment on approximately 800 km of the network. This will require expedient delivery by AT and a more efficient process for changing speed limits.
48. Reducing speed limits is a sensitive topic, with expectations from some stakeholders that AT should deliver rapid changes to speed limits across Auckland, while others in the community may not like the speed limit reductions and speed calming measures.
49. AT will do this by talking about the unacceptable loss of human life and focus on road safety with our communities, stakeholders and the media.
50. This will include running a publicity awareness campaign followed by a consultation process on the Speed Limit Bylaw. The campaign will aim to change the road safety conversation by educating Aucklanders that lower speeds provide survivable crash outcomes as well as enabling our kids to walk and cycle to school, a more liveable streets environment, and many health and environmental benefits.

51. Before and during the awareness campaign, AT will engage with our key stakeholders (NZTA, NZ Police, AA) to identify roads that will be affected by the speed limit changes.
52. The bylaw will be consulted on Auckland-wide (consultation on the entire programme of works for the Auckland region at a strategic level). Due to the urgent imperative to reduce, the number of deaths and serious injuries AT will in many cases not consult on each individual element of the safety improvement plan.
53. Once the bylaw has been approved by AT's Board, then the speed limits become legally enforceable. AT will continue to discuss in partnership with local boards on all safety and speed limit changes in their area.

Ngā tāpirihanga / Attachments

There are no attachments to this report.

Ngā kaihaina / Signatories

Authors	Andrew Bell, Strategy and Performance Team Leader, Auckland Transport Michael Brown, Road Safety Engineering Team Leader, Auckland Transport
Authorisers	Randhir Karma, Group Manager Network Management and Safety, Auckland Transport