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

File No.: <<leave blank - Infocouncil will insert this when the report is saved in HPRM>>

Te take mō te pūrongo / Purpose of the report

1. To update the Ōrākei 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.
- Road Safety performance in the Ōrākei 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 road network, and growth in people walking, cycling 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 per cent over an initial three year period. It will work closely with its partners to deliver on the Vision Zero goal for Auckland. 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.
- 6. 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 Ōrākei Local Board area.
- 7. 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.
- 8. 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 per cent 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.
- 9. 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 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.

10. The primary road safety focus areas in the Ōrākei 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 are 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.

Ngā tūtohunga / Recommendation/s

That the Ōrākei Local Board:

a) receive 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 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 importantly, 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 per cent of all road deaths and serious injuries, and small reductions in average speeds of 1 per cent or a few kilometres per hour can reduce the risk and severity of crashes by up to 4 per cent (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 has a 90 per cent chance of surviving when compared with only a 20 per cent 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 Ōrākei 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.

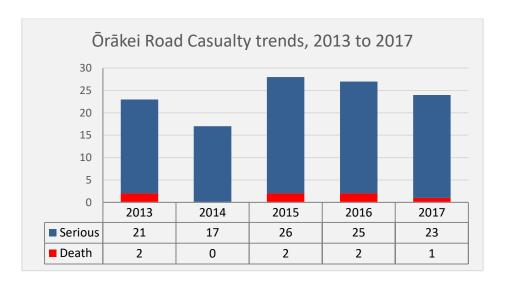
18. AT is investing in an ambitious road safety programme including safety engineering, speed management and behaviour change over the next ten years that will contribute towards a 60 per cent reduction in road trauma across Auckland.

Tātaritanga me ngā tohutohu / Analysis and advice

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

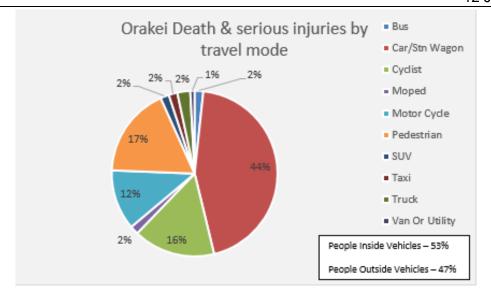
Auckland Region	2013	2014	2015	2016	2017
Deaths	48	36	52	46	64
Serious injuries	438	447	568	618	749

20. Ōrākei Local Board road deaths and serious injuries (DSi) have increased 4 per cent from 2013 to 2017 and made up 3 per cent of Auckland's total DSi in 2017. While Ōrākei Local Board achieved zero road deaths in 2014, it had the 17th highest level of DSi among all local boards in 2017 and the 15th 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 Ōrākei Local Board area 47 per cent of all DSi involved vulnerable road users.

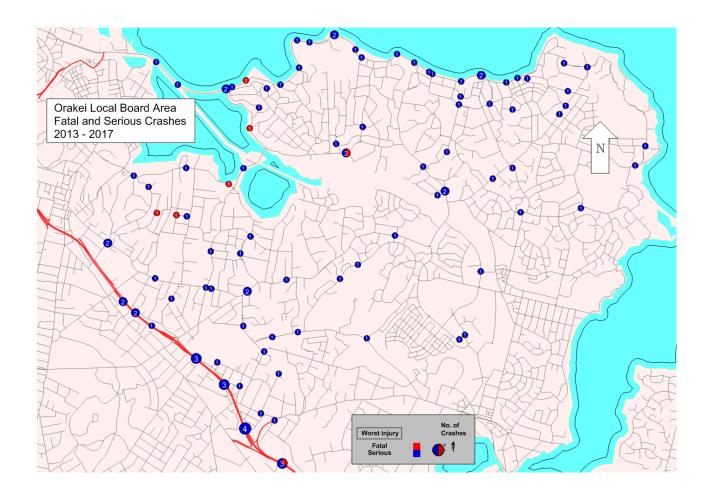


22. AT's Road Safety Action Plan for 2018/2019 covers the Ōrākei Local Board area. Below is an excerpt from the action plan showing five-year DSi trends from 2013 to 2017 for the Ōrākei Local Board area. The primary safety intervention measures include aspects from the Safe Systems approach: improving the safety of the roads and intersections, improving safety for vulnerable road users, speed management and alcohol/drugged driving prevention (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 Ōrākei 2018/19								
F	Focus areas Five year Road Death and Serious Injury (DSi) trend Interventions							
sn	Safe System Management	2013	2014	2015	2016	2017	Total	Waitematā Police Road Safety Action Plan.
Increase Focus	Safe Intersections	6	6	8	6	3	29	Safety engineering, enforcement and campaigns.
ease	Safe Roads	22	14	25	17	20	98	Safety engineering, enforcement and campaigns.
Incr	Pedestrian Safety	2	5	6	3	5	21	Travelwise schools, walking school bus routes, safe crossings and Safer communities.
	Motorcycle Safety	2	4	5	2	3	16	Safety engineering, checkpoints, enforcement and campaigns.
	Safe Speed	13	2	4	6	8	33	Speed management, education and enforcement campaigns.
ain IS	Alcohol/Drugged Driving	11	3	6	0	4	24	Education and enforcement campaigns.
Maintain Focus	Young Drivers	1	2	2	2	4	11	Young driver training, education and enforcement campaigns.
<	Cycle Safety	3	4	6	3	3	19	School cycle training.
Focus	Restraints	1	2	2	4	1	10	Restraint education and enforcement, including child restraints.
ig Foc	Older Road Users	0	1	2	3	2	8	Development of a 2018-21 programme.
Emerging	Distraction and Fatigue	1	2	1	0	4	8	Safe travel stop education and enforcement campaigns.
Em	Maori	3	1	0	5	2	11	Marae-based learner license 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 Ōrākei Local Board. The map highlights locations of Ōrākei fatal and serious crashes from 2013 to 2017 where the majority were midblock (not at intersections) crashes.



- 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 Ōrākei Local Board boundaries there is one high-risk intersection and four high-risk routes (based on 2012 to 2016 data). All of the high-risk routes are also high-risk for motorcycles. The high-risk intersection is also high-risk for Active road users (pedestrians and cyclists).

High risk routes in the Ōrākei Local Board area Ranked in the top 100 high risk routes in the Auckland Region (2012-2016 data)					
Regional Ranking	Route Name	Speed Zone	Collective Crash Risk	Active Road User Collective Crash Risk	Motorcycle Collective Crash Risk
16	Tamaki Drive (Ngapipi Road – Vale Street)	50	High	Medium High	High

29	Remuera Road (St Marks Road to Green Lane East)	50	High	Medium High	High
70	Tamaki Drive (Ngapipi Road – The Strand)	50	Medium High	Medium High	Medium High
88	Ngapipi Road	50	Medium High	Medium	High

Ranked	High risk lintersections in the Ōrākei Local Board area Ranked in the top 100 high risk intersections in the 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
25	Watene Crescent / Tamaki Drive	50	High	High	Medium

- 27. AT has embarked on a bold 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.
- 28. The tables below highlight some of the engineering improvements, speed management changes, and behaviour change activities that will be delivered in the Ōrākei Local Board area in 2018/2019 as part of the 2018-21 AT programme.

Safety engir	neering improvement projects 2018/2019
Intersection of Tamaki Drive / Watene Crescent, Ōrākei	Intersection safety improvement for cycle crashes.
Newton Road / Abbey Street intersection	Intersection safety improvement.
3 Averill Ave, Kohimarama (on Tamaki Drive)	Pedestrian zebra crossing.
297 Tamaki Drive, Kohimarama	Pedestrian zebra crossing.
40 Kelvin Road, Remuera	Pedestrian zebra crossing.
72 Shore Road, Remuera	Pedestrian zebra crossing.
128D Main Hwy, Ellerslie	Pedestrian zebra crossing.
37 Tamaki Drive, Mission Bay	Pedestrian zebra crossing.
107 Kohimarama Road, Kohimarama	Pedestrian zebra crossing.
217 Riddell Rd, Glendowie	Pedestrian zebra crossing.
37 Waiatarua Road, Remuera	Pedestrian zebra crossing.

¹ 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

² Active Road Users (ARU) = Pedestrians and Cyclists

Page 6

8 Portland Rd, Remuera	Pedestrian zebra crossing.
o i ordana iva, ivemaera	r cacathan zebra crossing.

Other sa	Other safety improvement projects 2018/2019				
Tamaki Drive Pedestrian Facility near Kohimarama Road	Installation of pedestrian refuge island on Tamaki Drive.				
Meadowbank Road	Upgrade existing raised pedestrian crossing into a raised zebra crossing.				
St Johns Road	Two pedestrian refuge islands installed on St Johns Road.				
Kupe St/Takitimu Street/Te Arawa Street intersection	Intersection tightening, particularly northern end to reduce north/south crossing distance. Consider ped refuge island for east/west crossing.				
Bonnie Brae Road	Installation of a new splitter island on Bonnie Brae Road at intersection with Meadowbank Road.				
Dilworth Avenue	Pedestrian refuge island at intersection with Remuera Road.				

Pedestrian safety and shared path network expansion 2018/2019			
Tamaki Drive	Construction programmed to begin.		
Glen Innes to Tamaki Drive - Sections 2 and 4	Construction programmed to begin.		
Links to Glen Innes	Construction programmed to begin.		

Speed management investigations 2018/2019

Mission Bay Town Centre – 30km/hr speed limit with engineering measures to reduce traffic speeds and make it safer for vulnerable road users.

St Heliers Town Centre – 30km/hr speed limit with engineering measures to reduce traffic speeds and make it safer for vulnerable road users.

Road safety and school travel behaviour activities 2018/2019

20 active Travelwise school programmes and 14 active walking school buses, along with re-engaging inactive Travelwise schools and 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.

Child restraint checkpoints with NZ Police.

- 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 supported by the Safe System speed is defined as the maximum survivable speed upon impact where the chance of death is less than 10 per cent.
- 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 of 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. A 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, over all age groups.
- 39. Māori are also over-represented in road deaths and serious injuries related to speed, making up 22 per cent 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. Ōrākei 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 Ōrākei 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 Ōrākei 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 800km 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. 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.
- 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