

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

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Te take mō te pūrongo / Purpose of the report

1. To update the Upper Harbour 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 Upper Harbour 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 urban road network, and growth in vulnerable road users. Vulnerable road users are people walking, people on bikes, people on motorcycles, children and elderly.
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). 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. 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.
5. 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 Upper Harbour Local Board area.
6. 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.
7. The Regional Fuel Tax will enable this investment to improve a larger number of high-risk intersections and routes through 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.

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9. The primary road safety focus areas in the Upper Harbour Local Board area for the next three years include safe intersections and roads, safe speeds, vulnerable road user safety, young drivers 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.

Ngā tūtohunga / Recommendation/s

That the Upper Harbour Local Board:

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

Horopaki / Context

10. 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.
11. AT's long-term goal of Vision Zero is about being more people-centered and 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.
12. 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. These are the four pillars of the Vision Zero / Safe System approach.
13. 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.
14. 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, International Transport Forum, 2018).
15. 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 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.
16. 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 Upper Harbour Local Board area (see table in paragraph 21), 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, Waitemata and Counties Manukau. The

document is updated quarterly and a new one for the current financial year is being developed.

17. 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

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

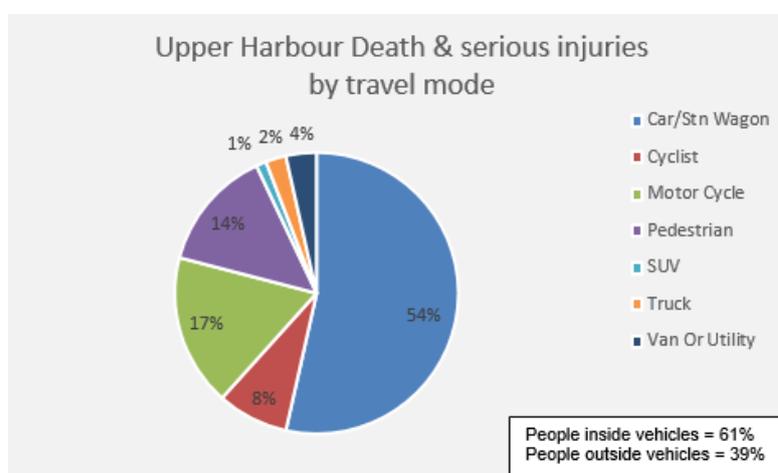
Auckland Region	2013	2014	2015	2016	2017
Deaths	48	36	52	46	64
Serious injuries	438	447	568	618	749

19. Upper Harbour Local Board road deaths and serious injuries (DSi) have increased 164% from 2013 to 2017 and made up 4% of Auckland's total DSi in 2017. While Upper Harbour Local Board achieved zero road deaths in 2015 and 2016, it had the 14th highest level of DSi among all local boards in 2017.



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

20. In the Upper Harbour Local Board area 39% of all DSi involved vulnerable road users.

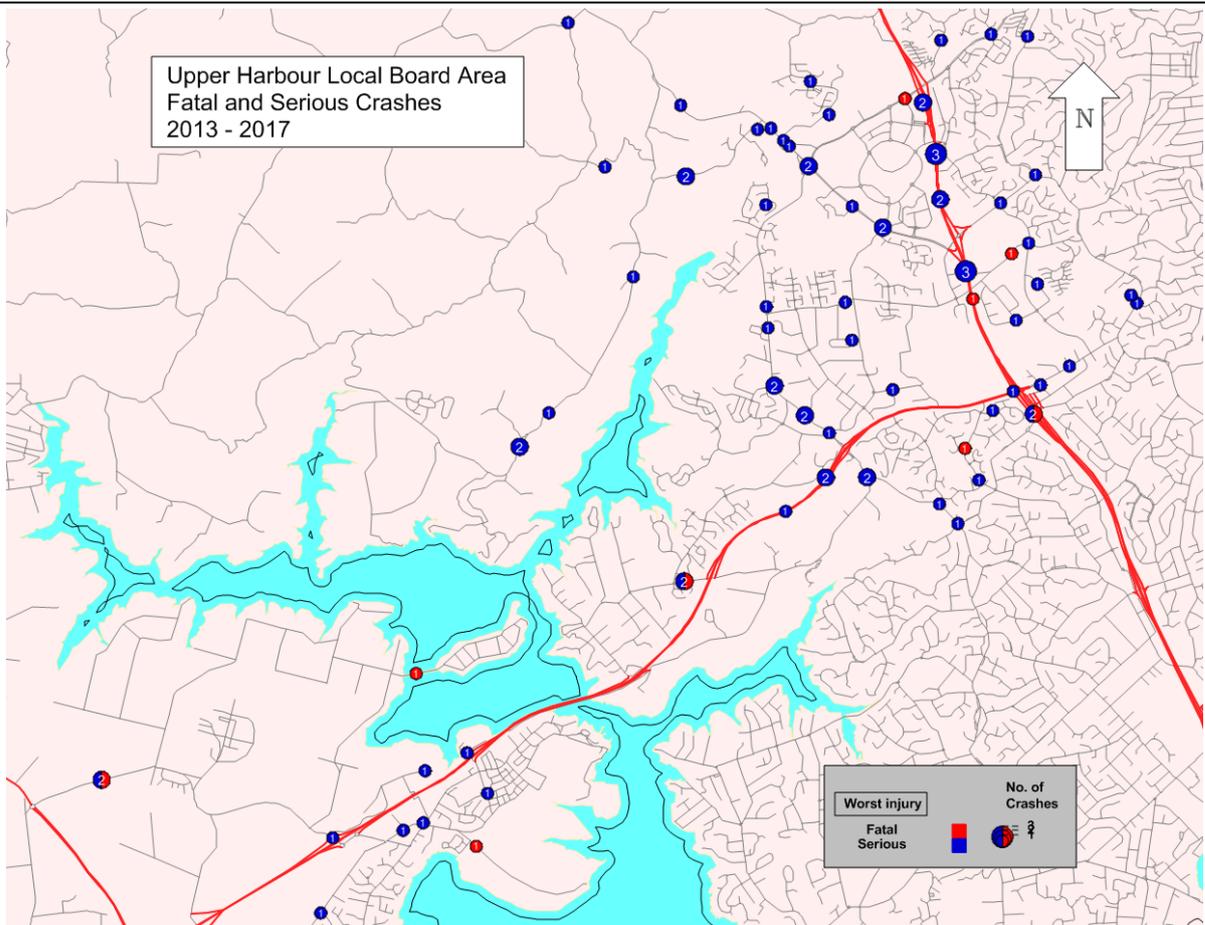


21. AT's Road Safety Action Plan for 2018-19 covers the Upper Harbour Local Board area. Below is an excerpt from the action plan showing five-year DSi trends from 2013 to 2017 for

the Upper Harbour 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 walking, cycling & motorcycling, speed management, young drivers 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 Upper Harbour 2018/19								
Focus areas		Five year Road Death & Serious Injury (DSi) trend						Interventions
Increase Focus	Safe System Management	2013	2014	2015	2016	2017	Total	Waitematā Police Road Safety Action Plan.
	Safe Intersections	5	5	5	6	10	31	Safety engineering, enforcement and campaigns.
	Safe Roads	8	6	15	9	18	56	Safety engineering, enforcement and campaigns.
	Pedestrian Safety	1	2	6	2	1	12	Travelwise schools, walking school bus routes, safe crossings and Safer communities.
	Motorcycle Safety	2	3	3	5	2	15	Safety engineering, checkpoints, enforcement and campaigns.
	Safe Speed	6	1	4	2	14	27	Speed management, education and enforcement campaigns.
Maintain Focus	Alcohol/Drugged Driving	3	0	4	3	12	22	Education and enforcement campaigns.
	Young Drivers	2	0	2	1	7	12	Young driver training, education and enforcement campaigns.
	Cycle Safety	2	0	2	0	3	7	School cycle training.
Emerging Focus	Restraints	0	1	0	1	2	4	Restraint education and enforcement, including child restraints.
	Older Road Users	1	4	1	0	1	7	Development of a 2018-21 programme.
	Distraction & Fatigue	0	1	0	3	6	10	Safe travel stop education and enforcement campaigns.
	Maori	0	0	2	1	2	5	Marae-based learner license workshops, speed management Hui.

22. 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.
23. Road crashes are investigated by NZ Police and then mapped by NZTA across the Upper Harbour Local Board. The map highlights locations of Upper Harbour fatal and serious crashes from 2013 to 2017 where a slight higher number were midblock (not at intersections) crashes on straight roads.



24. 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.
25. Within the Upper Harbour Local Board boundaries there are 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.
26. Within the Upper Harbour Local Board boundaries there is one high-risk intersection and one high-risk route (based on 2012 to 2016 data), which is also high-risk for motorcycles.

High risk routes in the Upper Harbour Local Board area					
Ranked in the top 100 high risk routes in the Auckland Region (2012-2016 data)					
Regional Ranking	Route Name	Speed Zone	¹ Collective Crash Risk	² Active Road User Collective Crash Risk	Motorcycle Collective Crash Risk
75	Constellation Drive (Home PI to East Coast Rd)		Medium High	Medium	High

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

High risk intersections in the Upper Harbour Local Board area					
Ranked in the top 100 high risk intersections in the Auckland Region (2012-2016 data)					
Regional Ranking	Location	Speed Zone	³Collective Crash Risk	⁴Active Road User Collective Crash Risk	Motorcycle Collective Crash Risk
46	Unsworth Drive / Albany Highway		High	Low	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.

The tables below highlight some of the engineering improvements, speed management changes, and behaviour change activities that will be delivered in the Upper Harbour Local Board area in 2018/19 as part of the 2018-21 AT programme.

Safety engineering improvement projects 2018-19

Greville Road / East Coast Road Intersection	Greville Road / East Coast Road Intersection Safety Improvements
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Other safety improvement projects 2018-19

Corinthian Drive	Raised zebras and refuges for construction in 2018/19
Ramp Road/Parkway Drive Intersection	Kerb build out and refuge island being investigated
Albany Highway/Appleby Road	Centre island cutback to extend right turn bay, to be constructed in 2018/19.
East Coast Road/Sunset Road/Constellation Drive	Investigating optimisation of intersections including potential signalisation of East Coast Rd / Sunset Rd
Albany Highway/Rothwell Ave	Signalisation of intersection on track for construction in 2018 calendar year

Pedestrian safety and shared path network expansion 2018-19

Spencer Road footpath	New footpath segments from 51 Spencer Rd. to Maidstone Pl.
Brigham Creek Road shared path	Conversion of footpath to shared path from 150 to 162 Brigham Creek Rd

Speed management investigations 2018-19

Investigation into safe and appropriate speeds on local roads

Road safety and school travel behaviour activities 2018-19

11 active Travelwise School Programmes & 12 active walking school buses, along with re-engaging inactive Travelwise schools and WSB buses.

Driver Distraction Campaign

Motorcycle and Scooter Safety Campaign

³ 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

⁴ Active Road Users (ARU) = Pedestrians and Cyclists

Safe speed awareness campaign

Red light running campaign and Educational events with police

Bikes in Schools

28. Speed has an impact on both the likelihood of a crash occurring and the severity of injury, should a crash occur.
29. 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.
30. 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%.
31. 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.
32. 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.
33. Contrary to popular belief, the majority of Auckland road deaths and serious injuries occur on 50km/h urban roads, involving vulnerable road users.
34. While a smaller percentage of speed related crashes occur on rural roads, the ones that do happen are more likely to result in death.
35. 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

36. 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.
37. Māori residents in Auckland experience a much higher risk of road traffic injury than other ethnicities, at all age groups.
38. Māori are also over-represented in road deaths and serious injuries related to speed, making up 22% of all speed-related DSI.
39. 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.
40. Upper Harbour 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

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

Ngā raru tūpono / Risks

42. Risks include reputation and continuing road trauma in the Upper Harbour Local Board area. If the accelerated road safety programme and speed management programme are not

championed or supported by the Upper Harbour Local Board it may be challenging to implement unpopular safety and speed management projects that could reduce community road trauma.

Ngā koringa ā-muri / Next steps

43. AT welcomes input from the Upper Harbour Local Board to help address the road safety challenge that is generating such a significant burden on road users and their families.
44. 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 Upper Harbour Local Board area.
45. 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.
46. 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.
47. 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.
48. 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.
49. This will include running a publicity awareness campaign followed by a consultation process on the Speed Limit Bylaw.
50. 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.
51. Once those roads have been identified, they will be added to the Schedule of Speed Limits and drafted into the bylaw.
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

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