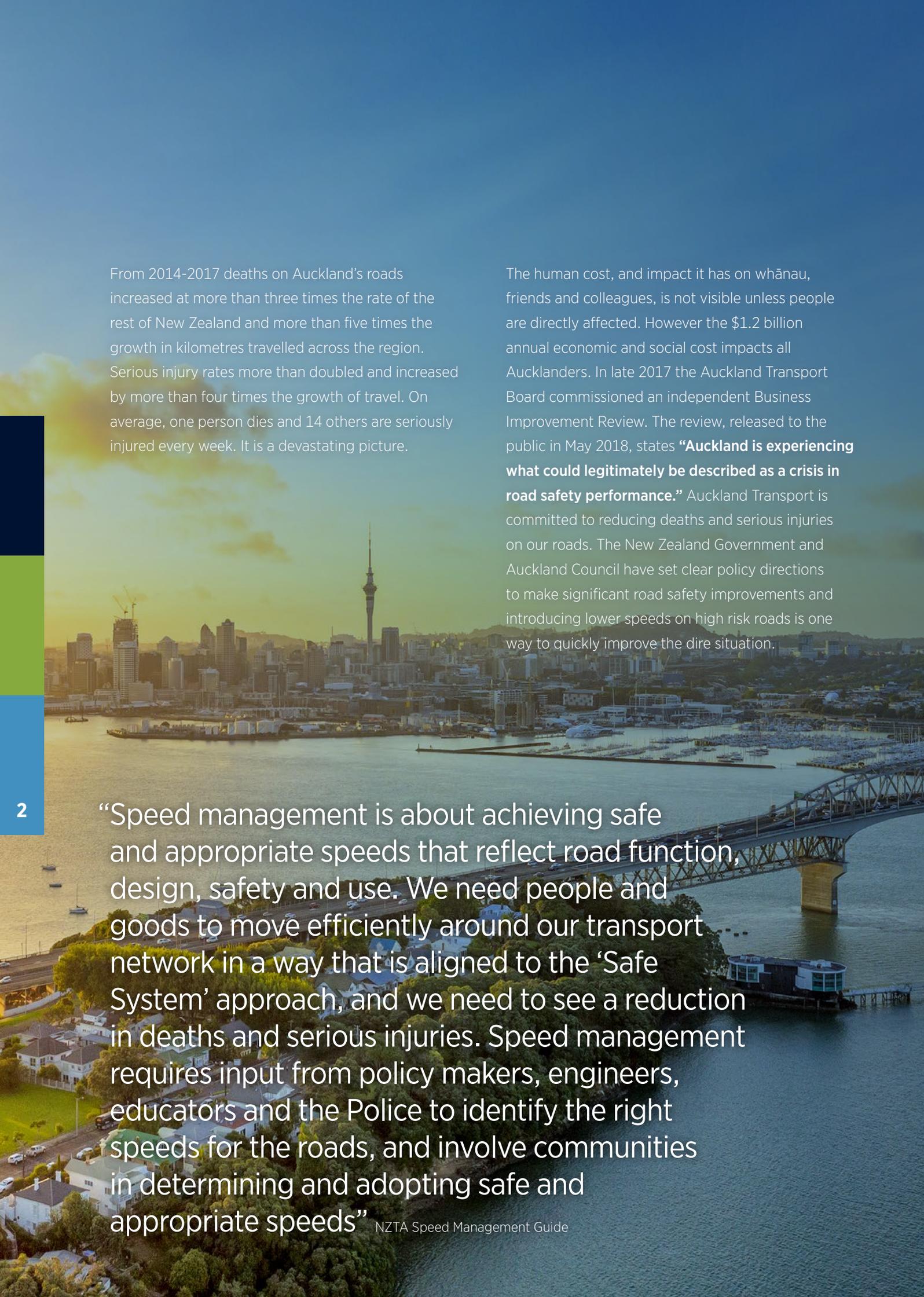


Summary of Local Board and Stakeholder Feedback

SPEED LIMITS BYLAW
2019





From 2014-2017 deaths on Auckland's roads increased at more than three times the rate of the rest of New Zealand and more than five times the growth in kilometres travelled across the region. Serious injury rates more than doubled and increased by more than four times the growth of travel. On average, one person dies and 14 others are seriously injured every week. It is a devastating picture.

The human cost, and impact it has on whānau, friends and colleagues, is not visible unless people are directly affected. However the \$1.2 billion annual economic and social cost impacts all Aucklanders. In late 2017 the Auckland Transport Board commissioned an independent Business Improvement Review. The review, released to the public in May 2018, states **“Auckland is experiencing what could legitimately be described as a crisis in road safety performance.”** Auckland Transport is committed to reducing deaths and serious injuries on our roads. The New Zealand Government and Auckland Council have set clear policy directions to make significant road safety improvements and introducing lower speeds on high risk roads is one way to quickly improve the dire situation.

2

“Speed management is about achieving safe and appropriate speeds that reflect road function, design, safety and use. We need people and goods to move efficiently around our transport network in a way that is aligned to the ‘Safe System’ approach, and we need to see a reduction in deaths and serious injuries. Speed management requires input from policy makers, engineers, educators and the Police to identify the right speeds for the roads, and involve communities in determining and adopting safe and appropriate speeds”

NZTA Speed Management Guide

From 28 February until 31 March 2019, Auckland Transport consulted on a proposed Speed Limits Bylaw including lowering the speed limit at the most high-risk locations across Auckland – approximately 10% of the region’s local road network. Approximately 90% of the total area proposed for speed limit reductions are rural roads.

The consultation process followed an extensive review of Auckland’s roads by Auckland Transport. Speed limits on roads across New Zealand must be ‘safe and appropriate’. If they are not safe and appropriate then the speed limits must be changed or changes made to the roading environment to make the road safe.

Before making any decisions on safe and appropriate speed limits, the Auckland Transport Board of Directors sought public feedback. This report summarises the feedback received from local boards and stakeholders.

Consultation and feedback

Feedback was sought on the proposed Speed Limits Bylaw 2019 with the following question:

To make our roads safer, Auckland Transport wants to introduce a new bylaw to set new speed limits, including lower speed limits for approximately 10% of Auckland’s local roads.

What do you think about the proposed new speed limits? (where possible, please state the specific road(s)/location(s) you’re referring to).

Feedback was sought through a number of mechanisms:

Via: an online feedback form, an online mapping tool (Geographic Information System), in writing – email and letter as well as feedback in person at hearings.

A total of 11,722 consultation feedback submissions were received on the proposed Speed Limits Bylaw 2019 of which 11,658 were from individuals, 51 were stakeholder submissions and 13 were local board submissions. This document is a summary of the stakeholder and local board submissions.

Introduction

Background information and how we engaged with iwi, elected representatives and our stakeholders

Sadly, when benchmarked globally, and indeed against other regions in the country, Auckland performs extremely poorly with respect to road safety. Recent research completed by the International Transport Forum¹ highlights that amongst many comparator cities both vulnerable road users – people on motor bikes, people on bikes, people walking – and people in vehicles are more at risk of dying or being seriously injured on Auckland's roads.

Auckland Transport has committed to taking a leadership role in reversing this tragic trend. And we cannot tackle the scale of road trauma we have in Auckland without the support of our treaty partners, our road safety partners, our democratically elected members, key stakeholders, and the wider public.

Howard (2018) wrote;

“It is difficult to believe that Aucklanders are not concerned about the remarkable escalation in DSI in recent years. But how does Auckland recover from this blight? Where will this run of years of increasing road trauma lead the Auckland community in the short, medium and longer term? Road safety is a tough taskmaster, and even more so for the lead agency. While there is a great deal that AT does directly (and much more it could do) to improve road safety performance in Auckland, these direct actions, while significant and important, are outweighed by the potential road safety benefits that are available if AT (with Auckland Council) is able to influence the regional and national partners. The appetite to do better needs to be found, coupled with decisive and persistent action.”²

The timely confluence of the Auckland Transport Road Safety Business Improvement Review (“BIR”), the finalisation of the Auckland Transport Alignment Project, Auckland Council's Long Term Plan, the passing of Regional Fuel Tax legislation and the approval of the Regional Land Transport Plan 2018-28 provided a platform for a revitalised approach to engagement with manawhenua and Maori, with Auckland's elected members, with our road safety partners, and with key stakeholders to address the road safety crisis.

Our strategy to tackling the crisis has been wholly consistent with the recommendations of the BIR; based on a safe system approach, which has been well proven in other jurisdictions – safe roads, safe drivers, safe vehicles and safe speeds.

As you will see in the material immediately following, engagement with partners, stakeholders and the wider public of Auckland has extended well beyond the formal consultation process normally required for setting a bylaw.

We have done this to ensure that as many groups and individuals as possible were well informed to be able to talk to and seek views of their whānau, hapū or iwi, their constituents, or their memberships well in advance of the consultation period for the proposed Speed Limits Bylaw. This has ensured well informed and considered submissions which have provided the best basis for the Board of Auckland Transport to consider the proposed Speed Limits Bylaw.

¹ Safer City Streets, Global Benchmarking for Urban Road Safety, International Transport Forum, 2018

² Howard, E (2018). “Auckland Transport: Road Safety Business Improvement Review – Final Report”, p14.



Engagement with Maori

As part of our commitment to our Treaty partners, AT has made a concerted effort to engage with mana whenua with eight hui between 2017 and 2019 across Tāmaki Makaurau focussed on road safety, Vision Zero, Te Ara Haepapa and speed management.

In addition, our team have attended a number of community consultations which included input from mana whenua and mataawaka on feedback around the Speed Limits Bylaw from specific iwi.

Globally, people living in lower-income neighbourhoods experience greater levels of traffic-related injury and deaths. In Tāmaki Makaurau this is shown through the over representation of Māori and Pacific children, and people living in urban south, urban west and rural areas in road deaths and serious injuries. Children living in the most socio-economically deprived areas have a three times higher injury rate than children living in the least deprived areas³.

Engagement with elected members

A number of strategic Auckland Council documents and direction aim to minimise death and serious injury on the region's roading network. The 2018/19 Statement of Intent includes provisions to "maximise safety" and to "develop options to improve the safety of the transport system". The widely consulted on Auckland Plan also gives AT clear direction:

"Focus area six: move to a safe transport network free from death and serious injury

How to do this:

- introduce appropriate speed limits in high-risk locations, particularly residential streets, rural roads and areas with high numbers of pedestrians and cyclists
- make necessary regulatory changes to promote safety, such as targeted speed limit reductions."

In September 2018 Auckland Council's Planning Committee unanimously passed the following recommendation:

"Request Auckland Transport to accelerate the road safety and speed management programmes and seek input from partners to make Auckland a Vision Zero region"

From June 2018 Auckland Transport's team began engaging with both ward councillors and local boards in detail about road safety and, among many other interventions which were being considered, the accelerated Speed Management Programme.

Through July, August and early September 2018 workshops were held with all local boards on road safety including mention of the speed management programme and possible speed limit reductions.

At a quarterly update to local boards on 29 October 2018 our Group Manager, Safety and Network Operations gave an extensive update on the Speed Management Programme.

³ Hosking et al (2013) Social & Geographical differences in road traffic injury in the Auckland region, University of Auckland

Engagement with local boards formed part of the overall communications and stakeholder plan for the project. The following engagements with local boards were delivered:

DATE	ACTIVITY
June 2018	Memo to all local boards affected by the Speed Management Programme. This also included information about the proposed Speed Limits Bylaw. The Waitematā Local Board also requested a workshop and this was provided by AT.
July, August, September 2018	Road safety workshops with all local boards.
August 2018	Memo to all local boards updating them about the Road Safety and Speed Management Programme 2018-21. This also included information on the proposed Speed Limits Bylaw.
September 2018	Memo to all local boards to update them on the progress with the Speed Limits Bylaw. A further workshop was held with the Waitematā Local Board.
October 2018	Extensive presentation on Speed Management Programme at quarterly update to local boards.
November 2018	Memo to all local boards specifically about the proposed Speed Limits Bylaw. Workshops held with Devonport-Takapuna, Hibiscus and Bays and Franklin Local Boards.
December 2018	Memo to all local boards updating them on the AT Board decision to consult on the proposed Speed Limits Bylaw.
February 2019	Memo to all local boards with details about the forthcoming public consultation on the proposed Speed Limits Bylaw.
March 2019	Local boards invited to consultation events in Orakei, Whau, Franklin, Upper Harbour and Waitematā Local Board areas.
April 2019	Notification to all local boards about the close of public consultation and the number of submissions.

In addition to this engagement, members of AT's Elected Member Relationship team included numerous information updates in local board monthly reports, transport portfolio catch-up meetings and in response to any individual enquiries from local board members.

Engagement with our Tāmaki Makaurau road safety partners

AT's partners in tackling the road safety crisis include NZ Police, ACC, MoT, Auckland Council, the Auckland Regional Public Health Service (ARPHS) and Fire and Emergency Services.

Over the past eighteen months our engagement with them with respect to road safety and specifically the proposed Safe Speeds Programme has included the Safe Speeds Programme as a standing agenda item at the bi-monthly governance group meetings and monthly leadership meetings.

A highlight of this engagement has been the combined commitment of all the Tāmaki Road Safety Governance Partners to Tāmaki Makaurau Vision Zero Strategy which was approved by the AT Board on 3 September 2019 and features the Safe Speeds Programme as a key early action.

Engagement with key stakeholders

Our stakeholders reach well beyond the Tāmaki Makaurau Road Safety Governance Group.

One mechanism for engaging with stakeholders such as Bike Auckland, Walk Auckland, Safekids, Bus and Coach Association, Vector, NZTA, Students Against Dangerous Driving (SADD), Motorcycle Safety Advisory Council, Brake, and IAG Insurance is the Tāmaki Makaurau Road Safety Stakeholder Reference Group which meets three times every year. The Safe Speeds Programme was outlined to stakeholders at the meeting on 1st March 2019, and information circulated as part of the bylaw process.

Other important stakeholders include the Automobile Association, Heart of the City, the Auckland Business Chamber, the Road Carriers Association and a number of freight operators and the Auckland Federated Farmers.

We also engaged with key educational institutions such as the University of Auckland and Auckland University of Technology and secondary, intermediate and primary schools across Auckland.

Further outreach

Beyond this we have sought the views of overseas agencies with respect to their views on our approach and the proposal, including the Australasian College of Road Safety.

In addition, we also took the time to run drop-in sessions and public sessions focussed on community and residents' groups and businesses.

What have Maori, our elected representatives, our road safety partners and key stakeholders told us?

Key themes from Maori

Noting the specific feedback provided by Ngāti Whātua in this report, who were unable to make the nominated hui, overall feedback on AT's Safe Speeds Programme has received majority support with some additional questions about treatment at specific locations and the effectiveness and compliance to speed management changes on a few specific rural roads in the southern area.

Key themes from elected representatives

We were extremely pleased to see the level of interest and engagement from democratically elected local boards, a number of which took the opportunity to present their submissions at formal hearings.

Thirteen of the twenty-one local boards responded. Those local boards represent 872,295 people, around 62% of Auckland's population.

All thirteen of the local boards that provided feedback understand the need for speed limit changes and expressed support for the proposed Speed Limits Bylaw – some boards provided ancillary suggestions, requests or concerns.

Key themes from our road safety partners

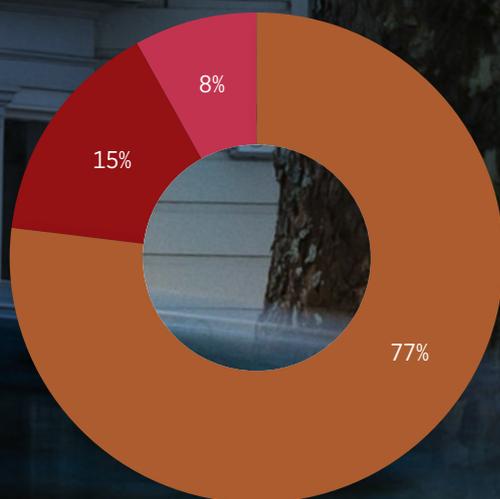
Our road safety partners such as the NZ Police and the Auckland Regional Public Health Service (ARPHS) are supportive of the proposal. ARPHS also provided a wide range of evidence supporting reduced speeds. That research is detailed in the Public Feedback Report which accompanies this report.

The New Zealand Transport Agency, the stewards of the Speed Management Guide supported the proposal and also suggested that a small number of other high-risk roads merit reduced speed limits.

Key themes from stakeholders

The majority of the 51 stakeholders who submitted feedback generally support the Speed Limits Bylaw or the principles behind it.

LEVEL OF STAKEHOLDER SUPPORT FOR PROPOSED BYLAW/ PREFERENCE FOR STATUS QUO



- Supportive of proposed bylaw
- Prefer status quo
- No preference expressed

* Data excludes submissions from those parties who form part of the Tāmaki Makaurau Road Safety Governance Group

Many high-profile organisations showed support for the Speed Limits Bylaw, including: NZ Police, ARPHS, Blind Citizens NZ, Safekids Aotearoa, Brake and Victim Support, AUT, University of Auckland.

Several cited international evidence for implementing speed limit changes such as the submission from AECOM. Deloitte cited the economic benefits that would come from reducing the number of deaths and serious injuries on our roads.

Some organisations, such as Transportation Group New Zealand, as well as offering support asked AT to consider other areas for speed limit reductions.

Lastly, in some instances where some stakeholders supported the proposal they conditionalised their support. One such example of this is Heart of the City who want to see the planned synchronisation of traffic lights on a selection of central city streets.

Several stakeholders did raise concerns about the proposed bylaw, including (but not limited to):

- The Automobile Association which opposes the bylaw in its current form although it supports some of the principles.
- NZ Post supports some road safety initiatives but feels the bylaw, in its current form, will have a detrimental impact on its business; and,
- The Ports of Auckland agrees AT should improve the safety of Auckland local roading network however is opposed to speed limit changes on Beach Road and Tangihua Street.

These three stakeholders also provided evidence in their submissions which is covered in this report.

Evidence provided by local boards and stakeholders

As part of the Speed Limits Bylaw consultation, we received submissions from 13 local boards and 51 stakeholders. A number of these local boards and stakeholders referenced evidence to support their submissions. This evidence has been assessed by subject matter experts within AT and has been taken into consideration by the AT Board as part of the decision-making process.

The following pages are a summary of the of the evidence submitted to AT as part of the consultation process.

AT's assessment of the evidence presented

A large range of evidence has been presented by submitters as part of the submissions process. The majority of it includes reference to published evidence.

All evidence has been assessed as either:

- 'Evidence has been validated' (when it directly relates to the submitter's statements)
- 'Considered to be a valid interpretation' (when it is considered an objective interpretation of the published evidence)
- 'Interpretation' (when it refers to a subjective interpretation)

In two submissions unpublished evidence has been presented which has been tested and assessed as either simplistically or incorrectly calculated.

In one submission, evidence has been noted but not referenced and is therefore unable to be assessed.

Management agrees that there are many opinions on 'survivability curves' regarding speed limits, and how they are portrayed. The variations between studies are due to different populations, methodologies, and because there are other aspects to consider including age group, vehicle size and type of exposure, measurement of mean speeds, road layout etc. management's view is that the information in the Statement of Proposal remains accurate.

Evidence summary

Theme	Evidence	Cited by	AT comments																																			
Increasing numbers of Aucklanders are being injured and killed on our roads	In 2017, 64 people were killed and 771 seriously injured on Auckland's roads. Numbers of serious injury and deaths have increased by more than 70% between 2014 and 2017, much faster than the rest of the country, which has experienced a 23% increase (Howard 2018). ¹	Auckland Regional Public Health Service (ARPHS)	EVIDENCE HAS BEEN VALIDATED																																			
	"Auckland has high rates of pedestrian and cyclist injury compared with many other developed countries". ²	ARPHS, Brake and Victim Support, Holy Trinity Catholic Primary School	EVIDENCE HAS BEEN VALIDATED																																			
The social cost of crashes	The social cost of crashes in Auckland has been estimated as \$4,516,000 for each fatal crash and \$855,000 for each serious crash. Over 90% of the social cost of crashes comes from loss of life or loss of quality of life. Other factors include reduced productivity and medical or other resource costs. (Ministry of Transport 2017). ³	ARPHS	VALID IN 2017, SINCE UPDATED IN 2018																																			
	Cost to the Auckland region ⁴ :	Deloitte	VALID IN 2017, SINCE UPDATED IN 2018																																			
	<table border="1"> <thead> <tr> <th colspan="7">Average social cost per reported injury, June 2017 prices (\$)</th> </tr> <tr> <th>Injury severity</th> <th>Fatal</th> <th>Serious</th> <th>Minor</th> <th>Serious and minor</th> <th>Fatal and serious</th> <th>Fatal, serious and minor</th> </tr> </thead> <tbody> <tr> <td>All areas</td> <td>4,242,000</td> <td>761,000</td> <td>83,000</td> <td>184,000</td> <td>1,027,000</td> <td>234,000</td> </tr> <tr> <td>Open roads</td> <td>4,242,000</td> <td>754,000</td> <td>83,000</td> <td>180,000</td> <td>1,140,000</td> <td>252,000</td> </tr> <tr> <td>Urban roads</td> <td>4,242,000</td> <td>764,000</td> <td>82,000</td> <td>186,000</td> <td>978,000</td> <td>225,000</td> </tr> </tbody> </table>	Average social cost per reported injury, June 2017 prices (\$)							Injury severity	Fatal	Serious	Minor	Serious and minor	Fatal and serious	Fatal, serious and minor	All areas	4,242,000	761,000	83,000	184,000	1,027,000	234,000	Open roads	4,242,000	754,000	83,000	180,000	1,140,000	252,000	Urban roads	4,242,000	764,000	82,000	186,000	978,000	225,000		
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	Table 1, source: MoT (1)																																					
	If the findings from the Bristol study were to be replicated on Auckland's urban roads, cost savings per year from serious and minor injuries averted would range from \$30 million for urban central roads to \$80.5 million for all urban roads across the region. ⁵	Deloitte	VALID IN 2017, SINCE UPDATED IN 2018																																			
	Read on for Bristol study information.																																					

¹ Howard, E. Auckland Transport: Road Safety Business Improvement Review. Victoria, Australia: Whiting Moyné P/L, 2018.

² International Transport Forum. Safer City Streets, a global road safety benchmark, working document prepared to support 2nd meeting of the Safer City Streets network. IFT, 2017.

³ Ministry of Transport. Social Cost of Road Crashes and Injuries June 2017 update. Wellington: Ministry of Transport, 2017.

⁴ New Zealand Ministry of Transport. Social cost of road crashes and injuries 2017 update. www.transport.govt.nz/assets/Uploads/Research/Documents/a5f9a063d1/Social-cost-of-road-crashes-and-injuries-2017-update-FINAL.PDF

⁵ Pilkington P et al. The Bristol Twenty Miles per Hour Limit Evaluation (BRITE) Study Analysis of the 20mph Rollout Project, 2018. www.tresa.org.uk/wp/wp-content/uploads/2018/12/BRITE-Bristol-20mph-limit-evaluation-report_20July18update.pdf

Theme	Evidence	Cited by	AT comments
What a 'safe' speed is considered to be	<p>Auckland Transport is required under the 'Land Transport Rule: Setting of Speed Limits 2017' to set speed limits that are safe. The International Transport Forum is an intergovernmental organisation with 59 member countries, including New Zealand. Their latest report on speed and road traffic safety compiled data from 10 countries to determine what a safe traffic speed limit is. Safe and reasonable speed limits were determined as:</p> <ul style="list-style-type: none"> • 30 km/h maximum in built up and residential areas where there is a mix of vulnerable road users and motor vehicle traffic • 50km/h in other areas with intersections and a high risk of side collisions • 70km/h on rural roads without a median barrier to reduce risk of head-on collisions (International Traffic Safety Data and Analysis Group 2018).⁶ 	ARPHS	EVIDENCE HAS BEEN VALIDATED
Reducing speed limits reduces crashes	In 2017, road injuries were the ninth leading cause of premature death in New Zealand (Institute for Health Metrics and Evaluation (IHME) n.d.). ⁷	ARPHS	EVIDENCE HAS BEEN VALIDATED
	It is a universal finding that reducing traffic speeds reduces the number of crashes and the level of injury from those crashes. (Cairns, et al. 2014) 30km/h speed limits in urban areas have been widely used around the world to improve road safety and are an effective way to reduce accidents and injuries, traffic speed, and improve perceptions of safety. (Cairns, et al. 2014, International Traffic Safety Data and Analysis Group 2018). ⁸	ARPHS	EVIDENCE HAS BEEN VALIDATED

⁶ International Traffic Safety Data and Analysis Group. Speed and Crash Risk: Research report. Paris: International Transport Forum, 2018.

⁷ Institute for Health Metrics and Evaluation (IHME). New Zealand. n.d. <http://www.healthdata.org/new-zealand> (accessed March 1, 2019).

⁸ Cairns, J, J Warren, K Garthwaite, and et al. "Go slow: an umbrella review of the effects of 20 mph zones and limits on health and health inequalities." *Journal of Public Health* 37, no. 3 (2014): 515-520.

Theme	Evidence	Cited by	AT comments
Reducing speed limits reduces crashes continued	There is a direct correlation between speed and road safety. Nilsson's Power Model gives a general rule for this relationship. It estimates that a 1% increase in average speed results in a 2% increase in injury crash rates, a 3% increase in severe crash rates, and a 4% increase in fatal crash rates (Nilsson 2004). ⁹ The magnitude of the change in risk will differ based on initial speed and the road environment, but the direction of the relationship stays the same (International Traffic Safety Data and Analysis Group 2018, Elvik 2009, Cameron 2010). ^{10 11 12}	ARPHS	EVIDENCE HAS BEEN VALIDATED
	"The faster vehicles travel, the more frequent and severe road crashes become, and the greater the level of injury and death that ensues". ¹³	ARPHS, Brake and Victim Support	EVIDENCE HAS BEEN VALIDATED
	An increase in average speed results in an increase in the risk of crashing and the severity of crash related injuries. ¹⁴	Deloitte	EVIDENCE HAS BEEN VALIDATED
	A number of studies have demonstrated that small increases in speed result in large increases in crash risk. ¹⁵	Deloitte	EVIDENCE HAS BEEN VALIDATED
	A 5% increase in average speed is estimated to result in a 10% increase in crashes that cause injury and a 20% increase in fatal crashes. ⁹	Deloitte	EVIDENCE HAS BEEN VALIDATED
	"..it is often the case that most events (e.g. crashes and injuries) occur in situations that are not 'high-risk'". ¹⁶	Te Ara Mua – Future Streets (TAM-FS) and Healthy Future Mobility Solution (HFMS)	EVIDENCE HAS BEEN VALIDATED
	A study conducted by the OECD and the ECMT in 2006 concluded that speeding is the number one road safety problem in most countries around the world and that reductions in average speeds of approximately 5 per cent would yield a reduction in fatalities by as much as 20 per cent. ¹⁷	AECOM	EVIDENCE HAS BEEN VALIDATED

⁹ Nilsson G. Traffic safety dimensions and the power model to describe the effect of speed on safety. Lund Institute of Technology, 2004. library.tee.gr/digital/m2100/m2100nilsson.pdf.

¹⁰ International Traffic Safety Data and Analysis Group. Speed and Crash Risk: Research report. Paris: International Transport Forum, 2018.

¹¹ Elvik, R. The Power Model of the relationship between speed and road safety: Update and new analyses. Oslo: The Institute of Transport Economics; report no.1034, 2009.

¹² Cameron, MH., Elvik, R. "Nilsson's Power Model connecting speed and road trauma: applicability by road type and alternative models for urban roads." Accident Analysis and Prevention 42 (2010): 1908-1915.

¹³ International Traffic Safety Data and Analysis Group. "Speed and Crash Risk: Research report". Paris: International Transport Forum, 2018.

¹⁴ Global Road Safety Partnership. Speed management: a road safety manual for decision-makers and practitioners, 2008. www.who.int/.

¹⁵ Kloeden CN et al. Travelling speed and the risk of crash involvement. Canberra, Federal Office of Road Safety, CR172, 1997. www.atsb.gov.au/publications/1997/pdf/Speed_Risk_1.pdf.

¹⁶ Rose G. Sick individuals and sick populations. International Journal of Epidemiology. 2001;30(3):427-32.

¹⁷ Archer, J et al 2008, 'the impact of lowered speed limits in urban and metropolitan areas', Monash University accident research centre, report no. 276, pp. 71.

Theme	Evidence	Cited by	AT comments
Reducing speed limits reduces crashes continued	Historical NZ and international crash data demonstrates that inappropriate speed limit management has taken many lives, resulted in many seriously injured people and caused trauma for the communities of NZ and internationally.	AECOM	EVIDENCE HAS BEEN VALIDATED
	New Zealand's reported and unreported crash risks have identified and recorded that 87% of the current NZ set speed limits are not safe and appropriate for the users of the NZ transportation system	AECOM	EVIDENCE HAS BEEN VALIDATED
	The effect of changes in open road speeds has been estimated based on crash data from 1996 to 2002. There was a 12% reduction in fatal and injury crashes for every 1km/hour reduction in mean open road speed in New Zealand. ¹⁸	ARPHS	EVIDENCE HAS BEEN VALIDATED
	The World Health Organization has concluded that a five percent reduction in average speed can result in a 30 percent decrease in traffic fatalities.	Waitematā Local Board	EVIDENCE HAS BEEN VALIDATED
National / international evidence of the effects of speed limit reductions	Sweden – “It was predominantly roads with a low traffic safety standard and unsatisfactory road sides that were selected for reduced speed limits. Results show a reduction in fatalities on rural roads with reduced speed limit from 90 to 80 km/h where the number of fatalities decreased by 14 per year”. ¹⁹	AECOM	EVIDENCE HAS BEEN VALIDATED

¹⁸ Povey, L.F. (2003). "An investigation of the relationship between speed enforcement, vehicle speeds and injury crashes in New Zealand". IPENZ Transportation Group Technical Conference. Christchurch.

¹⁹ Vadeby, A & Forsman, A, 2017, 'Traffic safety effects of new speed limits in Sweden', accident analysis & prevention, vol 114, May2018, pp. 34-39.

Theme	Evidence	Cited by	AT comments
National / international evidence of the effects of speed limit reductions continued	<p>Bristol (UK) – In July 2012, Bristol City Council (UK) decided to introduce 20mph speed limits throughout the city. The 20mph speed limit was introduced in six phases. The first area was implemented on 20th January 2014 includes Central Bristol and borders the two pilot areas. The process of introducing 20mph limits across the city finished in September 2015.</p> <p>On average, according to Automatic Traffic Count (ATC) speed data (with over 36 million vehicle observations analysed) there was a statistically significant 2.7mph decrease in vehicle speeds on roads where the 20mph speed limit was introduced, when controlling for other factors that might affect speed (areas, calendar year, time of day, season, type of road, and day of week).</p> <p>Annual rates of fatal, serious, and slight injuries following the introduction of the 20mph speed limits are lower than the respective pre-20mph limit rate, therefore showing a reduction in the number of injuries. The estimated total number of injuries avoided across the city each year is 4.53 fatal, 11.3 serious, and 159.3 slight injuries. The estimated annual saving following the decrease in casualties is £15,256,309, based on Department for Transport formula for calculating the cost of road traffic casualties.</p> <p>There is evidence of increased sense of belonging, social interactions, fewer safety fears for children walking and residents are more inclined to feel it is safe for elderly people to cross the road in a number of areas where lower speed limits were introduced. These social benefits can significantly increase community cohesion, make more vibrant street life and result in higher pedestrian traffic.²⁰</p>	AECOM	EVIDENCE HAS BEEN VALIDATED
	<p>Bristol (UK) - “Evidence suggests that serious and minor injuries could be reduced by approximately 15% on travel on applicable roads, though we cannot say for certain whether there would be any effect on fatalities”.²¹</p>	Deloitte	CONSIDERED TO BE A VALID INTERPRETATION

²⁰ Pilkington et al, 2018, 'The Bristol Twenty Miles per Hour Limit Evaluation Study', centre for public health and wellbeing, University of the West of England.

²¹ Pilkington P et al. The Bristol Twenty Miles per Hour Limit Evaluation (BRITE) Study Analysis of the 20mph Rollout Project, 2018. www.tresa.org.uk/wp/wp-content/uploads/2018/12/BRITE-Bristol-20mph-limit-evaluation-report_20July18update.pdf.

Theme	Evidence	Cited by	AT comments
National / international evidence of the effects of speed limit reductions continued	London (UK) – In 2014, the City of London implemented a 20mph speed limit city-wide. This was done in conjunction with other measures such as an awareness campaign, speed limit enforcement, speed limit signs at entry/exit points and engineering methods to improve junctions. After a year it was found that the average speeds were one mph lower, as well as collision rates reducing by 6 per cent on urban main roads and residential roads with low average speeds. ²²	AECOM	EVIDENCE HAS BEEN VALIDATED
	Cites London case study which “found that implementation of 20 mph zones was associated with a 42% reduction in road traffic injuries.” ²³	TAM-FS and HFMS	EVIDENCE HAS BEEN VALIDATED
	New South Wales (Australia) – 40km/h permanent speed limits have been implemented in high pedestrian activity areas (HPAA) since 2003. “A 2017 evaluation concluded that a 38 per cent reduction in casualty crashes had been observed since the HPAA program was introduced. This was mostly related to speed limit reduction but there were other features such as pavement markings, traffic calming, pedestrian refuge and kerb extension that supported this outcome. It is important to note that reduced casualties occurred for road users generally, not just for pedestrians. A study of the locations where the 40 km/h speed limits were implemented indicated that expanding coverage would likely generate additional safety benefits.” ²⁴	AECOM	EVIDENCE HAS BEEN VALIDATED
	New York (USA). “In 2014, the New York City Department of Transportation began implementing speed cameras in school zones. Evidence from the first two years of the speed enforcement programme showed that cameras were very effective in reducing dangerous driving: Speeding during school hours at fixed camera locations decreased by over 63 percent, and injuries at these locations reduced by over 14 percent.” Also implemented left turn traffic calming techniques, built over 460 new speed tables and installed extra lighting. Its ‘Left Turn Traffic Calming’ project has reduced median left turn speeds by 24 percent. Resulted in a 30% decrease in traffic deaths and a 45% decrease in pedestrian deaths at the three locations included in the study.	AECOM	EVIDENCE HAS BEEN VALIDATED

²² Transport for London, 2018, ‘Vision Zero action plan’, <http://content.tfl.gov.uk/vision-zero-action-plan.pdf>.

²³ Grundy C, Steinbach R, Edwards P, Green J, Armstrong B, Wilkinson P. Effect of 20 mph traffic speed zones on road injuries in London, 1986-2006: controlled interrupted time series analysis. *BMJ*. 2009;339:b4469.

²⁴ Fry et al, 2018, ‘using evaluation to drive program improvement’ permanent 40/km/h speed limits in high pedestrian activity areas in NSW’, proceedings of the 2018 Australasian Road Safety Conference 3 – 5 October 2018, Sydney, Australia.

Theme	Evidence	Cited by	AT comments
National / international evidence of the effects of speed limit reductions continued	In Christchurch, the introduction of 30km/h zones in parts of the CBD reduced injury-causing crashes by 25%, compared to a 13.5% increase in the rest of the CBD (Koorey 2018). ²⁵	ARPHS	EVIDENCE HAS BEEN VALIDATED
	New Zealand has already seen the impact of speed limit changes. In 1973, the speed limit on the open road was reduced to 80km/h hour to conserve fuel, and in 1985 It was increased to 100km/hour. When speed limits were reduced, traffic deaths and injuries fell relative to urban roads. Conversely, when speed limits increased traffic deaths and injuries increased. ²⁶	ARPHS	EVIDENCE HAS BEEN VALIDATED
	Preliminary analysis of the self-explaining roads project in Pt England, Auckland suggested that the project had led to a 30% reduction in the number of crashes, and an 86% reduction in crash costs, with later figures suggesting a reduction in crash costs of approximately 50%. Cost reductions exceeded crash reductions because serious crashes reduced more than minor crashes. The project reduced average speeds on local streets from about 50 km/h to about 30 km/h. Although these were only preliminary results, they indicate that speed reductions can lead to large crash reductions. ²⁷	TAM-FS and HFMS	EVIDENCE HAS BEEN VALIDATED
The case for 30km/h	In a collision, the severity of injury is directly related to vehicle speed. As speed increases, so does the level of injury. At 30km/h, most (90%) unprotected road users will survive if hit by a vehicle. This is the collision speed that is considered survivable for the human body (International Traffic Safety Data and Analysis Group 2018). ²⁸	ARPHS	EVIDENCE HAS BEEN VALIDATED
	If a person is hit by a car at 50km/h they are five times as likely to be killed compared to being hit at 30 km/h (Kröyer. H. R. G. 2014, Rosen 2009). ^{29 30}	ARPHS	EVIDENCE HAS BEEN VALIDATED

²⁵ Koorey, G. "Has the Christchurch Central City 30km/h worked?" Transport Knowledge Conference. November 2018. <https://viastrada.nz/sites/default/files/2018-11/GKoorey-TKC18-Chch30kmhCBD.pdf> (accessed 15 February 2019).

²⁶ Koorey, G.F. (2017). "Changing rural speed limits – learning from the past". IPENZ Transportation Group Conference. Hamilton.

²⁷ Mackie HW, Charlton SG, Baas PH, Villasenor PC. Road user behaviour changes following a self-explaining roads intervention. *Accident Analysis & Prevention*. 2013;50(0):742-50. Charlton SG, Mackie HW, Baas PH, Hay K, Menezes M, Dixon C. Using endemic road features to create self-explaining roads and reduce vehicle speeds. *Accident Analysis & Prevention*. 2010;42(6):1989-98.

²⁸ International Traffic Safety Data and Analysis Group. *Speed and Crash Risk: Research report*. Paris: International Transport Forum, 2018.

²⁹ Kröyer. H. R. G., Jonsson, T., Varhelyi, A. "Relative fatality risk curve to describe the effect of change in the impact speed on fatality risk of pedestrians struck by a motor vehicle." *Accident Analysis and Prevention* 62 (2014): 143-152.

³⁰ Rosen, E., Sander, U. "Pedestrian fatality risk as a function of car impact speed." *Accident analysis and Prevention*, 2009: 536-542.

Theme	Evidence	Cited by	AT comments
The case for 30km/h continued	NZTA reports collision impacts at 50km/h are equivalent to falling from the third floor of a building (New Zealand Transport Agency n.d.). ³¹	ARPHS	EVIDENCE HAS BEEN VALIDATED
	A before-and-after study of 32km/h (20mph) zones found a 61% reduction in total injuries, but a 70% reduction in child pedestrian injuries, and a 48% reduction in child cyclist injuries (Cairns, et al. 2014). ³²	ARPHS	EVIDENCE HAS BEEN VALIDATED
	A controlled time series analysis of 20 years of data on the impact of 20 mph zones in London found they were associated with a 40% reduction in casualties and collisions. Serious injuries and deaths in children were halved (Grundy 2009). ³³	ARPHS	EVIDENCE HAS BEEN VALIDATED
	The optimal capacity for urban street networks during peak period is 30-40km/h. ³⁴	Movement	CONSIDERED TO BE A VALID INTERPRETATION
	The NACTO Global Street Design Guide 1st Edition, 2016 recommends that Shared Spaces be 10-15km/h, signalised multilane streets with separated cycle lanes be 50km/hr; Urban Streets be 40km/hr; and Local Streets 30km/hr. ³⁵	Transportation Group New Zealand	CONSIDERED TO BE A VALID INTERPRETATION
Evidence against reducing speed limits	<p>“University College London report produced with the Department of Transport (DfT) into 20mph roads which found that there was only minimal average speed reduction and concludes that there is not yet evidence to link a significant change in collisions and casualties following the introduction of 20mph limits in residential areas.³⁶</p> <p>This report has been criticised by some commentators for not meeting all objectives and it doesn’t try to account for the co-benefits of active travel in health and therefore death avoided from other matters such as avoiding cardiovascular disease – wider benefits which you are hopefully looking to take into account and can be seen in this Department for Transport 20 mph evaluation.³⁷</p>	AECOM	EVIDENCE HAS BEEN VALIDATED

³¹ New Zealand Transport Agency. Speed. n.d. <https://www.nzta.govt.nz/safety/driving-safely/speed/>.

³² Cairns, J, J Warren, K Garthwaite, and et al. “Go slow: an umbrella review of the effects of 20 mph zones and limits on health and health inequalities.” *Journal of Public Health* 37, no. 3 (2014): 515-520.

³³ Grundy, C., Steinbach, R., Edwards, P., et al. “Effect of 20 mph traffic speed zones on road injuries in London, 1986-2006: controlled interrupted time series analysis.” *BMJ*, 2009: 339:b4469.

³⁴ <https://dnproulx.wordpress.com/2014/12/03/slowing-down-traffic-can-actually-move-more-people>.

³⁵ NACTO Global Street Design Guide 1st Edition, 2016, <https://globaldesigningcities.org/wp-content/uploads/guides/global-street-design-guide.pdf>.

³⁶ UCL/DfT, 2018, 20mph speed limits on roads, <https://www.gov.uk/government/publications/20-mph-speed-limits-on-roads>.

³⁷ DfT, 2018, 20s plenty evaluation, <http://www.20splenty.org/dft20mphevaluation>.

Theme

Evidence

Cited by

AT comments

Survivability rates

The diagram below is approximate only but represents pictorially the relationship between impact speed and the risk of death for differing crash configurations.

Australian College of Road Safety

CONSIDERED TO BE A VALID INTERPRETATION



The diagram is highly instructive, and points to the following:

- Critical impact speeds differ markedly across differing crash circumstances
- Pedestrians are highly vulnerable at impact speeds of about 30 km/h or higher
- Vehicle occupants in side-on collisions (for example at an intersection) at impact speeds of about 50 km/h or higher, and
- Vehicle occupants in head-on collisions (for example, on the open road) at impact speeds of about 70 km/h or greater
- Beyond the critical impact speed, the risk of death rises rapidly; small increases in impact speed translate into large increases in the risk of death.³⁸

The AA Questions the validity of AT’s “survivability curves” and cites evidence in opposition to AT stats: “... we think that much of the research that underpins this figure is biased, and that this has resulted in a greatly exaggerated figure for the probability of death at both 50km/h and at reduced speeds. Based on unbiased evidence, the Ministry of Transport identifies the risk of pedestrian death as 2.6% at 30km/h 14.8% at 50km/h.

NZ Automobile Association INTERPRETATION NO SOURCE PROVIDED FOR MOT EVIDENCE

See page 19 for AT’s response to this evidence

³⁸ Wrangborg, P. 2005, ‘A new approach to a safe and sustainable road structure and street design for urban areas’, Road safety on four continents conference, 2005, Warsaw, Poland, Swedish National Road and Transport Research Institute (VTI), Linköping, Sweden.

AT's comments on evidence provided by the AA

1. Thank you for the substantial work that has gone into a very comprehensive submission on the AT Speed Limits Bylaw 2019. We value your input and our partnership with you in creating a safe and forgiving road environment for Aucklanders.

The submissions drew out differing views on survivable speeds and especially in relation to 40kmh versus 30kmh in the city centre and town centres.

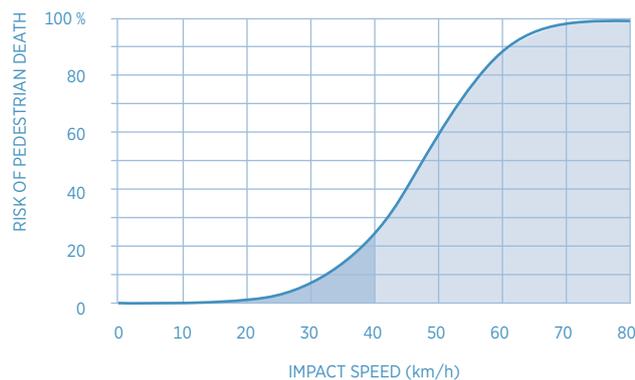
Management agrees that there are many opinions on 'survivability curves' regarding speed limits, and how they are portrayed. The variations between studies are due to different populations, methodologies, and because there are other aspects to consider including age group, vehicle size and type of exposure, measurement of mean speeds, road layout etc. Management's view is that the information in the Statement of Proposal remains accurate. That view continues to be supported by publicly available research by leading road safety experts (such as the authors and case studies referenced in Speed and Crash Risk published by the International Traffic Safety Data and Analysis Group (IRTAD). IRTAD is supported by the Federation Internationale de L'Automobile).

While the evidence in the 'survivability curve' area continues to evolve, management has taken the view that, AT, as New Zealand's largest road controlling authority, has a responsibility to address the escalating road trauma in our region. We also have to factor in the differences for more fragile pedestrian age groups (our children and our senior citizens) e.g. an elderly person being hit by a bus travelling at 30km/h has a high probability of death. Equally, we support the long-established New Zealand Health and Safety practice of a 30km/h speed limit for workers beside or on the road, and believe that it should also be the survivability norm for areas where there is a high mix of vulnerable pedestrians and motor-vehicle traffic.

Management's view is that the international evidence is compelling: Vulnerable road users (those not inside a motorised vehicle; people walking, cycling, on e-scooters) are most at risk at direct impact speeds above 30km/h.

2. There was no traceable reference included in your submission to evidence from the Ministry of Transport identifying the risk of pedestrian death as 2.6% at 30km/h 14.8% at 50km/h.

Theme	Evidence	Cited by	AT comments
Survivability rates continued	<p>CHASNZ notes that the International Transport Forum (an OECD organisation) in its Speed and Crash Risk report 2018 reports the following:</p> <ul style="list-style-type: none"> • The risk of death from being hit by a car (as a pedestrian) is 4-5 times higher at 50kph than 30kph • In areas where there are a high mix of vulnerable road users and motor vehicle traffic – a reasonable speed limit is 30 kph • On rural roads, without a median barrier, to reduce the risk of head on collisions – a speed limit of 70kph is appropriate • Where motorised vehicles and vulnerable road users share the same space – such as residential areas, 30kph is the recommended maximum • Most unprotected road users survive if hit by a vehicle only up to 30kph • The report goes on to confirm that Auckland would not be the first to make this kind of reduction. Many countries and cities have gone down this path before us. 	Construction Health and Safety New Zealand	EVIDENCE HAS BEEN VALIDATED
	<p>The NACTO Global Street Design Guide 1st Edition, 2016 provides more conservative numbers in this graph showing the risk of pedestrian death by impact speed:</p>	Transportation Group New Zealand	CONSIDERED TO BE A VALID INTERPRETATION



The relationship between impact and speed and risk of pedestrian death.

Several recent studies (Pasanen 1993, DETR 1998, Rosen and Sanders 2009 and Tefft 2011) show the existence of a clear relationship between vehicular speeds and pedestrian casualties, supporting the idea that speeds over 40km/h should not be permitted in urban streets. However, most of these studies were conducted in high-income countries and there are reasons to believe this relationship might be even more extreme in low- and middle-income countries.

Theme	Evidence	Cited by	AT comments
Survivability rates continued	Even by these conservative estimates the risk of pedestrian death after impact at 50km/h is around 60% but reducing that by just 10km/h to 40km/h reduces risk of death by 30 percentage points. Dropping to 30km/h reduces that risk by another 15-20 percentage points to less than 10% risk of death. Therefore, reducing the top speed of vehicles in areas where there may be pedestrians will reduce the risk of death in the event of a collision.	Transportation Group New Zealand	CONSIDERED TO BE A VALID INTERPRETATION
	Reduced vehicle speeds also reduce the likelihood of any crash happening in the first place, by reducing the required stopping distance, as shown in the following graph, also from NACTO, 2016: ³⁹	Transportation Group New Zealand	CONSIDERED TO BE A VALID INTERPRETATION
	<p>The relationship between speed and stopping distance.</p> <p>The graphic above depicts minimum stopping distances, including perception, reaction and braking times. They are based on dry conditions and assume perfect visibility.</p>		
The link between speed and congestion	We have also considered research from Monash University, which shows that “benefits of slow speeds include increase in traffic flow, reduction in congestion and delays... less pollution and noise”.	Heart of the City	CONSIDERED TO BE A VALID INTERPRETATION
	Intersections, which are typically the main source of congestion, work better at reduced speeds. ⁴⁰	Movement	CONSIDERED TO BE A VALID INTERPRETATION

³⁹ The NACTO Global Street Design Guide 1st Edition, 2016, <https://globaldesigningcities.org/wp-content/uploads/guides/global-street-design-guide.pdf>.

⁴⁰ The Need for (Safe) Speed: 4 Surprising Ways Slower Driving Creates Better Cities: “Lower speed limits may even reduce congestion in some cases, as they reduce the likelihood of bottlenecks. This has been observed in Sao Paulo, where lowering the speed limit on major arterials reduced congestion by 10 percent during the first month of implementation, while fatalities also dropped significantly.” <https://www.wri.org/blog/2017/05/need-safe-speed-4-surprising-ways-slower-driving-creates-better-cities>.

Theme	Evidence	Cited by	AT comments
The safety of pedestrians / people on bikes	Cited the Ministry of Transport which noted that: "... It is difficult to develop countermeasures to prevent excessive drinking and walking. However, any changes to the infrastructure that increase the safety of pedestrians in general are also likely to increase safety for intoxicated pedestrians." ⁴¹	Alcohol Healthwatch	EVIDENCE HAS BEEN VALIDATED
	Because they are unprotected, people who are walking or cycling have a greatly increased risk of serious injury or death compared to someone travelling in a car. For example, people walking have a 29 percentage point increase in serious injury risk compared to a person in a car (Deloitte 2017, Infometrics 2017). ⁴²	ARPHS	EVIDENCE HAS BEEN VALIDATED
	Estimates from the International Transport Forum show that out of 26 international cities, Auckland has the second highest pedestrian fatality rate, the sixth highest cyclist fatality rate, and the highest motorcyclist fatality rate per distance travelled (International Transport Forum 2017). ⁴³ Nearly all serious cycling injuries in New Zealand involve a vehicle (Turner 2009). ⁴⁴	ARPHS	EVIDENCE HAS BEEN VALIDATED
	Auckland Transport's most recent cycling survey reported 52% of respondents not feeling safe cycling because of the way people drive (TRA 2018). ⁴⁵	ARPHS	EVIDENCE HAS BEEN VALIDATED
	Conditions for people cycling in Auckland are reported by Auckland Transport as unsafe. As unprotected road users, people cycling in Auckland experience ten times the level of serious injuries from crashes by mode share. ⁴⁶	ARPHS	EVIDENCE HAS BEEN VALIDATED
	Negative traffic perceptions have been consistently associated with less walking and cycling. Levels of walking and cycling are inversely proportional to traffic speed and volume of vehicle traffic. Where pedestrians and bicyclists feel safer, levels of walking and cycling tend to be higher (Jacobsen 2009, Fraser 2010, J. Garrard 2008). ^{47 48 49}	ARPHS	EVIDENCE HAS BEEN VALIDATED
	Places that have high rates of active transport use traffic speed reduction to create an environment that is conducive to walking and cycling (J. Garrard 2008). ⁴⁸		

⁴¹ Ministry of Transport (2010). Pedestrians: Crash statistics for the year ended 31 December 2009. (Crash Factsheet 2010). Wellington: Ministry of Transport. Cited in Alliston, L. Alcohol-related injury: An evidence-based literature review. February 2012. Research New Zealand.

⁴² Deloitte. Qualitative and Quantitative Analysis of the New Zealand Road Toll: Final Report. Wellington: Ministry of Transport, 2017.

⁴³ International Transport Forum. Safer City Streets, A Global road safety benchmark, Working Document prepared to support 2nd meeting of the Safer City Streets network. ITF, 2017. Also see final report: <https://www.itf-oecd.org/sites/default/files/docs/safer-city-streets-globalbenchmarking-urban-road-safety.pdf>.

⁴⁴ Turner, S., Binder, S., Roozenburg, A. Cycle Safety: Reducing the crash risk. Wellington: NZ Transport.

⁴⁵ TRA. Measuring and growing active modes of transport in Auckland. Auckland: Auckland Transport, 2018.

⁴⁶ Auckland Transport, Auckland Cycling 10-year Plan. Available from: <https://at.govt.nz/media/1974167/auckland-cycling-10-year-plan-july-2017.pdf>.

⁴⁷ Jacobsen, P. L., Racioppi, F., & Rutter, H. "Who owns the roads? How motorised traffic discourages walking and bicycling." Injury Prevention, 2009; 15(6): 369.

⁴⁸ Fraser, DS., Lock, K. "Cycling for transport and public health: a systematic review of the effect of the environment on cycling." European Journal of Public Health 21, no. 6 (2010): 738-743.

⁴⁹ Garrard, J. Safe speed: promoting safe walking and cycling by reducing traffic speed. Melbourne, Australia: Safe Speed Interest Group - Heart Foundation, City of Port Phillip and City of Yarra, 2008.

Theme	Evidence	Cited by	AT comments
The safety of pedestrians / people on bikes continued	Studies of walking school buses frequently identify parental concerns about road safety as a barrier to their use. Walking school bus coordinators reported the dominance of cars, cars not stopping, and busy roads being of concern (Smith 2015). ⁵⁰	ARPHS	EVIDENCE HAS BEEN VALIDATED
	Simulated bicycle route choices show parents and children favour routes with 30km/hour traffic speed limits. (Ghekiere 2015). ⁵¹	ARPHS	EVIDENCE HAS BEEN VALIDATED
	A research project with three intermediate schools in Auckland and three outside Auckland found that low traffic speed zones were one of the top-three rated interventions to overcome barriers to children cycling to school. A school cycle network and cycle skills training were the other top rated interventions (H. Mackie n.d.). ⁵²	ARPHS	EVIDENCE HAS BEEN VALIDATED
	While there is good data on the perceived impact of traffic speeds and road safety on cycling, walking and children's play, there is only limited data on the actual impact of reducing traffic speeds. Both are likely to influence the relationship between traffic speed and active transport. Results from the few studies on actual impact are mixed and suggest a comprehensive approach to traffic calming is important to change perceptions sufficiently to impact on travel behaviour. This includes features such as road layout and design features alongside speed reductions (Cairns, et al. 2014, J. Garrard 2008). ^{53 54}	ARPHS	EVIDENCE HAS BEEN VALIDATED
	A NZTA survey of adult New Zealanders living in urban centres found three-quarters reported they would cycle if the roads were safer (NZTA 2016). ⁵⁵	ARPHS	EVIDENCE HAS BEEN VALIDATED

⁵⁰ Smith, L., Norgate, S. H., Cherrett, T., Davies, N., Winstanley, C., & Harding, M. "Walking School Buses as a Form of Active Transportation for Children—A Review of the Evidence." *The Journal of School Health* 85, no. 3 (2015): 197–210.

⁵¹ Ghekiere, A., Van Cauwenberg, J., Mertens, L., et al. "Assessing cycling-friendly environments for children: are micro-environmental factors equally important across different street settings?" *International Journal of Behavioural Nutrition and Physical Activity*, 2015: 12:54.

⁵² Mackie, H. Overcoming barriers to cycling to school: a key to improving transport system performance. n.d. http://atrf.info/papers/2009/2009_Mackie.pdf (accessed 11 1, 2018).

⁵³ Cairns, J, J Warren, K Garthwaite, and et al. "Go slow: an umbrella review of the effects of 20 mph zones and limits on health and health inequalities." *Journal of Public Health* 37, no. 3 (2014): 515–520.

⁵⁴ Garrard, J. Safe speed: promoting safe walking and cycling by reducing traffic speed. Melbourne, Australia: Safe Speed Interest Group - Heart Foundation, City of Port Phillip and City of Yarra, 2008.

⁵⁵ NZTA. "Urban New Zealanders Attitudes and Perceptions of Cycling." 2016.

Theme	Evidence	Cited by	AT comments
The safety of pedestrians / people on bikes continued	It is an NZTA strategic priority to make urban cycling a safer and more attractive transport choice. Similarly, it is a focus in the Auckland Plan 2050 to “make walking, cycling and public transport preferred choices for many more Aucklanders”. ⁵⁶	ARPHS	EVIDENCE HAS BEEN VALIDATED
	New Zealand is a member of The International Transport Forum, which makes the point that “where streets are seen as dangerous, efforts to promote walking and cycling are undermined. Reducing the risks of urban traffic thus not only saves lives: it unlocks sustainable forms of transport which reduce pollution, cut emissions, fight congestion and improve the physical and mental health of citizens – in short, safer streets are a key to make a city more liveable” (International Transport Forum. Safer City Streets. Available from: https://www.itf-oecd.org/safer-city-streets). ⁵⁷	ARPHS	EVIDENCE HAS BEEN VALIDATED
	Most cycling crashes and deaths happen in urban areas. Vehicle drivers are at fault in 87% of collisions and near misses, with a common feature being failure to look properly. ⁵⁸	ARPHS	EVIDENCE HAS BEEN VALIDATED
	It becomes safer for commuters and school students to walk and cycle resulting in less traffic. ⁵⁹	Movement	VALID INTERPRETATION
	Studies have found that streets that are more inviting for walkers and cyclists are more vibrant and economically successful than streets with high volumes of fast-moving traffic. Benefits include increased real estate value and higher spending on retail and services. ⁶⁰	Movement	CONSIDERED TO BE A VALID INTERPRETATION
	A systematic review undertaken by New Zealand researchers found that more traffic was associated with less active travel (e.g. walking or cycling) to school. ⁶¹	TAM-FS and HFMS	EVIDENCE HAS BEEN VALIDATED
	Walking and cycling provide physical activity, which reduces the risk of several of the leading causes of death in New Zealand, such as cardiovascular disease, cancers and diabetes. ⁶²	TAM-FS and HFMS	EVIDENCE HAS BEEN VALIDATED

⁵⁶ Auckland Council. Auckland Plan 2050. Transport and access Focus Area 4. Available from: <https://www.aucklandcouncil.govt.nz/plans-projects-policies>.

⁵⁷ International Transport Forum. Safer City Streets, A Global road safety benchmark, Working Document prepared to support 2nd meeting of the Safer City Streets network. ITF, 2017. Also see final report: <https://www.itf-oecd.org/sites/default/files/docs/safer-city-streets-globalbenchmarking-urban-road-safety.pdf>.

⁵⁸ Mackie, H.H. (2017). “Towards a safe system for cycling. Research report 606.”. Wellington: NZ Transport Agency.

⁵⁹ Slow Motion: Why reducing speed will promote walking and cycling https://www.healthybydesignsa.com.au/wpcontent/uploads/2013/04/ReduceSpeedSnapshot_Feb13.pdf.

⁶⁰ Good for Business <https://www.heartfoundation.org.au/images/uploads/publications/Good-for-business.pdf>.

⁶¹ Ikeda E, Hinckson E, Witten K, Smith M. Associations of children’s active school travel with perceptions of the physical environment and characteristics of the social environment: A systematic review. *Health and Place*, 2018. 54:118–131. doi:10.1016/j.healthplace.2018.09.009.

⁶² Woodcock J, Edwards P, Tonne C, Armstrong BG, Ashiru O, Banister D, et al. Public health benefits of strategies to reduce greenhouse-gas emissions: urban land transport. *The Lancet*. 2009;374(9705):1930–43.

Theme	Evidence	Cited by	AT comments
The safety of pedestrians / people on bikes continued	A New Zealand modelling study estimated that traffic calming of all local streets in Auckland using the 'self-explaining roads' design (street changes that naturally slow traffic without the need for speed signs or enforcement) would increase cycling mode share by 5% by 2051, with a net 85 road traffic injury deaths prevented up to 2051. Total lives saved would be much higher, at 650, due to the health benefits of physical activity from more cycling. The estimated benefit-cost ratio was 6, although if combined with separated cycle lanes on arterial roads, benefits would be much higher than for either intervention alone, and the benefit-cost ratio would be 24. ⁶³	TAM-FS and HFMS	EVIDENCE HAS BEEN VALIDATED
	Modelling undertaken in Auckland estimated that the total number of lives saved from implementing traffic calming (self-explaining roads) across Auckland would be an order of magnitude higher than the number of road traffic injury deaths prevented, due to increased physical activity. ⁶²	TAM-FS and HFMS	EVIDENCE HAS BEEN VALIDATED
	Implementation of 30km speed limits was a key recommendation of our e-bike research. This is because overseas research has identified 30km speed limits as the most effective way to increase e-bike uptake (even more so perhaps than separated lanes), because at 30km/hr e-bikes, as a slightly faster bike technology, are properly competitive with cars, thus 30km/hr limits are an important e-bike mode shift tool. ⁶⁴	TAM-FS and HFMS	EVIDENCE HAS BEEN VALIDATED
	Our qualitative research with ecyclists supported this: they were particularly likely to report feeling safe and comfortable biking in Wynyard Quarter with 30km/hr speed limits and sharrows – they reported finding it easier to harmonise their speed with motorists (important for safety), and experienced less traffic stress (a major deterrent to cycling), without needing separated cycle lanes. ⁶⁵	TAM-FS and HFMS	EVIDENCE HAS BEEN VALIDATED
	Auckland Council's work reports that 'Just under half of car trips in the morning peak period in Auckland are 6km long or less. These trips are within a 30-minute bike ride, and can easily be replaced by the bicycle.' ⁶⁶	TAM-FS and HFMS	CONSIDERED TO BE A VALID INTERPRETATION

⁶³ Macmillan A, Connor J, Witten K, Kearns R, Rees D, Woodward A. The societal costs and benefits of commuter bicycling: simulating the effects of specific policies using system dynamics modelling. *Environ Health Perspect.* 2014 Apr;122(4):335-44.

⁶⁴ Rudolph, F. Promotion of Pedelecs as a Means to Foster Low-Carbon Mobility: Scenarios for the German City of Wuppertal. *Transportation Research Procedia*4, 461-471 (2014).

⁶⁵ Wild, K. & Woodward, A. *Electric City: E-bikes and the future of cycling in New Zealand* (University of Auckland, Auckland, 2018)

⁶⁶ Auckland Council. *Auckland Plan 2050 evidence report: Transport and Access.*, Auckland Council, 2018.

Theme	Evidence	Cited by	AT comments
Increasing number of CBD residents and pedestrians	“The roads in the central city have a high volume of pedestrian traffic”. ⁶⁷	ARPHS	EVIDENCE HAS BEEN VALIDATED
	The Waitematā Local Board cites the increasing city centre population as evidence of the need for speed limit reductions (population nearing 60,000 and 118,000 city centre employees).	Waitematā Local Board	CONSIDERED TO BE A VALID INTERPRETATION
	“The number of people living in the city centre is greater than the number of people driving in during the morning peak”. ⁶⁸	ARPHS	EVIDENCE HAS BEEN VALIDATED

⁶⁷ Heart of the City (2018), Pedestrians in the City. Available from: www.hotcity.co.nz. Accessed 13 November 2018) with an estimated half a million walking trips daily (City Centre Residents Group (2019), City Centre Facts. Available from: <https://www.ccr.org.nz/city-centre-facts/>, accessed: 13 November 2018.

⁶⁸ MR Cagney (2018). Auckland City Centre: Transport Capacity and Access Trends. Auckland: Auckland Council.

Theme	Evidence	Cited by	AT comments
Healthy streets approach	<p>Self-explaining roads use the design characteristics of a road to influence driver behaviour. A demonstration project in Pt England/Glen Innes was successful at significantly reducing mean vehicle speeds to 30km/h with less speed variance (Charlton 2010).⁶⁹</p> <p>The intervention resulted in a 44% reduction in traffic compared to control areas (H. C. Mackie 2013, H. M. Mackie In press).^{70 71}</p>	ARPHS	EVIDENCE HAS BEEN VALIDATED
	<p>Te Ara Mua-Future Streets was a multi-agency healthy streets demonstration project in Māngere. The design principles were:</p> <ol style="list-style-type: none"> 1. A street hierarchy giving greater priority to people walking and cycling 2. Making people feel safe on their travel routes 3. Reducing traffic speed and speed variability 4. Improving people's ability to safely cross the road 5. Prioritising schools and the mall as destinations in the walking and cycling network 6. Providing an arterial separated bike network 7. Reflecting the identity of Māngere residents (H. Mackie 2018).⁷² <p>Preliminary data analysis suggests Te Ara Mua - Future Streets achieved reductions in traffic speed and volume, safer pedestrian crossing behaviour, a more user-friendly environment for walking and cycling, and improvements for people with impaired mobility (Hirsch 2018).⁷³</p>	ARPHS	EVIDENCE HAS BEEN VALIDATED
	<p>Healthy Streets is an evidence-based approach to creating urban streets and spaces that are socially and economically vibrant, environmentally sustainable and that improve people's health. The street environment achieves this if the whole community, including children, older people and disabled people are able to safely enjoy using the space (Mayor of London & Transport for London n.d.).⁷⁴</p>	ARPHS	EVIDENCE HAS BEEN VALIDATED

⁶⁹ Charlton, SG., Mackie, HW., Baas, PH., et al. "Using endemic road features to create self-explaining roads and reduce vehicle speeds." *Accident Analysis and Prevention* 42 (2010): 1989-1998.

⁷⁰ Mackie, HW., Charlton, SG., Baas, PH., Villasenor, PC. "Road user behaviour changes following a self-explaining roads intervention." *Accident Analysis and Prevention*, 2013: 742-750.

⁷¹ Mackie, H., Macmillan, A., Witten, K., et al. "Te Ara Mua - Future Streets suburban street retrofit: A researcher community-government co-design process and intervention outcomes." *Journal of Transport & Health*, In press.

⁷² Mackie, H., "Streets for our future: moving from knowledge to practice and outcomes." APCC presentation: Mackie Research, 2018.

⁷³ Hirsch, L., Mackie, H., Wilson, N., Cornille, Z. "Te Ara Mua - Future Streets: emerging impacts on road user behaviour." 2WALKandCYCLE Conference presentation. Available from author, 2018.

⁷⁴ Mayor of London and Transport for London. "Guide to the Healthy Streets Indicators." London, n.d. MG Boarnet, CL Anderson, K Day, T McMillan, M Alfonso., "Evaluation of the California Safe Routes.

Theme	Evidence	Cited by	AT comments
Healthy streets approach continued	Slower speed limits in town centres also contribute to social connectedness and place making. Roads and streets make up around half of Auckland's public open space. ⁷⁵	ARPHS	CONSIDERED TO BE A VALID INTERPRETATION
	The design speed of roads should be considered within a framework such as Healthy Streets or Complete Streets that moves beyond traffic speeds to creating streets that support social, environmental, economic and physical health and wellbeing. ⁷⁶	ARPHS	EVIDENCE HAS BEEN VALIDATED
	The resulting social and environmental benefits make cities more attractive places to live. ⁷⁷	Movement	EVIDENCE HAS BEEN VALIDATED
The need for engineering and enforcement	ACC, in their report on reducing traffic speeds, states that "To be effective, speed limits should be consistent with the design speed of the road and be backed up by enforcement" (Accident Compensation Corporation 2000). ⁷⁸	ARPHS	EVIDENCE HAS BEEN VALIDATED
	Traffic calming reduces vehicle speeds by altering the road layout or structural features. Traffic calming has been associated with higher levels of walking and reductions in pedestrian injury (Cairns, et al. 2014, Rothman 2014). ^{79 80}	ARPHS	EVIDENCE HAS BEEN VALIDATED
	The AA says AT hasn't followed the Speed Management Guide when creating the proposed bylaw: "..both the SMG and the Government Policy Statement (GPS) highlight, speed management entails a multi-pronged approach: not just reduced speeds, but also 'engineering up' (and, in some cases, speed limit increases).	NZ AA	CONSIDERED TO BE A VALID INTERPRETATION

AT's comments on evidence provided by the AA

AT has been working closely with NZTA and other stakeholders in following the national Speed Management Guidance, and when developing the bylaw. The Speed Management Programme developed in the AT Road Safety Programme Business Case 2018/28 identifies a combination of 'self-enforcing' and 'engineering up' initiatives that will contribute significantly towards reduced road trauma over time. The first bylaw is predominantly made up of 'self-enforcing' speed management changes in high-risk rural areas where road users are already travelling at the safe and appropriate speed. Future speed management bylaws will also include rural 'engineering-up' changes. It is also important to note that AT has already implemented a number of engineering safety enhancements in urban areas at high-risk locations e.g. raised pedestrian crossings.

⁷⁵ Auckland Transport (2017), Roads & Streets Framework. Available from: <https://at.govt.nz/media/1976084/roads-and-streets-framework-webcompressed.pdf>. Accessed 9 November 2018

⁷⁶ Mayor of London and Transport for London, "Guide to the Healthy Streets Indicators". London, n.d.) and (Smart Growth America. Complete Streets. Available from: <https://smartgrowthamerica.org/program/national-complete-streets-coalition/publications/what-are-complete-streets/>).

⁷⁷ World Resources Institute "Cities Safer By Design": https://wriorg.s3.amazonaws.com/s3fpublic/CitiesSaferByDesign_final.pdf?ga=2.109229061.1815257020.1540194716571279675.1536470985.

⁷⁸ Accident Compensation Corporation. "Down with Speed." 2000.

⁷⁹ Cairns, J, J Warren, K Garthwaite, and et al. "Go slow: an umbrella review of the effects of 20 mph zones and limits on health and health inequalities." Journal of Public Health 37, no. 3 (2014): 515-520.

Theme	Evidence	Cited by	AT comments
The need for engineering and enforcement continued	<p>“In the international literature it is well established that when the speed limit is not aligned with the road environment, the result is low levels of compliance. The SWOV Institute for Road Safety, The Netherlands states that “A credible speed limit is defined as a speed limit that matches the image that is evoked by the road and the traffic situation..If a limit is not credible, drivers will be more inclined to choose their own speed. If limits are experienced as being incredible too often, it will also damage the trust in the speed limit system as a whole.”⁸¹</p>	NZ AA	EVIDENCE HAS BEEN VALIDATED
	<p>The AA says compliance will be low if the changes aren't accompanied by engineering measures:</p> <p>“The UK's Department for Transport recently completed a review of sign-only 20mph zones, which evaluated the effects of residential areas and town centres that had lowered speed limits from 30mp/h (48km/h) to 20mp/h (32km/h). It found only minor changes in driven speeds: median speed fell 0.7mph in residential areas and 0.9mph in city centres. It also found that road characteristics have a much larger impact on driven speeds than whether the road has a 30mph or 20mph limit”.⁸²</p>	NZ AA	CONSIDERED TO BE A VALID INTERPRETATION
The impact on children	<p>Safekids report that each year 316 Kiwi children die or are hospitalised from crashes involving motor vehicles. For non-fatal crashes, nearly half occur when children are passengers in vehicles and more than one-quarter occur when they are pedestrians.⁸³</p>	ARPHS	EVIDENCE HAS BEEN VALIDATED
	<p>In Auckland from the beginning of 2014 and the end of 2015, 110 children aged under 10 were killed or required hospitalisation due to a motor vehicle collision. This was over a third of the total child injuries and deaths from motor vehicle collisions in the whole country.⁸⁴</p> <p>Appendix 1 shows the number of children requiring either a hospital stay of more than a day or killed due to road injuries, by Auckland local board area.</p>	ARPHS	EVIDENCE HAS BEEN VALIDATED

⁸⁰ Rothman, L., Buliung, R., Macarthur, C., To, T., Howard, A. “Walking and child pedestrian injury: a systematic review of built environment correlates of safe walking.” Injury Prevention: Journal of the International Society for Child and Adolescent Injury Prevention 20, no. 1 (2014): 41-49.

⁸¹ SWOV Institute for Road Safety, The Netherlands, SWOV Fact Sheet: Towards credible speed limits, https://www.swov.nl/sites/default/files/publicaties/gearchiveerdefactsheet/uk/fs_credible_limits_archived.pdf (accessed 26 March 2019).

⁸² Atkins, AECOM and Mahler, M., 20mph Research Study: Process and Impact Evaluation, Headline Report, https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/757307/20mph-headline-report.pdf, UK Dept for Transport, 2018.

⁸³ Safekids Aotearoa (2015) Transport injuries were among the top ten causes of health loss in children under 14 years of age in 2013. Environmental Health Indicators New Zealand 2018.

⁸⁴ Injury Prevention Research Unit, Department of Preventive and Social Medicine, University of Otago n.d.

Theme	Evidence	Cited by	AT comments
The impact on children continued	A before-and-after study of 32km/h (20mph) zones found a 61% reduction in total injuries, but a 70% reduction in child pedestrian injuries, and a 48% reduction in child cyclist injuries (Cairns, et al. 2014). ⁸⁵	ARPHS	EVIDENCE HAS BEEN VALIDATED
	Studies that have assessed the impact of 30km/hour zones have found they reduce injuries and deaths in children by 50-70%. ^{86 87}	ARPHS	EVIDENCE HAS BEEN VALIDATED
	The World Health Organization report on Child Injury Prevention discusses a range of interventions to protect children when using roads. A safe environment for children requires: <ul style="list-style-type: none"> – prioritising space for walking and cycling – integrating routes to school, playgrounds and shops into a logical, coherent and safe cycling and walking network, and – the use of traffic calming and speed limits to reduce vehicle speeds. (World Health Organization 2008) 	ARPHS	EVIDENCE HAS BEEN VALIDATED
	They recommend 30km/h speeds should be the norm in residential areas and around schools (World Health Organization 2008). ⁸⁸		
	The World Health Organisation (WHO) has emphasised the need for 30km/h limits, stating that in areas where ‘motorised traffic mixes with pedestrians, cyclists, and moped riders, the speed limit must be under 30km/h’ due to the vulnerability of these road users (Global Status Report on Road Safety 2015, WHO, 2015). ⁸⁹	Brake and Victim Support	EVIDENCE HAS BEEN VALIDATED
Research has found that children cannot judge the speed of approaching vehicles travelling faster than 30km/h, so may believe it is safe to cross when it is not. ⁹⁰	Brake and Victim Support	EVIDENCE HAS BEEN VALIDATED	

⁸⁵ Cairns, J, J Warren, K Garthwaite, and et al. “Go slow: an umbrella review of the effects of 20 mph zones and limits on health and health inequalities.” *Journal of Public Health* 37, no. 3 (2014): 515–520.

⁸⁶ Cairns, J, J Warren, K Garthwaite, and et al. “Go slow: an umbrella review of the effects of 20mph zones and limits on health and health inequalities”. *Journal of Public Health* 37, no.3 (2014): 515–520.

⁸⁷ Grundy, C., Steinbach, R., Edwards, P., et al. “Effect of 20mph traffic speed zones on road injuries in London, 1986–2006: controlled interrupted time series analysis.” *BMJ*, 2009: 339:b4469.

⁸⁸ World Health Organization. *World Report on Child Injury Prevention. Chapter 2: Road traffic injuries.* Geneva: World Health Organization, 2008.

⁸⁹ Global Status Report on Road Safety 2015, WHO, 2015.

⁹⁰ Traffic at 30mph is too fast for children’s visual capabilities, University of Royal Holloway London, 2010.

Theme	Evidence	Cited by	AT comments
The impact on children continued	Our research team has also undertaken qualitative research with ‘exemplar’ schools that have high levels of active travel to school. Having a supportive physical environment surrounding the school was an important theme reported by participants as influencing active travel to school, indicating the importance of reducing traffic barriers around school. ⁹¹	TAM-FS and HFMS	EVIDENCE HAS BEEN VALIDATED
	A recent study of over 900 parents in Auckland found concerns about traffic safety were by far the greatest barrier to children walking and cycling around their neighbourhood. Over half of parents (50.3%) mentioned a need for a safer transport environment (less, slower and safer traffic; and having safe places to cross, cycle, and walk), with the greatest need being less, slower and safer traffic (19.9%). ⁹²	TAM-FS and HFMS	EVIDENCE HAS BEEN VALIDATED
	Parent traffic safety concerns were also significantly associated with reduced likelihood of actively travelling to school in over 1100 children in Auckland. ⁹³	TAM-FS and HFMS	EVIDENCE HAS BEEN VALIDATED
Strategies for assisting public acceptance of reduced speed limits	<p>Evaluation shows that residents favour reduced speed limits once they are in place, even if there was initial opposition (van den Dool 2017, Cairns, et al. 2014).^{94 95} Recommendations to improve acceptance of 30km/h speed limits include:</p> <ul style="list-style-type: none"> • Implementing slow zone neighbourhoods around schools and busy residential areas that allow residents to experience the benefits of slower speeds prior to wider implementation • Creating a culture of safer streets through physical traffic calming and enforcement • Developing an attitude of zero tolerance to unnecessary road deaths • Working together with all stakeholders to create a strong collective voice for change and a broad base of support, whilst also working with residents around any concerns (VanderBerg 2015).⁹⁶ 	ARPHS	EVIDENCE HAS BEEN VALIDATED

⁹¹ Hawley G, Witten K, Smith M, Hosking J. What Contributes to High Rates of Active School Travel? Perspectives of Exemplar Schools in New Zealand. *Journal of Transport & Health*, 2018, 9(supp):S20.doi:10.1016/j.jth.2018.05.075.

⁹² Smith M, Amann R, Cavadino A, Raphael D, Kearns R, Mackett R, Mackay L, Carroll P, Forsyth E, Mavoa S, Zhao J, Ikeda E, Witten K. (in review). What parents want: A wish-list for children’s independent mobility, relationships between parent perceptions and objectively assessed transport environments, and associations with parent licence for independence in Auckland, New Zealand. *International Journal of Environmental Research and Public Health*.

⁹³ Ikeda E, Hinckson E, Witten K, Smith M. (in press). Assessment of direct and indirect associations between children active school travel and environmental, household and child factors using structural equation modelling. *International Journal of Behavioural Nutrition and Physical Activity*.

⁹⁴ van den Dool, D., Tranter, P., Boss, A. “Safe-street neighbourhoods: the role of lower speed limits.” *Journal of the Australian College of Road Safety* 28, no. 3 (2017): 55-63.

⁹⁵ Cairns, J, J Warren, K Garthwaite, and et al. “Go slow: an umbrella review of the effects of 20 mph zones and limits on health and health inequalities.” *Journal of Public Health* 37, no. 3 (2014): 515-520.

⁹⁶ VanderBerg, N., Penalosa, G., Sooley, L., O’Rourke, A., O’Connor, R. *Livable streets for all: 30kmh / 20mph speed limits in urban neighbourhoods*. Toronto: 8-80 Cities, 2015.

Theme	Evidence	Cited by	AT comments
The impact of reduced speed limits on journey times	<p>Changes in speed limits tend to have more effect on travel times for roads that are not congested and rural roads. In urban environments, travel time is effected more by traffic flow through intersections rather than speed limits (Accident Compensation Corporation 2000).⁹⁷</p> <p>NZTA has determined travel times on an urban Auckland route using different speed limits. A 10km/h speed reduction in a peak hour trip of 12km from Lynfield to Mt Wellington increased trip time by 3:13 minutes (Rowland 2017).⁹⁸</p> <p>Estimates of impacts on travel time from speed limit changes suggest impacts will be small. On urban roads, capacity is determined more by traffic flow through intersections and congestion rather than speed limits. Dropping the maximum speed limit has a small effect on the average speed for a trip.⁹⁹</p>	ARPHS	EVIDENCE HAS BEEN VALIDATED
	<p>NZ Post and Freightways “collaborated on an assessment of the impact that the proposed Speed Limit Bylaw would have on our respective courier businesses if the full Bylaw changes were implemented.”</p> <ul style="list-style-type: none"> • Used GPS technology to assess the impact on journey times • Found that in the CBD, the proposed changes would mean “that on a typical day we would need to deploy 20% more vehicles, and the delivery time would increase from 635’ to 940’ (48% increase).” <ul style="list-style-type: none"> – The increase in vehicles and delivery time is also expected to put pressure on designated loading zones within the CBD area, resulting in a requirement for more or larger loading zone areas – Delivery costs are estimated to increase by c 30%, which will inevitably be passed onto our customers – Will cause a reduction in delivery cycles per day – will have detrimental effects on CBD businesses. 	NZ Post and Freightways	UNPUBLISHED EVIDENCE

⁹⁷ Accident Compensation Corporation. “Down with Speed.” 2000.

⁹⁸ Rowland, T., McLeod, D. Time and fuel effects of different travel speeds. Wellington: NZ Transport Agency research report 582, 2017.

⁹⁹ NZTA (2016). Speed Management Toolbox. Available from: <https://www.nzta.govt.nz/assets/safety/docs/speed-management-resources/speed-management-toolbox-and-appendices-201611.pdf>.

AT's comments on the evidence provided by NZ Post and Freightways

Thank you for the substantial work that has gone into a comprehensive submission on the AT Speed Limits Bylaw 2019. We value your input and our partnership with you in creating a safe and forgiving road environment for Aucklanders.

We have assessed the submission from NZ Post and Freightways Ltd claiming that the proposed city centre speed limit changes will result in a 48% increase in operations on a typical day and recommending alternative speed limit proposals through the CBD. We appreciate your concerns and understand that, if correct, this would represent a substantial impact on operations. However, it is considered that the analysis provided in the submission is incomplete and unable to be verified without further information being provided by NZ Post or Freightways. In our view;

- The analysis that informs the evidence quoted in the submission has been undertaken by NZ Post and Freightways Limited directly and has been conducted using GPS technology used by NZ Post and Freightways to track and dynamically route vehicles.
- The submission does not reference independent or published evidence.
- There is no presented evidence within the submission that outlines the methodology applied in assessing this data or any data sources provided, with the exception of point speed data which is presented in two maps.
- No timeframes have been applied to the point speed maps to determine specific time periods during which these speeds are recorded.
- The data that has been presented indicates point speeds along the routes, however point speeds between 20kph and 30kph have been omitted from the submission.
- The GPS analysis on key arterials shows point speeds of 40-50km/h. The absence of point speeds in the 20km/h to 30km/h range on the submission maps results in an incomplete picture. Of the 8 routes highlighted in the submission NZTAs Megamaps shows an average operating speed of <30km/h for 6 of the corridors. This is consistent with Auckland Transport's monthly monitoring along these city centre arterials routes. On this basis it is likely that AM, PM and interpeak journey time impacts will likely be negligible as operating speeds are already below the proposed 30km/h limit.
- No evidence is provided to support comments that CBD arterials have much lower concentrations of vulnerable road users.
- No evidence has been provided on the safety benefits from the alternative proposals outlined in the recommendation.

In summary, without access to the analysed data, the methodology applied in undertaking the assessment or any key assumptions made in calculating the journey time impacts it is unfeasible to verify the outputs which have been presented in the submission showing the impact on the overall operation of both organisations. Based on available average operating speed information, it is considered highly likely that impacts to journey times will be negligible through the CBD as these are already on average below 30kph. If there was a willingness to share details in relation to the analysis that informs the submission findings then AT would be willing to undertake a verification process to ascertain the validity of the concerns raised in the submission.

Theme	Evidence	Cited by	AT comments
The impact of reduced speed limits on journey times continued	<p>Ports of Auckland presented evidence from a senior associate at Traffic Planning Consultants Limited – Anatole Michael Sergejew who conducted an investigation into the impacts of the proposed changes to Beach Road and Tangihua Street:</p> <ul style="list-style-type: none"> • Not accounting for delay at intersections, the route would take 48 seconds to traverse at 50 km/h and 80 seconds to traverse at 30 km/h • Based on a social cost of \$16.27/hour, the social cost of reducing the speed limit on Beach Road and Tangihua Street from 50km/h to 30km/h would be \$575,300 per year. Updating to July 2018 values this would be an annual social cost of \$862,950 • This results in a net social loss of \$675,330. <p>Please see page 39 for AT's comments on the evidence submitted by POAL.</p>	Ports of Auckland	UNPUBLISHED EVIDENCE
	<p>According to Archer, et al., 2008, in medium congestion levels, "a lower speed limit may actually reduce overall travel time by allowing a more harmonic traffic rhythm."¹⁰⁰</p>	Transportation Group New Zealand	EVIDENCE HAS BEEN VALIDATED
Evidence opposing claim that 'driver education' is the solution	<p>It has been contended by some that the solution to improving road safety is driver education. Training and driver education have a role, but cannot be relied on to significantly improve road safety. The Safe System approach arose in the 1980s and 1990s because of the ineffectiveness of the prevailing view that road use safety was a person's own responsibility and could be changed by influencing road users' to act safely at all times. There was a shift to viewing road safety as a whole system, taking into account that human beings make errors of judgement.¹⁰¹</p>	ARPHS	EVIDENCE HAS BEEN VALIDATED
	<p>Traffic psychology tells us that human behaviour is the most difficult part of the transport system to change.¹⁰²</p>	ARPHS	EVIDENCE HAS BEEN VALIDATED
	<p>Experimental studies on driver training have not demonstrated beneficial effects on accident rates (positive effects have only been seen in non-experimental studies). It is thought this could be because people who have received training think they are better drivers so give themselves smaller safety margins than less-confident drivers.¹⁰¹</p>	ARPHS	EVIDENCE HAS BEEN VALIDATED

¹⁰⁰ Archer, et al., 2008. https://www.monash.edu/__data/assets/pdf_file/0007/216736/The-impact-of-lowered-speed-limits-in-urbanand-metropolitan-areas.pdf.

¹⁰¹ ITF (2016), *Zero Road Deaths and Serious Injuries: Leading a Paradigm Shift to a Safe System*, OECD Publishing, Paris.

¹⁰² Porter, BE (2011). *Handbook of Traffic Psychology*. Academic Press: London.

Theme	Evidence	Cited by	AT comments
Social and geographical differences in road traffic injuries in Auckland	Research from the University of Auckland, commissioned by Auckland Transport, found traffic-related deaths and hospitalisations were more common for Māori, Pacific children, people in South Auckland and in rural areas. Road crash injury rates increased with level of socio-economic deprivation across all age groups. Children living in the most socio-economically deprived areas had a three times higher injury rate than children living in the least deprived areas (J. A. Hosking 2013). ¹⁰⁵	ARPHS	EVIDENCE HAS BEEN VALIDATED
	Some of Auckland's communities are disproportionately impacted by road crashes. There is a relationship between socioeconomic status and traffic injuries and death that is seen globally. ¹⁰⁴	ARPHS, Holy Trinity Catholic Primary School	EVIDENCE HAS BEEN VALIDATED
	This is also the case in Auckland, with Māori, Pacific children, people living in South Auckland and in rural areas over-represented in road deaths and serious injury. Children living in the most socio-economically deprived areas have a three times higher injury rate than children living in the least deprived areas. ¹⁰⁵	ARPHS, Holy Trinity Catholic Primary School	EVIDENCE HAS BEEN VALIDATED
	Research has found fewer road traffic-calming features within a 1km radius of schools in Manukau City, compared to a 1km radius of schools in Auckland City. The road environment for children attending higher-decile schools in Auckland City was compared to that for children attending lower decile schools in Manukau City. There were fewer road traffic calming features within a 1km radius of schools in Manukau City, where children are known to be at increased risk of child pedestrian injury. By level of socio-economic deprivation, there were 25 traffic calming features around the least deprived schools versus 18 in the most deprived schools. Auckland City schools had 27 traffic calming interventions, compared to 16 around schools in Manukau City (T Hopgood 2013). ¹⁰⁶	ARPHS, Holy Trinity Catholic Primary School	EVIDENCE HAS BEEN VALIDATED

¹⁰⁵ Hosking, J., Ameratunga, S., Exeter, D., Stewart, J., Bell, A. "Ethnic, socioeconomic and geographical inequalities in road traffic injury rates in the Auckland region." *Australian and New Zealand Journal of Public Health* 37, no. 2 (2013): 162-7.

¹⁰⁴ Christie, N. (2018). "Why we need to view road safety through a public health lens." *Transport Reviews*, 38:2, 139-141, DOI: 10.1080/01441647.2018.1411226.

¹⁰⁵ Hosking, J, S Ameratunga, D Exeter, J Stewart, and A Bell. 2013. Ethnic, socioeconomic and geographical inequalities in road traffic injury rates in the Auckland region. *Australian and New Zealand Journal of Public Health* 37, no. 2: 162-7.

¹⁰⁶ Hopgood, T., T Percival, J Stewart, S Ameratunga. 2013. A tale of two cities: paradoxical intensity of traffic calming. *The New Zealand Medical Journal* 126, no. 1374: 22-28.

Theme	Evidence	Cited by	AT comments
Social and geographical differences in road traffic injuries in Auckland continued	The proposed implementation pattern of reduced speed zones on urban is likely to increase health inequities, including inequities by income and ethnicity in road traffic injury. ¹⁰⁷	TAM-FS and HFMS	EVIDENCE HAS BEEN VALIDATED
	The largest area affected by 30 km/h zones is the city centre, which is distant from many deprived areas, which often have higher rates of road traffic injury, especially for children. As such, 30 km/h zones in the city centre may lead to greater benefits for more affluent Aucklanders, compared with people living in more deprived areas.		
Impact of speed limits reductions on air quality and greenhouse gas emissions	Speed reductions on roads with 100km/h speed limits will improve air quality and reduce greenhouse gas emissions, noise and fossil fuel use. ¹⁰⁸	ARPHS	EVIDENCE HAS BEEN VALIDATED
	On urban roads with 50km/h speed limits reducing traffic speeds may not improve air quality unless it creates smoother driving patterns and a shift towards public and active transport (Bellefleur 2012). ¹⁰⁹	ARPHS	EVIDENCE HAS BEEN VALIDATED
	While vehicle emissions data does not suggest improvements in air pollution at speeds under 50km/h, empirical evidence shows that vehicles travelling at higher speeds in urban areas brake and accelerate more often, increasing air pollution. Slower and calmer styles of driving can reduce gear changing, braking, and fuel use, thereby reducing air pollution (Replogle 1995). ¹¹⁰		

¹⁰⁷ Hosking J, Ameratunga S, Exeter D, Stewart J. 'Social and geographical differences in road traffic injury in the Auckland region'. Auckland: Auckland Transport; 2012.

¹⁰⁸ International Traffic Safety Data and Analysis Group. Speed and Crash Risk: Research report. Paris: International Transport Forum, 2018.

¹⁰⁹ Bellefleur, O. Summary: Urban Traffic Calming and Air Quality: Effects and Implications for Practice. Quebec: National Collaborating Centre for Healthy Public Policy, 2012.

¹¹⁰ Replogle, MA... Effects of highway capacity changes on energy use and the environment. Washington DC: Transportation Research Board, 1995.

Theme	Evidence	Cited by	AT comments
Impact of speed limits reductions on air quality and greenhouse gas emissions continued	In New Zealand, deaths attributable to the effects of air and noise pollution from road transport have been estimated to be similar to the number of deaths from road collisions (Briggs 2016). ¹¹¹	ARPHS	EVIDENCE HAS BEEN VALIDATED
	Vehicle emissions are a major contributor to greenhouse gas emissions. Road transport was one of the biggest contributors to the increase in New Zealand's greenhouse gas emissions between 1990 and 2016, with an 82% increase in emissions. (Ministry for the Environment 2018) Transportation is the biggest contributor to greenhouse gas emissions in Auckland (Xie 2017). ¹¹²	ARPHS	EVIDENCE HAS BEEN VALIDATED
	Carbon dioxide emissions directly relate to fuel consumption. Reducing speed (no further than 20km/h) reduces fuel consumption (International Traffic Safety Data and Analysis Group 2018). ¹¹³		
	Lower speeds also result in a decrease in fuel use and fewer emissions and pollutants, resulting in cleaner, greener and more liveable communities. Furthermore, in urban areas, increases in travel time due to lower speed limits are negligible. ¹¹⁴	Brake and Victim Support	EVIDENCE HAS BEEN VALIDATED
	In fact, there is plenty of evidence supporting the promotion of active travel for health benefits generally as shown in the recent NICE report ¹¹⁵ , which evidences the air quality benefits. ¹¹⁵	AECOM	EVIDENCE HAS BEEN VALIDATED
Surveys of public opinion	The AA cites its own survey results regarding its members support/opposition to proposed speed limit changes: How do you generally feel about the prospect of lower speed limits in and around Auckland? Support: 11.9% It depends exactly where, when and how: 51.9% Opposed: 35.8% Not sure or don't know: 0.5% See NZ AA submission for more survey results.	NZ AA	CONSIDERED TO BE A VALID INTERPRETATION

¹¹¹ Briggs, D., Mason, K., Borman, B. "Rapid Assessment of Environmental Health Impacts for Policy Support: The Example of Road Transport in New Zealand." *International Journal of Environmental Research and Public Health*, 2016: 13(1): 61.

¹¹² Xie, S. *Auckland's Greenhouse Gas Inventory to 2015*. Auckland: Auckland Council, 2017.

¹¹³ International Traffic Safety Data and Analysis Group. *Speed and Crash Risk: Research report*. Paris: International Transport Forum, 2018.

¹¹⁴ Austroads (2005) *Balance between Harm Reduction and Mobility in Setting Speed Limits: A Feasibility Study*. Austroads Publication No. AP-R272/05.

¹¹⁵ NICE, 2019, *Review of Interventions to Improve Air Quality*, https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/784055/Reviewofinterventionstoimproveairquality.pdf

Theme

Evidence

Cited by

AT comments

Road/area related evidence

At the hearings, Ports of Auckland presented evidence from a senior associate at Traffic Planning Consultants Limited who conducted an investigation into the impacts of the proposed changes to Beach Road and Tangihua Street:

Ports of Auckland

UNPUBLISHED EVIDENCE

- There were four serious injury crashes on Beach Road between 2014-2018
- In his opinion the proposed speed limit reductions would only have reduced two of those crashes
- Had those crashes been prevented by the proposed speed limit changes, it would “represent a social benefit of \$885,000 over 5 years or \$177,000 per year on average in May 2015 value terms. Updating to July 2018 values this would be an annual social benefit of \$187,620

- However, he says the impact to journey times – and associated social cost – means the proposed changes will yield a net social loss
 - Not accounting for delay at intersections, the route would take 48 seconds to traverse at 50 km/h and 80 seconds to traverse at 30 km/h
 - Based on a social cost of \$16.27/hour, the social cost of reducing the speed limit on Beach Road and Tangihua Street from 50km/h to 30km/h would be \$575,300 per year. Updating to July 2018 values this would be an annual social cost of \$862,950
 - This results in a net social loss of \$675,330

- Recommends changes to the road environment incl. installing a midblock solid media island which would prevent right turns at driveways and reduce the risk of serious injury crashes

- Says proposed changes will increase congestion on The Strand.

POAL cited the Regional Policy Statement section of the Auckland Unitary Plan which recognises the Port’s national and regional significance, specifically the requirement “that an integrated transport network is provided for, specifically referencing freight”. POAL says the proposed bylaw will have adverse effects on its operations.

AT's comments on evidence provided by the Ports of Auckland

Thank you for the investigative work that has gone into your submission on the AT Speed Limits Bylaw 2019. We value your input and our partnership with you in creating a safe and forgiving road environment for Aucklanders.

We have reviewed the evidence put together by Traffic Planning Consultants Ltd (TPC) suggesting that the proposed speed restrictions to Beach Road and Tangihua Street will result in only a very limited gain in safety outcomes and that the social costs of the proposal far outweigh the social benefit of reducing the target serious injury crashes on these two roads.

We have assessed the evidence to be a very simplistic analysis of social costs and benefits that has not included a number of important safety aspects and data sources including:

- Urban KiwiRAP Risk-mapping of Collective Crash-risk for Tangihua Street and Beach Road which identifies Tangihua Street as having a High-Medium Collective Crash-risk and both roads having a High Active Road User Crash-risk. This is a reflection of the increased walking and cycling use in the area.
- Vulnerable road user injuries feature strongly on Beach Road and Tangihua Street and due to the significant mis-reporting of vulnerable road user injuries (serious injuries being mis-coded as minor injuries), the EEM recommends a 10 year analysis for such areas.
- We have identified six serious injuries on Tangihua Street and Beach Road, three of which have been excluded from the TPC analysis. This results in a significant under-estimation of the social cost of serious injury crashes on these roads.
- Speed is a factor in every serious injury and it is inconsistent to select which injuries it applies to.
- Walking and cycling health benefits have not been included in the analysis.
- The social cost values of the serious injury crashes have been assessed using national averages instead of Auckland urban social costs, which results in an under-estimation of the costs involved.
- The travel time analysis is very optimistic when compared to actual operating speeds on Tangihua Street and Beach Road, resulting in an over-estimation of social cost of travel time.
- The Beach Road and Tangihua Street speed reduction proposals are part of a city centre wide proposal and therefore include area-wide social costs and benefits.
- NZTA has recently allowed travel time social costs to be off-set on roads which involve lowering the existing speed limit to the Safe and Appropriate Speed. This recent change further reduces the estimated travel time social costs on Beach Road and Tangihua Street.

In summary, the evidence provided considers itself to be a 'simplistic analysis' that does not consider a wide range of costs and benefits. A more thorough analysis is required to estimate the full Benefit to Cost Ratio of speed limit reductions on Beach Road and Tangihua Street.

Theme	Evidence	Cited by	AT comments
Road/area related evidence continued	Māngere Central ranks 4th out of 275 Auckland communities for fatal and serious crashes. 26% of all crashes in the area involve pedestrians. The social costs of these incidents in Māngere Central is around \$18.2m.	Māngere-Ōtāhuhu Local Board	EVIDENCE HAS BEEN VALIDATED
	Mangere has a significant residential development for Auckland through central government's Auckland Housing Programme (AHP) which will replace approximately 2,700 state houses with up to 10,000 new healthy homes over the next 10-15 years. This will include around 3000 new state houses, as well as 3500 affordable homes and 3500 new market homes.	Māngere-Ōtāhuhu Local Board	EVIDENCE HAS BEEN VALIDATED
	The Manurewa Local Board area has one of the highest road death and injury rates in Auckland, with 56 deaths and serious injuries recorded in 2017.	Manurewa Local Board	EVIDENCE HAS BEEN VALIDATED
	Road deaths in Rodney have increased 107% from 2013 to 2017, making up 12% of the total deaths on Auckland's roads	Rodney Local Board	EVIDENCE HAS BEEN VALIDATED
	Rodney had the highest level of DSI of all local board areas in 2017, 28% of these in 2017 involving vulnerable road users – people walking and cycling.	Rodney Local Board	EVIDENCE HAS BEEN VALIDATED



Local Boards

We received 13 submissions from local boards. Their full submissions were taken into consideration. For the purpose of this report, summaries of their submissions have been provided below.

Albert-Eden Local Board

The Albert-Eden Local Board generally supports reducing speed limits on Auckland's roads and the extension of the programme into urban areas throughout the city, including Albert-Eden which is not affected by the proposal.

The board also notes that there have been several accidents involving deaths and serious injuries in their area in recent years and welcomes the opportunity to discuss with AT how this could be addressed through reducing speed limits and other measures.

Some Local Board members would like to see speed limits reduced to 30km/h on all roads around schools at all times.

Aotea Great Barrier Local Board

The proposed Speed Limits Bylaw 2019 does not directly affect any roads on Aotea Great Barrier Island. However, the board supports the intent of the bylaw which is to decrease traffic speeds in order to reduce death and injury on Auckland roads.

Franklin Local Board

- i. Support the intent of the proposed Speed Limits Bylaw as an important mechanism for making Auckland roads safer.
- ii. Request that AT reduce speed limits by no more than 20km/h e.g. from 100km/h to 80km/h or from 80km/h to 60km/h, except where evidence shows a more significant reduction is warranted or where the community have indicated a preference for a lower speed through the public consultation process.



- iii. Support the Speed Limits Bylaw providing a mechanism to amend (reduce) speed limits to reflect an evolving environment noting that green-field development and consented or permitted activities such as quarrying and forestry will have impacts on rural roading conditions and road use in the future.
- iv. Request that limits on roads that lead into the Waikato or Hauraki Districts are consistent with the Waikato and Hauraki District Council imposed limits/approach to speed management.
- v. Request that communities that have actively sought reduction in speed have reductions prioritised for implementation e.g. Hunua Village, Brookby School.
- vi. Note that while reduction of speed is a significant contributor to road safety, road quality is of significant concern in rural areas e.g. maintenance request that AT continue to progress other rural road safety initiatives including intersection lighting, intersection improvements, engineering improvements education, interactive warning signs at identified 'hot spot' intersections e.g. Monument Road and Tourist Road (Clevedon).



Hibiscus and Bays Local Board

Supports the principle of reducing speed limits to reduce serious injuries and road deaths, 30km/h speed limits in town centres, Hatfield's Beach being reduced to 60km/h and extending the slow zones on Alice Ave and include Edward Ave (West Hoe Road to Orewa Town Centre).

HBLB has concerns about the narrow focus of the question used for consultation and the small number of have your say events in their area.

Suggests that AT should look at reducing speeds on:

- Red Beach Road as a primary school is present.
- Rothesay Bay due to known issues with speed.
- Okura River Road (East Coast Road to Vaughans Road) should be reduced to 60km/h as it is a known accident black spot record has a host of issues.

Hibiscus Coast Highway through Silverdale to be reduced from 70km/h to 60 km/h from the intersection of East Coast Road through to Moffat Road.

Howick Local Board

The Howick Local board broadly supports speed limit changes around Auckland to ensure Auckland's road network is safer. Three roads where affected by the Bylaw are in the boards area:

- Supports speed reductions on Thomas Road and Ormiston Road.
- Concerned that increasing the number of varying speeds on Ormiston Road may cause confusion to drivers decreasing compliance amongst drivers.
- The board suggests that changing the speed limit on Highbrook Drive would have little impact on the safety of road users but would significantly impede traffic flow given that speeds are usually 60-64 km/h.

Māngere-Ōtāhuhu Local Board

The local board support the draft bylaw to introduce new speed limits across the Auckland region's road network. The board supports 30km/h speed restrictions in Mangere East and Mangere Bridge town centres.

The board recommend the following roads for 50km/h speed limits:

- Creamery Road
- Greenwood Road
- Pukaki Road (up to 375m south of Cyclaman Road)
- Favona Road
- Mahunga Drive
- McKenzie Road
- Suburban Roads in Mangere and Otahuhu.

The board request infrastructure such as signals and signage to support new speed limits.



Manurewa Local Board

The Manurewa Local Board supports in principle the lowering of speed limits and the wider road safety programme.

Ōrākei Local Board

While the Ōrākei Local Board supports in principle the intention of Auckland Transport's speed management plan to improve safer interactions between vehicles and other vulnerable road users through reduction of vehicle speeds in and around town centres, it disagrees that this requires changes to infrastructure in St Heliers and Mission Bay town centres as advised by AECOM to change driver behaviour.

Ōtara-Papatoetoe Local Board

Ōtara-Papatoetoe Local Board welcomes the Speed Limits Bylaw 2019 and supports the review and setting of safe speed limits that can prevent unnecessary loss of life, injury or property on our roads.

The Ōtara-Papatoetoe Local Board request that town centres and schools in their area are prioritised for investigation of safe speed limits in the future

Papakura Local Board

The board broadly supports the range speed reductions within Papakura. In addition, the board suggests two new areas near schools where they see a benefit in reducing the speed limit:

- Airfield Road reduced from 70km/h to 50 km/h (from Porchester to Mill Road)
- Papaka Road as Hingia School is using it as its main access
- Walters Road as it is near Kari Flats School.

Rodney Local Board

Supports a review of speed limits within Rodney and the investigation and delivery of effective measures to improve safety on the road network.

Encourages Auckland Transport (AT) and the New Zealand Transport Agency (NZTA) to collaborate on programmes and promotions to improve the safety of the road network.

Supports slower speeds on rural roads to cope with increasing use and increasing demands on driver decision making.

Supports slower speeds on unsealed roads to improve safety and to reduce dust nuisance.

Notes that growth and development has led to an increase in vulnerable users on roads throughout Rodney.

Asks that AT consider carefully the mixed public feedback on Coatesville-Riverhead Highway proposed speed reduction.

Notes that some members of the community support retaining current speed limits to support heavy transport user operations.

Notes that the local board had hoped to see local feedback in response to the Safer Speeds Bylaw consultation.

As a local board, we look forward to the introduction of safer speeds and further safety enhancements in our community.

Waiheke Local Board

The board supports the intent of the bylaw, which is to decrease traffic speeds to reduce death and injury on Auckland roads. In line with its Local Board Plan 2017, the board has advocated to Auckland Transport and the New Zealand Transport Agency to lower speed limits where required.

The board does not support Schedule 1 (p.7) of the proposed bylaw which designates the whole of Waiheke as an Urban Traffic Area with a maximum speed limit of 50km per hour. The board also notes that Schedule 7 Parts A and B detail several Waiheke roads with existing maximum speed limits which it believes are inappropriate for current island conditions and need to be reassessed during later Waiheke discussion.

Waitematā Local Board

The local board confirms our support for AT's work to make our streets safer. We are deeply concerned about Auckland's road safety crisis that has seen a 78% increase in deaths and serious injuries since 2012 and would like to thank the CEO and the AT Board for their leadership in making safety a priority.

AT has advised that as over 11,500 submissions were received with a significant number of feedback points it is not yet possible to provide the local board with any detailed analysis of the feedback. Therefore, the local board is not in a position to give specific feedback on each proposal but we know there is general support for safe and appropriate speeds and in fact for more extensive changes.

Stakeholder Submissions

We received 51 submissions from stakeholders. Their full submissions were taken into consideration. For the purpose of this report, summaries of their submissions have been provided below.

AECOM

 43,507

AECOM support the speed management programme changes to the now legally accepted safe and appropriate speed limit in New Zealand. The submission draws on evidence from around the world in favour of speed reduction in urban and rural environments, but also attempts to provide balanced opinion.

AECOM's submission draws on evidence from around the world to make a case for speed reduction in urban and rural environments. Speed management in the New Zealand context, on rural, residential and urban roads, and in city/town centres is discussed in AECOM's submission, as are the wider benefits of speed management to health and wellbeing.

Alcohol Healthwatch

 245

Support the proposed bylaw that sets speed limits within the Auckland transport system.

Recommend further consideration be given to reducing speed limits around alcohol outlets or in communities that have a high density of alcohol outlets.

Alcohol Healthwatch is an independent charitable trust working to reduce alcohol-related harm and contracted by the Ministry of Health to provide a range of regional and national health promotion services.



Auckland Business Chamber (ABC)

 over 20,000  3,616

Strongly recommends that a bench-mark of 40km/h be set for Auckland's CBD roads – with latitude for up to 50km/h for some CBD arterial roads and 'through traffic' main roads which have far fewer concentrations of pedestrians, cyclists (and residents), and down to 30km/h for other crowded inner-city streets with high numbers of pedestrians, cyclists, scooters and residents.

Recommends that before AT makes the changes it proposes, it needs to demonstrate the evidence, consistent with the Speed Management Guide process.

ABC suggest AT commission a traffic engineering report to examine the 'productivity' and 'congestion' impacts of its 30km/h proposal, especially given the significant NZ-wide businesses located in CBD or located nearby.

Auckland Council Youth Advisory Panel

 2,716

Overall the Youth Advisory panel support the proposed initiative to change the speed limit of our roads to increase public safety. However, some members are concerned that Auckland Transport have failed to identify other efforts of limitation that should take place to help mitigate the change in speed.



Auckland Federated Farmers (AFF)

 over 26,000  8,421

AFF submits that AT should review the proposed Schedule 3 speed limits on roads where it proposes to reduce the speed limit from 100kph to 60kph and satisfy itself that the roads conform to the criteria by which they have been selected (particularly on Linwood Road and Glenbrook Road in Franklin, and Kahikatea Flat Road in Rodney).

AFF submits that, if the bylaw is implemented, AT monitor the roads where the speed limits have been reduced, with a view to raising the speed limits back to their previous levels, if the reduction in speed limits is having no effect or if significant safety improvements are made to the roads.

In principle, AFF supports AT's proposed Speed Limits Bylaw 2019.

Auckland Organisations

This was a combined submission, from a number of organisations, which states:

Great cities of the world have speed limits of 30kpm. Their safer speeds have resulted in less death and serious injuries, however these cities also recognise the benefits of safe speeds are much broader;

1. **Traffic flows improve:** more people walk/cycle, greater public transport use, less congestion and travel time reliability improves.
2. **It's good for the local economy:** streets that are more inviting for walkers and cyclists are more vibrant and economically successful.
3. **Improved quality of life for all city dwellers:** the resulting social and environmental benefits make cities more attractive.

“Speed limits must not be set by popularity contest and self-selecting membership surveys. What seems like a radical idea to some today, quickly becomes the status quo accepted by all.”

“We commend Auckland Transport’s staff for their commitment to Vision Zero and their thorough and considered approach to adopting safe speeds.”

“We now ask Auckland Transport Board to support 30kph for Auckland’s CBD so that we may all enjoy the resulting benefits – as evidenced by the great cities of the world.”

Signed,

Ccrg



Brake
the road safety charity

Women in Urbanism

TRANSITION TOWN
PT CHEVALIER



MOVEMENT
SAFE JOURNEYS FOR ACTIVE KIWI'S



Doctors for Active Sustainable Transport





Auckland Regional Public Health Service (ARPHS)

 3,819

The Auckland Regional Public Health Service fully supports Auckland Transport's proposed approach to Speed Management. They see this as the first step in a complete safe system approach to road safety and the Safe Speeds Programme.

Provides public health services to people living in the Counties Manukau, Waitemata and Auckland District Health Boards (DHBs).

Australasian College of Road Safety

 2,069

The Australasian College of Road Safety is not in a position to comment on the specific speed limit change in each individual street or road identified as per Schedules 2 to 8 of the proposed Bylaw. However, the College can state firmly that:

- based on the strong scientific evidence underpinning the decision making, and
- based on the judicious selection of criteria adopted to identify candidate sites – namely, crash numbers, crash risk linked to travel speeds and road function.

Enactment of the Speed Limit Bylaw 2019 by Auckland Transport should lead to an appreciable drop in serious road trauma on the affected roads.

The Australasian College of Road Safety (ACRS) is the region's peak membership association for road safety professionals, advocates, and members of the public who are focused on saving lives and serious injuries on our roads.

ACRS membership includes experts from across all areas of road safety: policy makers, academics, community organisations, researchers, federal, state and local government agencies, private companies and members of the public (www.acrs.org.au). The College has Chapters in New Zealand, Queensland, New South Wales, the Australian Capital Territory, Victoria, South Australia and Western Australia.



AUT

 more than 29,000  100,9333

Fully support the new Speed Limit Bylaw.

AUT would like this vision to more clearly translate the needs of a growing, international city, by targeting the elimination of deaths and serious injuries on Auckland's roads, following the principles of Vision Zero.

AUT would like to see speed-related interventions rolled out more generally, in highly populated neighbourhoods and around schools.

While AUT support the logic of reducing speeds, they would like to see a systematic assessment of pedestrian and bicycle users' risk, and a vision that considers the potentials for walking and cycling for commuting purposes.

Beca

 5,082

Beca is supportive of the principles underpinning the Bylaw but does not wish to make submissions of the schedules of the Bylaw. Beca supports an approach that integrates transport and land use, with speed limits appropriate to the function of the corridor and surrounding land use zoning.

Beca is a multidisciplinary international consultancy with an Auckland team of over 1000.





Bike Tamaki Drive

f 389

Bike Tamaki Drive welcomes the news that the AT team are developing data-led safety programmes for Tamaki Drive, including the town centres of St Heliers and Mission Bay.

Bike Tamaki Drive would like to see supporting infrastructure change for all users, including active modes (cycling and walking), the proposed safety improvements would cause major issues if implemented as suggested. The result would be far less safe for cyclists in particular

They suggest along Tamaki Drive measures need to be extended to include the most challenging intersections, and the remaining beach/village centres of Okahu and Kohimarama. When considered as a set these contain more high-risk areas than the current focus on Mission Bay and St Heliers.

Independent group of 160+ walkers and cyclists.

Blind Citizens NZ

f 5,012

Blind Citizens NZ support the proposed bylaw and speed limit reductions.

They urge AT to exercise whatever control possible over e-scooters particularly on footpaths.

Blind Citizens NZ is New Zealand's oldest disability consumer advocacy group.

Brake & Victim Support

f 5,012

Brake and Victim Support strongly support the proposed Bylaw and lowering of speed limits to reduce road deaths and injuries in the Auckland region. Both charities also support Auckland Transport's move towards a wider Vision Zero approach to improving road safety.

Brake and Victim Support recommend

- extending the reduction in speed limits to 30km/h to include all town centres, and all schools and Early Childhood Education centres, to provide greater protection for children
- prioritising safety for active transport modes through the implementation of the safe speeds recommended in the Roads and Streets Framework for arterial, collector and local streets across Auckland.

Brake is a road safety charity that promotes road safety policies and awareness, safe and sustainable road use and cares for families bereaved and injured in road crashes. Victim Support is a non-government organisation (NGO) that has supported 3488 people nationwide following vehicle collisions in the 2017/18 financial year.



BRONZ

 1,278

BRONZ opposes the proposed bylaw as they argue the new speed limits will be not adhered to as they will not be enforced, will make roads more dangerous rather than safer, humbug to the “think of the children” cry and will no doubt have a negative effect on business.

BRONZ is an advocacy group for motorcyclists.

Castor Bay Ratepayers’ and Residents’ Association (CBRRA)

 285

CBRRA says its members support safer roads, however, Castor Bay does not have any roads proposed for speed limit reductions. CBRRA says the three locations below present a danger for pedestrians, cyclists and motor vehicles, and as such warrant a reduced speed limit:

- Campbells Bay School, Aberdeen Road, Castor Bay/Campbells Bay
- 62 - 88 Beach Road, Castor Bay
- The Esplanade, Castor Bay.

The Castor Bay Ratepayers’ and Residents’ Association represents approximately 70 households in the Castor Bay area.

Construction Health and Safety New Zealand (CHASNZ)

 41

CHASNZ encourages the construction industry’s support for the Auckland Transport Safe Speeds Programme and agrees with Auckland Transport’s proposed measures to reduce speed on inner city and rural Auckland roads.

CHASNZ would also support complimentary actions including effective monitoring and policing of speed limits as well as ensuring that safety in design principles are pre-eminent when commissioning infrastructure projects and maintenance activity.

CHASNZ is a charitable trust, set up by the construction industry to set standards and improve health and safety in the sector.

Deloitte

 11,725

Did not explicitly say they support the proposal however; the purpose of their submission is to provide an indication of the potential scale of benefits the proposal could realise.

Deloitte state: AT’s proposal to reduce speed limits is a step toward a road network where usage is appropriately matched to circumstances and surrounding development. If this leads to injury severity and fatalities being reduced, significant public health and economic benefits can be realised.

The cost of road injury crashes each year in Auckland is hundreds of millions of dollars and data from recent years suggests this number is on the rise. There is clearly a need for action and there are significant, health and economic benefits if people are safer on Auckland roads.

Freemans Bay School

 approx 500

Freeman's Bay School urge Auckland Transport to include the school's boundary streets, Wellington Street and Hepburn Street, in the proposed 30km/hr zone.

The school says the intersection of these streets is extremely dangerous, and Police are often present to patrol it. Most infringements are for speeding or running red lights.

They say that in the last month there was a hit and run incident involving a child and parent.

Approx. 500 students: 59% of students live within 1km of home, 64% of students walk or scooter to school.

Freemans Bay School Parent Group

In favour of reducing speed limits to make our roads safer. Concerned that Wellington Street (where the main entrance to the school is located) and Hepburn Street (adjacent to the school) have not been included for the proposed speed reductions.

Glen Innes Business Association

 150 business across Glen Innes

Glen Innes Business Association supports the reduction in speed limits around the town centre.

They say this area has at least four pedestrian crossings and the highest pedestrian counts would possibly be by high school students coming and going to the train station and bus terminal.

Represents all businesses within Glen Innes.

Grey Lynn Residents Association (GLRA)

 512

GLRA support lowered speeds around schools and in town centres. In particular they support the lowered speeds to 30 km/h in the West Lynn town centre and much of the CBD, and support speed reductions around Richmond Road School and St Paul's College, Grey Lynn School, Western Springs College and other schools in the area.

Informed by needs assessment of 516 locals.

Heart of the City

 173,351

HOTC support the proposal conditional on AT implementing the planned **synchronisation of traffic lights** on a selection of central city streets.

Holy Trinity Catholic Primary

 149  546

Fully support Auckland Transport in moving towards a Vision Zero approach to improving road safety; and reducing traffic speed limits to reduce deaths and serious injury.

Suggest that South Auckland should be prioritised for further road safety interventions.

Karaka Residents & Ratepayers Association (KRRRA)

The KRRRA supports initiatives to improve safety and reduce the consequences of incidents on our roads. The KRRRA wish to continue to engage with AT on including:

- Overall strategy: The KRRRA wish to see cost/benefit analysis of the proposal and suggest that setting all roads to 80 km/h supported by engineering measures would be more efficient and acceptable
- Specific road limits on Walters Road, Lewis Road and Kidd Road
- Engineering measures that will support roads where the speed limit is reduced.

Kathmandu

 340,980

Kathmandu have an office of Karangahape Road employing 10 people. They say all of the office unanimously supports speed reductions in the Newton area (and across Auckland as appropriate) to improve safety, to reduce noise and pollution, and to encourage more people to use active forms of transport.

Kaukapakapa Residents and Ratepayer's Association (KARRA)

 329

KARRA is not against reducing certain speed limits in principle but are concerned that the proposal will lead to further confusion for motorists, and not necessarily lead to safer rural roads. KARRA would prefer to see a system involving no more than three clear speed limits on rural roads – 100kph for open roads such as Kahikatea Flats road, 80kph for rural roads and 50kph for urban and suburban zones.

KARRA also opposes changes to the speed limit on:

- Horseshoe Bush Road: which the KARRA suggest should be 80 km/h
- Peak Road: KARRA would prefer doubling the single-track bridge and eliminating some of the worst curvature on the road as a long-term plan.

Kohimarama Yacht Club

 863

Currently Kohimarama Beach would remain at 50km/h under the new proposal, when other nearby roads would be reduced to 30km/h. The committee and members of KYC feel that any speed reduction should also include Kohimarama Beach.

Living Streets Aotearoa

 441

Living Streets supports the safer speeds proposed in the bylaw which is a significant and effective way to improve road safety over the whole network, and in particular to make our streets more pleasant places to walk.

Living Streets supports the plan to prioritise lower speeds in approximately 10% of Auckland's local roads. They encourage Auckland Transport to extend the lower speed designations to local roads in all town centres across Auckland as soon as possible so that all areas of Auckland can benefit from this bylaw.

Living Streets Aotearoa is New Zealand's national walking and pedestrian organisation, providing a positive voice for people on foot and working to promote walking friendly planning and development around the country.



Meadowbank & St Johns Residents Association (MSJRA)

 1,132

The association broadly supports the “safer streets” proposals but would like to see them applied far more widely. MSJRA suggest speed reductions on:

- Meadowbank town centre as the train station, boardwalk and train station mean it has high numbers of pedestrians
- The residential streets around Meadowbank Primary
- Gowing Drive and all the streets nearby due to already recorded dangers.

National Road Carriers and Road Transport Forum

 1513 members

 1899 (National Road Carriers)

National Road Carriers (NRC) and Road Transport Forum (RTF) strongly support road safety but feel that AT have not considered all options and the proposed change may not make a difference.

NRC and RTF are frustrated by the approach that AT have used to consultation, which they describe as a 'carpet-bombing' blanket approach as opposed to AT's usual approach of consulting on a street by street basis. The NRC and RTF contend that AT have given very little consideration to commercial road user and economic impact that speed reductions may have.

NRC and RTF are strongly opposed to the use of reduced speed limits as a substitute for lack of investment in the transport infrastructure.

The NRC and RTF opposes speed reductions on:

- Key freight routes (e.g. Highbrook Drive)
- Arterials linking key freight generators (e.g. Brookby Road, Glenbook Road)
- Arterials linking the CBD and town centres.

NRC is a leading New Zealand road transport organisation and an affiliate member of RTF NZ, representing 1513 members of which 900 are based in the greater Auckland region. Some 85% of NRC's membership comprises single vehicle operators and 95% employ 10 or less people.

NZ Automobile Association

 1.7m (NZ), 540,000 in Auckland

 92,383

The AA opposes the proposed bylaw in its current form, though it supports many of the road safety principles behind it.

The AA says they are particularly concerned that the speed limits proposed on several roads don't relate to the road environment, especially arterial roads such as Hobson, Nelson and Fanshawe Streets, which they suggest will result in non-compliance.

The AA notes that of the six town centres included for lower speed limits in the proposed bylaw only St Heliers lies within the top 10% of high-risk roads. For this reason, the AA oppose town centres being prioritised in the proposed bylaw, though they support looking at lowering town centre speed limits to 40 km/h once the top 10% of high-risk roads are addressed.

The AA are comfortable by and large with the approach taken by the proposed bylaw to main roads in rural areas, but less so with secondary roads, which they contend seems like a 'blanket approach' to locals and speed limits that are mis-aligned to drivers' perceptions of the appropriate speed.

The Speed Management Guide (SMG) is the national framework for making informed speed management decisions. In many places, including most of the CBD and six town centres, the proposed bylaw calls for 30km/h speed limits. The AA says in most of these instances the SMG recommends 40 km/h or no change to the 50 km/h speed limits. Similarly, the AA also says there are rural roads where the proposed bylaw calls for a change from 100km/h to 60 km/h speed limits where the SMG recommends 80 km/h speed limits.



The AA are especially concerned 'AT has provided little evidence' for the need for the proposed bylaw to include lower speed limits than those recommended by the SMG. Where evidence is provided, the AA contends that this evidence is biased and when looking at unbiased evidence the safety benefits between 40 km/h and 30 km/h speed limits are small.

The AA are concerned about the negative implications of making large-scale changes to Auckland's roads in a relatively short space of time. The AA suggest that large rapid change is a roadblock to meaningful engagement as most groups and individuals will not have the resources to process all the information, and that the 'blanket approach' of the proposed bylaw will mean it is dismissed 'prima facie'.

Instead of the proposed bylaw, the AA are calling for a more targeted, incremental approach, which they believe stands a much greater chance of securing lasting public buy-in (and, therefore, compliance), and will improve safety.

The AA believe the design of AT's consultation could have been improved by asking more specific questions more clearly, and more information about how the proposed bylaw stacks up against other options for improving safety on Auckland's roads.

The AA's view is shaped by two surveys:

- The first Auckland-wide survey garnered 14,000 responses
- The second surveyed members in the Rodney and Franklin districts and received 1000 responses.

NZ Police

 236,230

NZ Police strongly supports safe driving speeds, a key foundation of which is the setting of safe and appropriate speed limits.

Auckland Transport's proposed changes to speed limits take a safe system approach to speed management in accordance with the national Speed Management Guide and the latest evidence on road safety treatments. Accordingly, Police supports the proposal.

NZ Post

 42,466

It is NZ Post's view that the Bylaw in its current form will have a detrimental effect on the courier operations in and around the Auckland CBD area, to an extent that service levels to their customers in this area will be negatively impacted, their costs will materially increase, and their plans to invest in Electric Vehicle technology will be negatively constrained. They also believe that an unintended consequence of this change will be an increase in traffic congestion resulting from the greater number of vehicles required to fulfil the same amount of work. NZ Post supports initiatives to improve road safety throughout the Auckland Transport network. They recommend that:

- Speed limits in mixed zones can and should be reduced to 10Km/h
- Speed limits in the downtown CBD area should be reduced from 50Km/h to 40Km/h
- Arterial roads in and out of the downtown CBD area should be retained at their current speed limit of 50Km/h.

NZ Transport Agency

 50,109

"The NZ Transport Agency has reviewed the proposed new Speed Limits Bylaw 2019 and would like to draw AT's attention to the expectation of the Government that all Road Controlling Authorities address the top 10% of regional networks likely to deliver the highest deaths and serious injury savings in terms of safety and efficiency. Treating these lengths as quickly as possible is a requirement of the Government Policy Statement."

"The Transport Agency acknowledges that a significant number of top 10% roads have been included in the areas currently being consulted on, however there are a few that have not been included. Addressing speed on these roads will make a considerable contribution to safety in the region. The Transport Agency encourages Auckland Transport to include those roads that have not been included in the current proposals with safe and appropriate speed limits, including:

- Muriwai Road
- Upper Harbour Drive
- Dairy Flat Highway
- Matakana Road
- Matakana Valley Road
- Waitakere Road."



Panmure Community Action Group (PCAG)

f 474

PCAG opposes the proposed new speed limits despite none of the roads in Panmure being affected by the new limits. They worry that Panmure roads will be included for speed limit reductions in the future

The PCAG also strongly object to what they argue is a lack of any meaningful consultation on the speed limit bylaw or speed limit changes.

Ports of Auckland

f 7,557

Overall, POAL agrees that AT should improve the safety of Auckland's local roading network. However, POAL is opposed to the proposed speed reductions on Beach Road and Tangihua Street because:

- The proposed speed restrictions will have significant adverse effects on the operations of the Port of Auckland.
- POAL believe speed restrictions on these roads do not achieve the stated objectives of the Bylaw.
- POAL suggest there is no evidence available that justifies the proposed restrictions, particularly given the strategic importance of the Port of Auckland and the critical connections these roads provide to that asset.





Safekids Aotearoa

f 4,979

- Safekids Aotearoa supports AT's objective of dramatically reducing deaths and serious injuries on the region's roads. They've done so by contributing child injury data and injury prevention perspectives to the Auckland Public Health Service (ARPHS) submission on the proposed bylaw. We fully support the recommendations made by ARPHS.
- Safekids submit that when the bylaw is adopted, the Road Safety Programme it supports should be implemented to prioritise road safety investment in those areas in Auckland where Māori, Pacific and those who are most deprived live.

Safekids is the national child injury prevention service of New Zealand, they use evidence-based methods and data to advocate for the reduction of the high rates of unintentional injury suffered by New Zealand's children. Safekids works to raise public awareness of child injury issues and provide evidence-based information to planners, decision-makers, and providers to improve child safety.

Te Ara Mua – Future Streets (TAM-FS) and Healthy Future Mobility Solution (HFMS)

f 226 (TAM_ES)

Overall, TAM-FS and HFMS strongly support the proposal to reduce speeds on some Auckland streets. They support the proposed 30 km/h zones in the central city, and in some town centres. They also support speed reductions around schools and support Auckland Transport in moving to a Vision Zero approach to road safety.

TAM-FS and HFMS do not support amending this proposal by implementing 40 km/h limits instead of 30 km/h limits. Their submission provides evidence that this would greatly reduce the benefits of the proposal.

TAM-FS and HFMS also recommend that speed zone of 30km/h or less are adopted more widely, that affected streets undergo design changes to align the design changes with signposted speeds, and that speed reductions be more equitable distributed (for example in more socio-economically disadvantaged areas).

This submission is on behalf of the Te Ara Mua – Future Streets and Healthy Future Mobility Solution research teams. TAM-FS is a project that aims to make Māngere safer and easier for people to travel around, especially by walking and cycling. Many of the TAM-FS team are also involved in HFMS.

Te Rūnanga o Ngāti Whātua: Māori Public Health Unit

 278

Te Rūnanga o Ngāti Whātua supports Auckland Transport's Proposed Speed Limits Bylaw 2019 and supports the implementation of 'Option 2: set new speed limits across the network to respond to the findings of the review' as they strongly support the implementation of measures that help support the health and wellbeing of all people and that will reduce the risk of death and serious injury on Auckland's roads.

Te Rūnanga o Ngāti Whātua is concerned about the financial impact that speeding tickets may have on disadvantaged communities during the transitional period after the reduced speed limits are implemented. They recommend taking measure to ensure people are aware of the new speed limits.

Te Rūnanga o Ngāti Whātua requests they are included in planning stages of future projects, rather than being consulted for feedback in the final stages.

Te Rūnanga o Ngāti Whātua represent ngā uri o te iwi o Ngāti Whātua. As an iwi, the Ngāti Whātua tribal boundaries extend from Ōtāhuhu, in South Auckland, and extend to Whangarei and Waipoua in the North.

The body corporates of The Parc, The Point and Viaduct Point apartments

Requests that AT reduce the speed limit on section of **Customs Street West** to 10km/h (Market Place to Pakeham Street East) as they contend that the road is better suited to a 10km/h speed limit, the presence of vulnerable road users and the road is similar to other roads where 10km/h speed limits are proposed.

The Parc, The Point and Viaduct Point apartments (Apartments) comprise 273 individual apartments.

Titirangi Residents & Ratepayers Association (TRRA)

 678

Support the proposed bylaw and the reduced speeds proposed, but believe that the following proposed reductions do not go far enough and speed limits should be lowered to 50km/h on:

- **Huia Road** between 750m south of Scenic Dr and 410m east of Sylvan Ave
- **Laingholm Drive** between Huia Road and 35 north of Deidre Place.

TRRA also request the reinstatement of the rumble strips on the kerbless path where cars are cutting the corner on Huia Road and that the speed is lowered from 70km/h to 50km/h on the Huia side of Parau on Huia Road.

Todd Property Limited

 800

Todd's submission is to request that the speed limit through the Ormiston Town Centre be lowered from the current 60 km/hour to 50 km/hour as part of the suite of bylaw speed limit changes.

Todd Property Limited are currently developing the Ormiston Town Centre.

Traffic Engineering and Management (TEAM)

This submission seeks to have a section of Sandspit Road that has an 80 km/h speed limit reduced to 60km/h. The submission provides an in-depth analysis of why 60 km/h is a more suitable speed limit.

Trafinz (NZ Traffic Institute)

 76

Represents local authority views on road safety, transportation management and land use integration in NZ. Member authorities represent more than two thirds of NZ's population.

Trafinz strongly urges the Auckland Transport Board to support the Safe Speeds Programme to implement safe and appropriate vehicle speed limits as the fastest and most cost-effective way to reduce Auckland road trauma outcomes. They say Auckland is currently in a safety crisis and needs to enable people to reclaim the streets for their daily access, wellbeing and activities. To achieve this, it is critical to make Auckland streets travel safe for people.

Transportation Group New Zealand

 326

The Transportation Group New Zealand Auckland Branch fully supports Auckland Transport's initiative to reduce traffic deaths and injuries by reducing speed limits. They fully support both the urban and rural initiatives described in the Speed Limit Bylaw 2019.

They further request that Auckland Transport commit to developing a systematic citywide speed limit reduction across all streets or, at minimum, expand the programme to include the following urban street typologies across Auckland:

1. School zones (30km/h)
2. Residential local (Access) streets (30km/h)
3. Residential collector and arterial streets (40km/h)
4. Town centres (30km/h)
5. 400m walking catchments of major public transport stations (30-40km/h, depending on roadway typology).

The Transportation Group New Zealand is a Technical Interest Group of Engineering New Zealand, with over 1,100 members. The Group was formerly known as the IPENZ Transportation Group.

University of Auckland (UoA)

🎓 over 40,000  230,850

The University of Auckland supports the proposal to reduce speed limits around the City and Grafton Campuses. Speed on Symonds Street and Grafton Road is a safety issue for UoA staff and students as both roads bisect the University and vehicles tend to accelerate to beat the lights. UoA says there have been several reported accidents involving cars vs pedestrians and cars vs cyclists over the last ten years on Symonds and Grafton Street, with Symonds Street in particular subject to a separate Auckland Transport safety review at present.



University of Auckland (Office of the Vice- Chancellor)

The University of Auckland (Office of the Vice-Chancellor) supports the proposal to reduce speed limits around the city centre.

Waiwera Valley Association

Suggest that roads in their area should be have speed limits reduced to 80km/h for sealed and 60km/h for unsealed roads given that many of the roads in the area are winding, have uneven surfaces, have numerous property entrances at close intervals, no shoulders and inadequate marking of sharp corners, edge delineation and stray livestock (specifically Weranui Road, Upper Waiwera Road and Upper Orewa Road).

The Waiwera Valley Association are a community group.

Western Bays Community Group

f 166

The Western Bays Community group supports the lowering of speed to 30km/hour in their area. In addition to the areas indicated in the consultation, they would like the 30 km/ hour area extended to include all the side roads off Ponsonby Road, down to and including John Street.



Whitford Horse Safety Group & Whitford Pony Club

f 1,009

Both groups support the measures being proposed to reduce deaths and serious injuries on the region's roads and in particular reducing the speeds on some of Auckland's most dangerous roads.

Both groups would like the speed limit on Whitford-Maraetai Road from Whitford Park Road to 300m east of the western entrance of Trig Road to be 50 km/h. This encompasses the entrance to the Whitford Pony Club and includes the current speed limit of 50 kms through the Whitford Village.

WSP Opus

f 3,173

WSP Opus supports the Auckland Transport's introduction of safe and appropriate speeds as a means to reduce road trauma on Auckland's roads. However, to facilitate behaviour change by motorists, infrastructure treatments may be required in addition to speed limit changes, to ensure that the desired speeds are both safe and appropriate, and the variance is minimised.

Appendix 1 – ARPHS

Child (<10 years) road traffic hospitalisations and deaths by Auckland local board area in the 2014-15 year

Children <10 years in 2014 to 2015 by local board area	Children discharged from hospital (>1 day)	Rate per 100,000 people (not calculated for <5 discharges)	Child deaths	Rates per 100,000 people (not calculated for <5 deaths)
Rodney	5	32.7	1	–
Hibiscus & Bays	7	30.2	1	–
Upper Harbour	1	–	0	–
Kaipatiki	5	20.3	0	–
Devonport-Takapuna	4	–	1	–
Henderson-Massey	10	26.4	1	–
Waitakere Ranges	2	–	1	–
Great Barrier	0	–	0	–
Waiheke	0	–	0	–
Waitemata	2	–	0	–
Whau	6	26.7	0	–
Albert-Eden	4	–	0	–
Puketapapa	4	–	0	–
Orakei	4	–	0	–
Maungakiekie-Tāmaki	6	24.9	0	–
Howick	2	–	1	–
Mangere-Otahuhu	12	40.6	0	–
Otara-Papatoetoe	10	34.5	0	–
Manurewa	10	30.0	1	–
Papakura	3	–	0	–
Franklin	5	25.2	0	–

* 2014-15 data was used as both injury and death rates were available for these years in the database (Injury Prevention Research Unit, Department of Preventive and Social Medicine, University of Otago n.d.)

**Total road traffic hospitalisations and deaths
by Auckland local board area in the 2014-15 year**

2014 to 2015 year	Total discharges from hospital (>1 day)	Rate per 100,000 people (not calculated for <5 discharges)	Total deaths	Rates per 100,000 people (not calculated for <5 deaths)
Rodney	142	119.7	8	6.7
Hibiscus & Bays	120	61.7	7	3.6
Upper Harbour	70	58.9	6	5.1
Kaipatiki	136	76.2	6	3.4
Devonport-Takapuna	74	62.1	4	-
Henderson-Massey	184	79.1	11	4.7
Waitakere Ranges	72	69.6	2	-
Great Barrier	1	-	0	-
Waiheke	14	79.4	0	-
Waitemata	137	75.8	7	3.9
Whau	108	67.8	6	3.8
Albert-Eden	140	68.7	4	-
Puketapapa	89	75.1	3	-
Orakei	103	60.4	4	-
Maungakiekie-Tāmaki	144	95.1	8	5.3
Howick	153	54.3	7	2.5
Mangere-Otahuhu	167	107.0	6	3.8
Otara-Papatoetoe	157	93.9	7	4.2
Manurewa	173	96.6	8	4.5
Papakura	86	85.3	5	5.0
Franklin	132	93.9	15	10.7

* 2014-15 data was used as both injury and death rates were available for these years in the database (Injury Prevention Research Unit, Department of Preventive and Social Medicine, University of Otago n.d.)



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