How do we sell the Benefits of Lower Speeds?



VIASTRADA

John Lieswyn on behalf of Dr Glen Koorey

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Director, ViaStrada Ltd, Christchurch

2WALKandCYCLE Conference 2024 - Wellington

Our hypothesis today...

We don't do a good job of explaining the benefits of lower speeds

- To politicians
- To the media
- To the general public



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Corollary:

We could do a lot better...

Apparently lower speeds are everywhere in NZ...

And people are grumpy about them...



IAIN MCGREGOR/STUFF

Public Pressure leads to Political Pressure...

Public Service Watch: Is speed limit discontent an election issue?

Piers Fuller | September 12, 2023

How did we go from 85% of NZ highways being too fast to only targeting the "1% worst"?

Govt abandons plan to cut speed limits on most state highways Mon, Mar 13



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The Government has backed down on its plans to cut speed limits on state highways and says it will now only focus on 1% of the "most dangerous" roads.

Prime Minister Chris Hipkins announced the "significant narrowing" of the speed limit reduction programme at his Monday post-Cabinet media conference as part of his policy "reprioritisation" process that has seen swathes of policy priorities wiped out.

Safety in the GPS: won't be through speed mgmt.



POLITICS / TRANSPORT

Waka Kotahi directed by minister to stop blanket speed limit reductions

Draft Government Policy Statement on land transport 2024/25–2033/34

We will make changes to the Land Transport Rule: Setting of Speed Limits 2022 to enable Road Controlling Authorities to reverse blanket speed limit reductions where it is safe to do so and to require Road Controlling Authorities to determine speed limits using consistent benefit-cost analysis criteria.

The term "blanket" is simple political marketing



IT'S TIME WE STOPPED PAYING THE ROAD TOLL.

https://www.youtube.com/watch?v=XGv-aAB_Rmo

Why do people object to Lower Speeds?

- "It takes a lot longer to get somewhere"
- "More driver fatigue/frustration will result in more crashes"
- People won't obey the new speed limits, so why bother?"
- Sounds like we have a "It doesn't improve safety n there"
- "I have to wate misinformation challenge...
 - "It's just revenue gathering for the Police"

etc, etc...

"Modern cars are much better at handling speed"



"It's not speed that causes accidents, it's poor driving and poor roads"

Reality check:

- We're all human (and make mistakes & poor decisions)
 - It's not just "bad drivers"...



Even if road users followed **all** the road rules, fatalities would only fall by around **50%** and injuries by **30%**

- We could never afford (nor justify) to fix every road in NZ
 - In fact, very few of them...



We need Other People to understand the actual implications of their speed choices

- Remember this Aust/NZ Speed Advert?
 - Prof Ian Johnston, ex MUARC
 - Effect of 60 km/h vs 65 km/h approach speed
 - Impact speed 45m away: 5 km/h vs 32 km/h

People don't understand the exponential impacts of speed...



The faster you go the bigger the mess



Evidence is all very well and good, but...

- The number of NZ case studies is still relatively small
 - Comprising a tiny fraction of the country's road network
 - Overall national statistics for DSIs have yet to be greatly affected by these implemented sites

 contributing to *public scepticism*
- Individual road sections/areas implemented to date tend to have few crashes or were introduced only fairly recently
 - Despite showing good downward trends in casualty numbers, it is difficult to get stat. significance to these individual sites so far
- Continuing resistance to introducing lower speeds on rural roads, despite their greater contribution to road deaths

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Example: lower speed limits in Christchurch suburbs (2023)

- Comprehensive reduced speed limits for many suburbs
- Infrastructure changes over time to support lower speeds
 - funding now eliminated





Example: Lower Speed Limits in suburban Christchurch, NZ



Would we see crash/injury reductions in our **suburban** areas?

- B/A analysis of **three** previous suburban lower speed areas
 - Addington west (May 2018)
 - Sumner (Oct 2019)
 - Papanui west (Nov 2019)
- Each case was compared with a nearby "control" area
 - Used these to estimate the "expected" numbers afterwards
 - Helped to account for any external effects too e.g. C19 lockdowns



Christchurch Suburban Case Studies: Addington west (30 May 2018)

- Before period:
- Jan 2013 Apr 2018
- After period:

Before

Jun 2018 – Dec 2022



Expected After

Actual After



"Expected after" based on what changes occurred in the control area



Christchurch Suburban Case Studies:

Before period:

Jan 2015 – Sep 2019

After period:

Nov 2019 – Dec 2022





Christchurch Suburban Case Studies: Papanui west (4 Nov 2019)

Before period:

Jan 2013 – Oct 2019

After period:

Dec 2019 – Dec 2022





Christchurch Suburbs: Some observations

The crash/injury numbers for each area aren't big

- -But *collectively* across all three it makes a notable difference...
- -Biggest savings in *injuries* reduced (from less severe crashes)

Addington	Treated Site	Control Site	Total	Change in expected injuries	
Before	8	1	9	% Reduction	-87.5%
After	2	2	4	Chi-Sq value	2.359
	10	3	13	p-value	0.125
Sumner	Treated Site	Control Site	Total		
Before	8	7	15	% Reduction	-56.3%
After	6	12	18	Chi-Sq value	1.340
	14	19	33	p-value	0.247
Papanui	Treated Site	Control Site	Total		
Before	6	10	16	% Reduction	-44.4%
After	2	6	8	Chi-Sq value	0.375
	8	16	24	p-value	0.540



Possible ways forward A multi-targeted approach

Start with the "low hanging fruit"

- Locations where lower speed limits are already self-evident
- Locations where communities are already asking for lower speeds
- Don't get hung up on strict compliance with new limits
 - Try posted limit changes first, then engineering where necessary
- Provide common material to pre-empt typical concerns
 - Waka Kotahi should take the lead on this (incl. TV adverts)
 - Local councils can customise to suit their local issues
 - More media about people who just made a mistake
- Highlight all the non-safety benefits too...







Swannanoa kids want prime



• Unsealed/winding/narrow rural roads

Residential traffic calmed areas

School zones

Possible ways forward Start with the 'Low Hanging Fruit'

Suburban/CBD shopping streets











Possible ways forward Countering the Rural Resistance

Judicial review mooted to prevent speed limit reduction on Napier-Taupō Rd •

- Highlight the success of the implemented sites in NZ so far
 - And the likely safety gains for the proposed areas
- Take "baby steps" (e.g. $100 \rightarrow 90 \rightarrow 80 \rightarrow 60$)
- Focus on the changes in *mean speeds*, not %complying
 - An observed speed reduction of some degree is a safety win...
- Find people who can speak to reduced stress of lower speeds
 - Incl. Travellers and Adjacent residents
- Calculate the actual (not perceived) travel time increases







Travel time example: SH75 Christchurch-Akaroa (80km)



0.9 60 0.9 0.03 0.6 60 0.03 0.6 0.07 1.3 60 1.3 23 50 0.18 2.5 0.08 0.38 80 5.9 0.63 5.2 50 1.0 0.05 0.9 23.6 80 26.1 2.48 0.22 1.4 50 1.6 0.27 1.2 80 1.5 0.08 60 0.6 0.5 19.0 0.53 60 18.4 0.03 1.7 70 1.7 60 Duvauchelle 0.60 7.3 60 7.9 Duvauchelle to Akaroa 100 75.6 mins 5.68 mins 59.9 mins

Aug 2023

Mins

New Speed

Limit

Difference

(mins)

Finally - keep reminding people: speed always affects the CONSEQUENCES



Thank you! | Ngā mihi nui

Any questions?

john@viastrada.nz

glen@viastrada.nz

