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28 JAN 2021

11:00 am- 12:00pm



ZOOM:

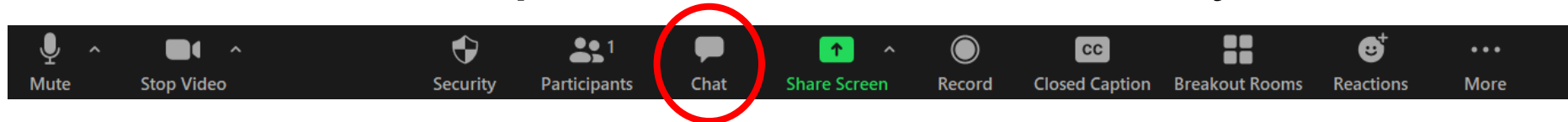
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THE BENEFITS OF SPEED MANAGEMENT

A conversation about the consequences and multiple benefits of (variable) speed limits and self-explaining road environments. Glen Koorey is sharing his in-depth knowledge and invites you to share best practice, challenges and concerns.

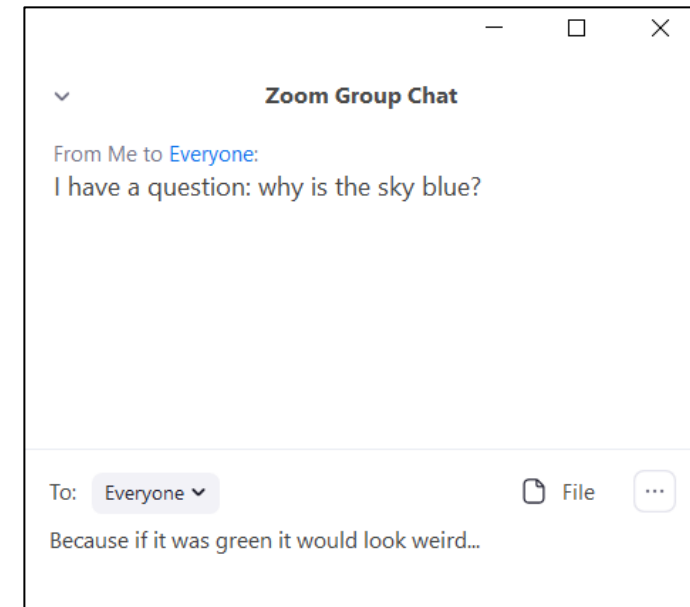
Some Webinar Guidelines

- You will see my shared screen and hear me
 - You won't be able to share your video or audio
- If you want to ask a question, click Chat anytime



(you can ask publicly or just privately to us)

- I'll try to answer them at the end
 - Feel free to contribute to the discussion as well!
- After the webinar we'll make available a recording of this session
 - Link provided on Facebook, LinkedIn, website



Today's Discussion

- Safety benefits of speed management
- Some of the (non-safety) benefits of speed management
- Implementing speed management in your area

Discussion and questions



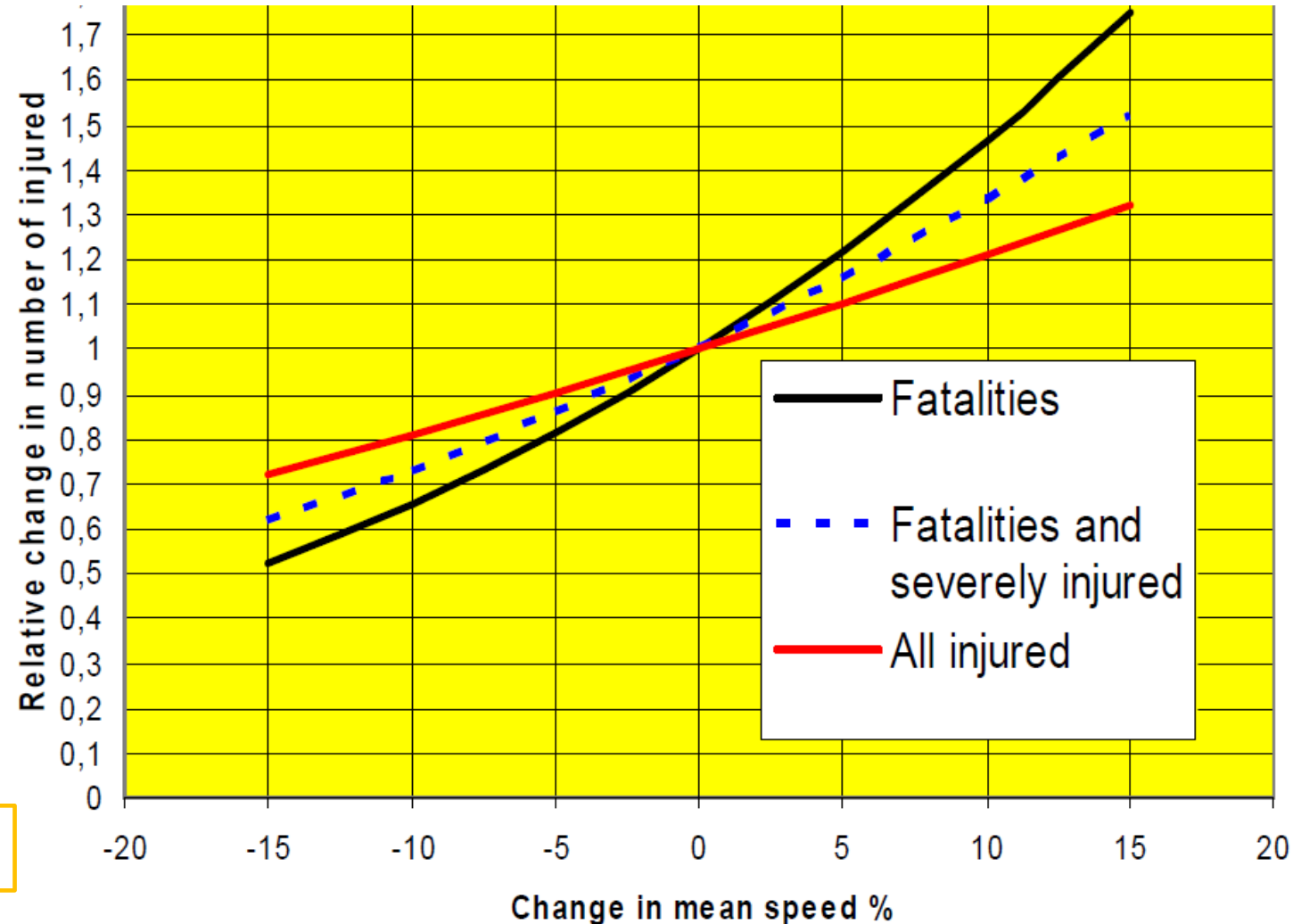
Even small travel speed changes MATTER

- For every -1% speed reduction we see:

≈ -2% all injuries

-3% serious injuries

-4% fatalities



Nilsson (2004)

LOTS of overseas evidence of safety

But we already have NZ evidence too...

ITF (2017)

Three Kings Islands

Mt Maunganui



21%

NZ 1973



36%

Rural Int'sns



51%

Wellington

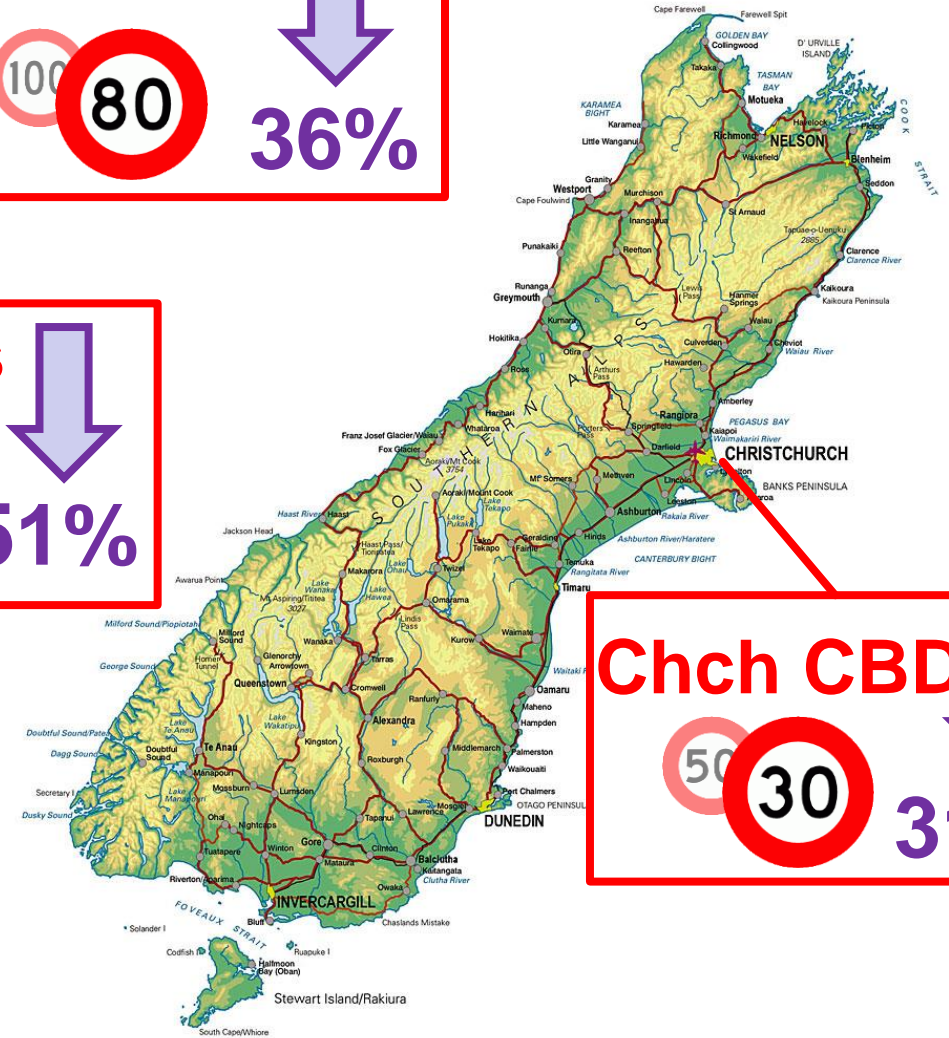


38%

Chch CBD



31%



“It’s not speed that causes crashes, it’s poor driving and poor roads”

Reality check:

- We’re all human (and make mistakes & poor decisions)



*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

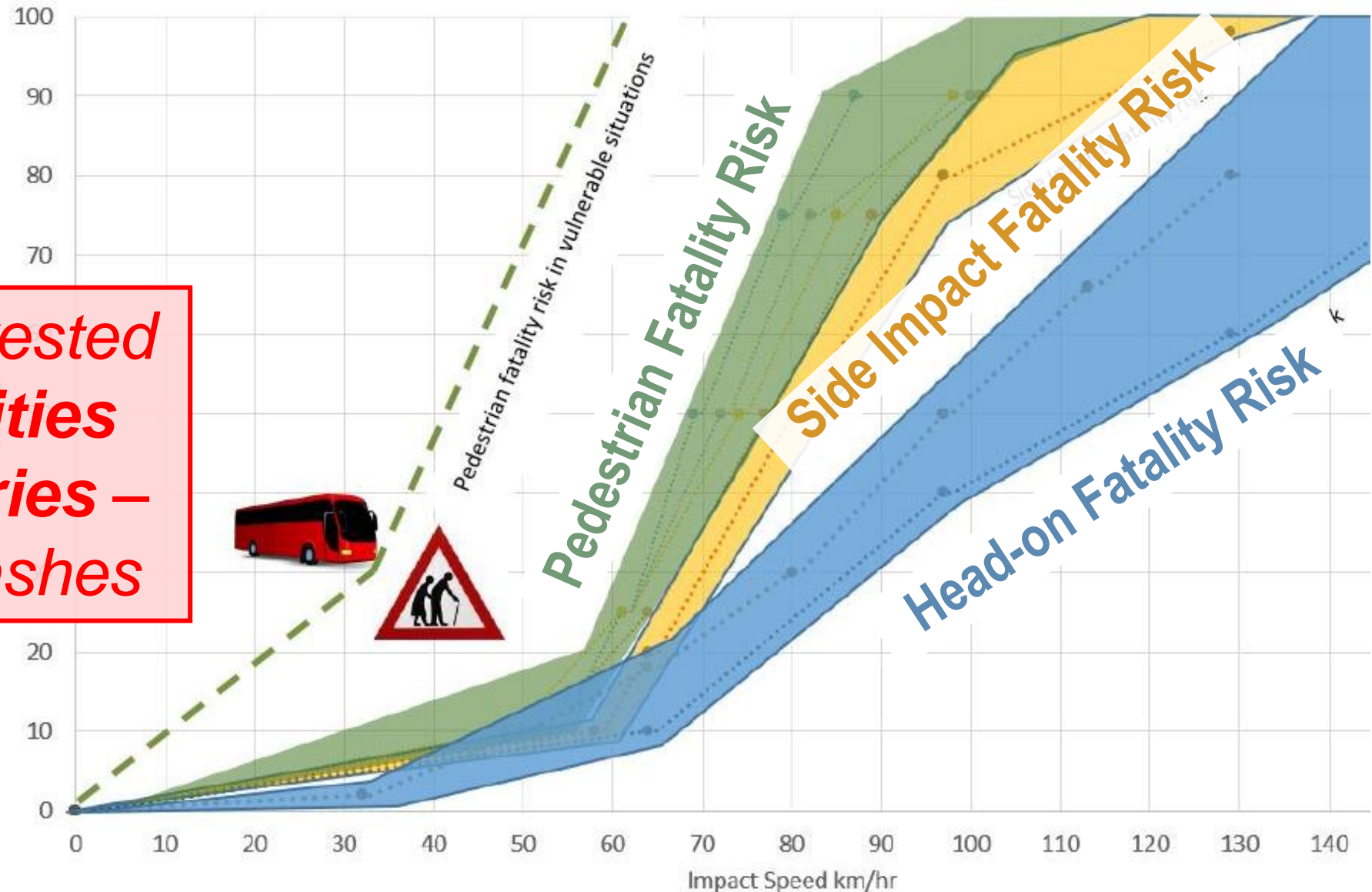


Speed always affects the CONSEQUENCES

(it affects the likelihood too)

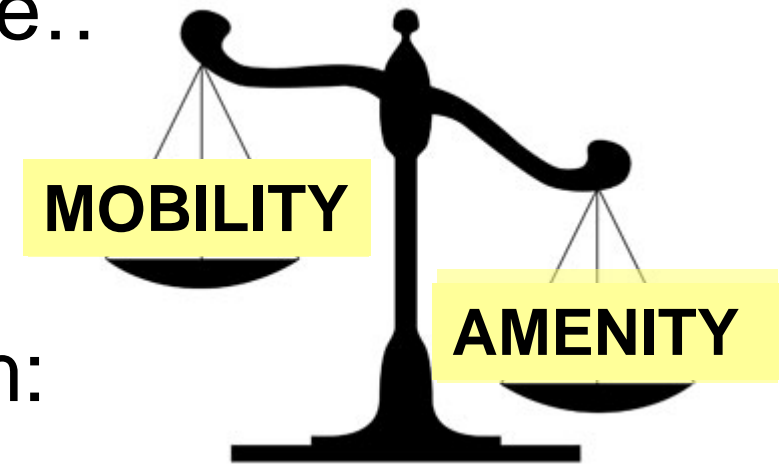
*We are more interested in reducing **fatalities and serious injuries** – NOT reducing crashes*

Scott & Mackie 2014



“Won't lowering speed limits greatly increase Travel Times?”

- **Maybe a little**, but most traffic delay is due..
 - Other **traffic** (local towns, intersections)
 - **Site** restrictions (curves, roadworks)
- You will gain more economic benefits from:
 - **Safety** benefits of reduced speeds
 - **Health** benefits of encouraging more active trpt, less noise, etc
 - **Retail** benefits from encouraging passing trade
 - **Property Value** benefits due to more liveability

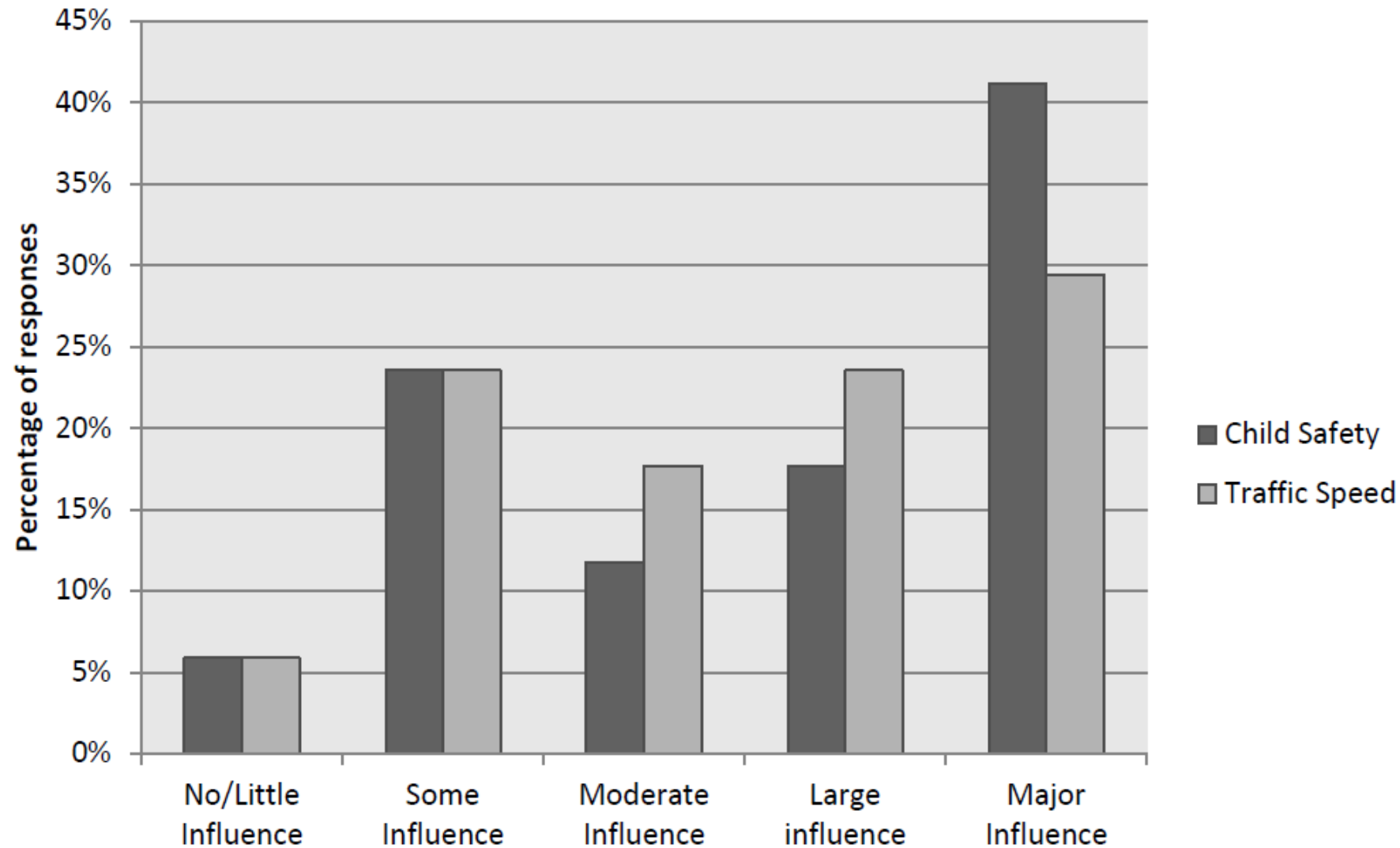


*Trading a little less mobility for vastly improved **amenity***



Likelihood to walk or other active modes

Influence of traffic speed on a resident's decision to allow their child to walk:



— *Trumper (2013)*

Noise effects...

- Freiburg, Germany
 - *Lärmschutz* = noise prevention
 - Also reduced speeds on some motorways



Climate Change effects...

- Netherlands open road speed limit
 - Reduced from 130km/h to 100km/h
 - Daytime only (between 6am-7pm)
 - Would otherwise breach EU law on nitrogen oxide emissions



“

I'm incredibly disappointed, it's terrible. But otherwise people would have lost their jobs by Christmas. And I would not have been able to look at myself in the mirror

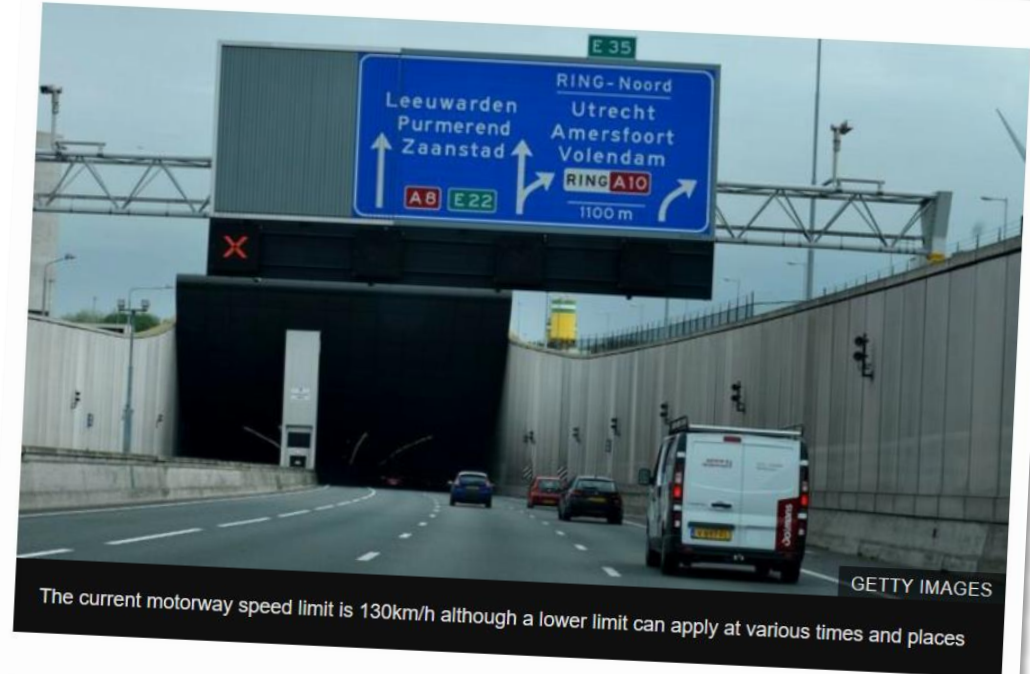
Mark Rutte

Dutch prime minister

Netherlands forced to slash speed limit to reduce emissions

13 November 2019

f Share



The current motorway speed limit is 130km/h although a lower limit can apply at various times and places

The daytime speed limit on Dutch roads is to be cut to 100km/h (62mph) in a bid to tackle a nitrogen oxide pollution crisis, according to cabinet sources widely quoted by Dutch media.










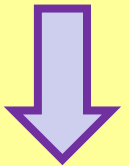








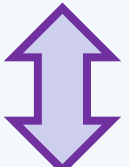






Prime Minister Mark Rutte said it was a "rotten measure" but necessary. The existing limit of up to 130km/h will still be permitted at night.

The new limit is set to come in next year along with several other measures.

Ministers have been grappling with ways of responding to the emissions problem.

"No-one likes this," Mr Rutte told a news conference. "But there's really something bigger at stake. We have to stop the Netherlands from coming to a halt and jobs being lost unnecessarily."

Speed Management Options

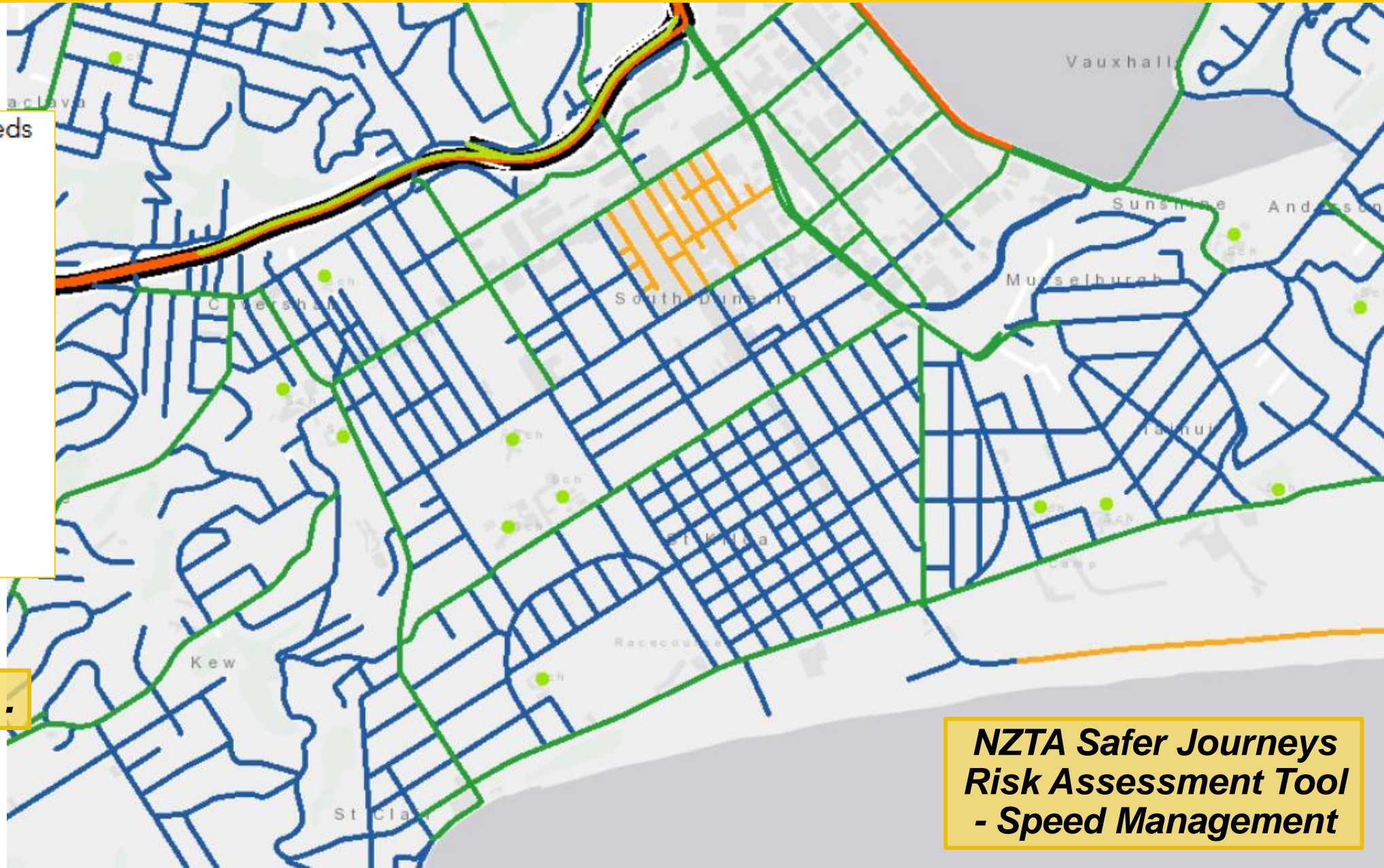
	Engineering DOWN	NO Engineering	Engineering UP
Increase speed limit 		 	 
No speed change 			
Decrease speed limit 	   	   	
Variable speed limit 	  	  	

MegaMaps: “Safe and Appropriate” Speeds

Safe and Appropriate Speeds

- 110
- 100
- 80
- 60
- 50
- 40
- 30
- 20
- 10

A sea of BLUE...



***NZTA Safer Journeys
Risk Assessment Tool
- Speed Management***

Start with the 'Low Hanging Fruit'

- Suburban/CBD shopping streets
- Residential traffic calmed areas
- School zones
- Unsealed/winding/narrow rural roads



“Lower posted speed limits alone won’t change traffic speeds”

For every **10 km/h** posted speed limit change:



- Typically we observe a **2-3 km/h** change in mean speeds



Elvik et al (2004)

Key physical tools for lower speeds



Explain WHY people should slow down

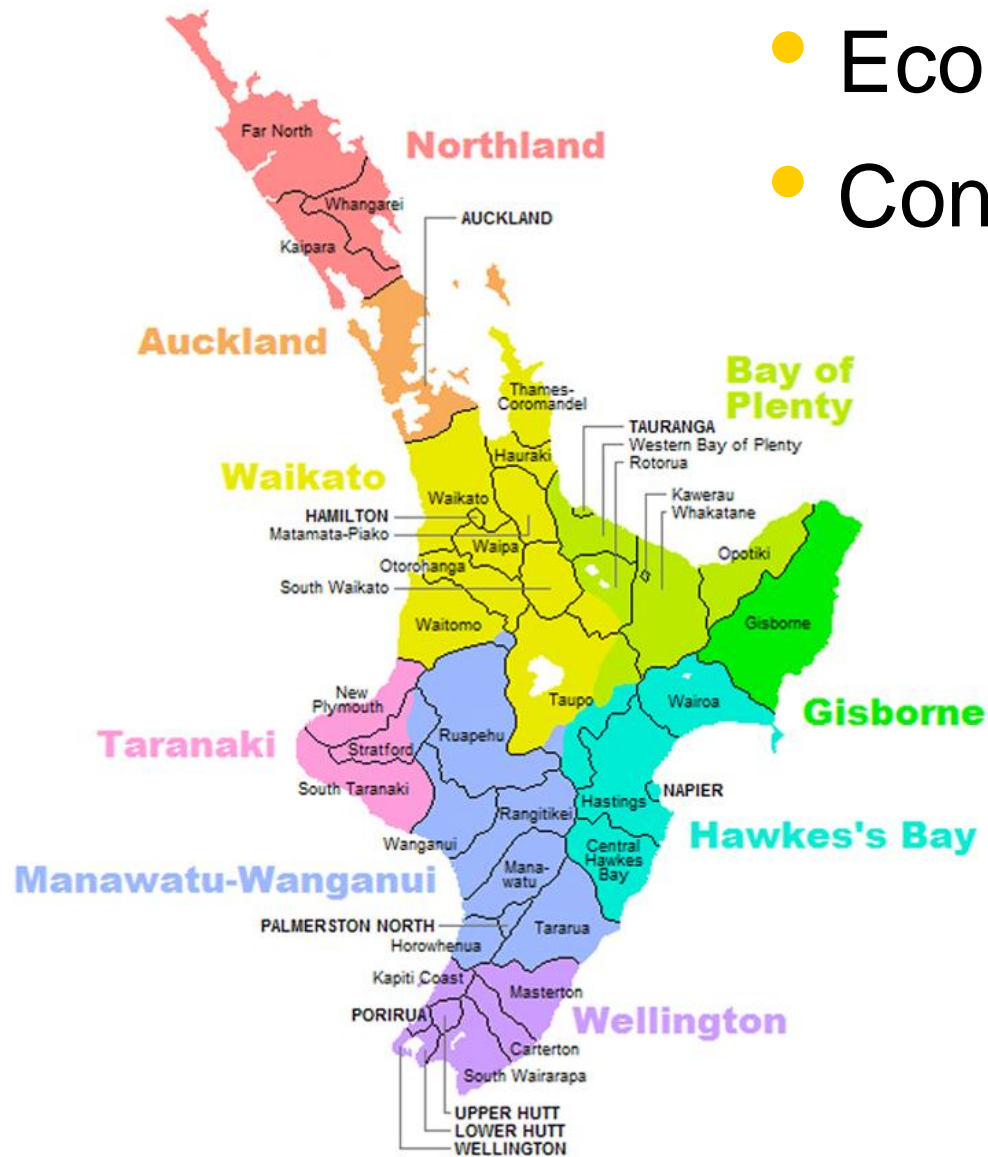


Speed Management Plan process

- Suggested steps for developing a strategy plan:
 1. Review existing WK maps/data, identify preliminary proposed treatments
 2. Consider additional local information (strategies, feedback, etc) for each site
 - *Optional: Undertake community research to gauge opinions on road risk (incl. speed)*
 3. Identify the most suitable management option(s) for each road section
 4. Determine appropriate treatments to implement the desired management options (signage, markings, physical works, etc) and estimate likely costs
 5. Develop a prioritisation plan for the work to inform 2021-24 LTP & beyond
 6. Present the proposed management and implementation plan to Council and the public, together with relevant supporting information
 7. Revise the plan based on feedback received from Council / stakeholders
 8. Programme and implement projects, and continue to monitor results

Region-wide speed plans?

- Economies of scale
- Consistency of approach



Thank you!

- Time for questions / discussion
 - Use Zoom Chat function



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