The Mechanics and Politics of Changing a Speed Limit

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VIASTRADA
TRANSPORT PLANNING AND DESIGN

Presentation Outline

- The current situation
  - And the problem…
- Why do people object to lower speeds?
  - Reviewing the objections
- Possible ways forward

What could you do with an extra…

72 seconds?

80

30

St Asaph St 30km/h speed limit

"You will clog up the city so that it becomes un-accessible"

"The central city is ruined"

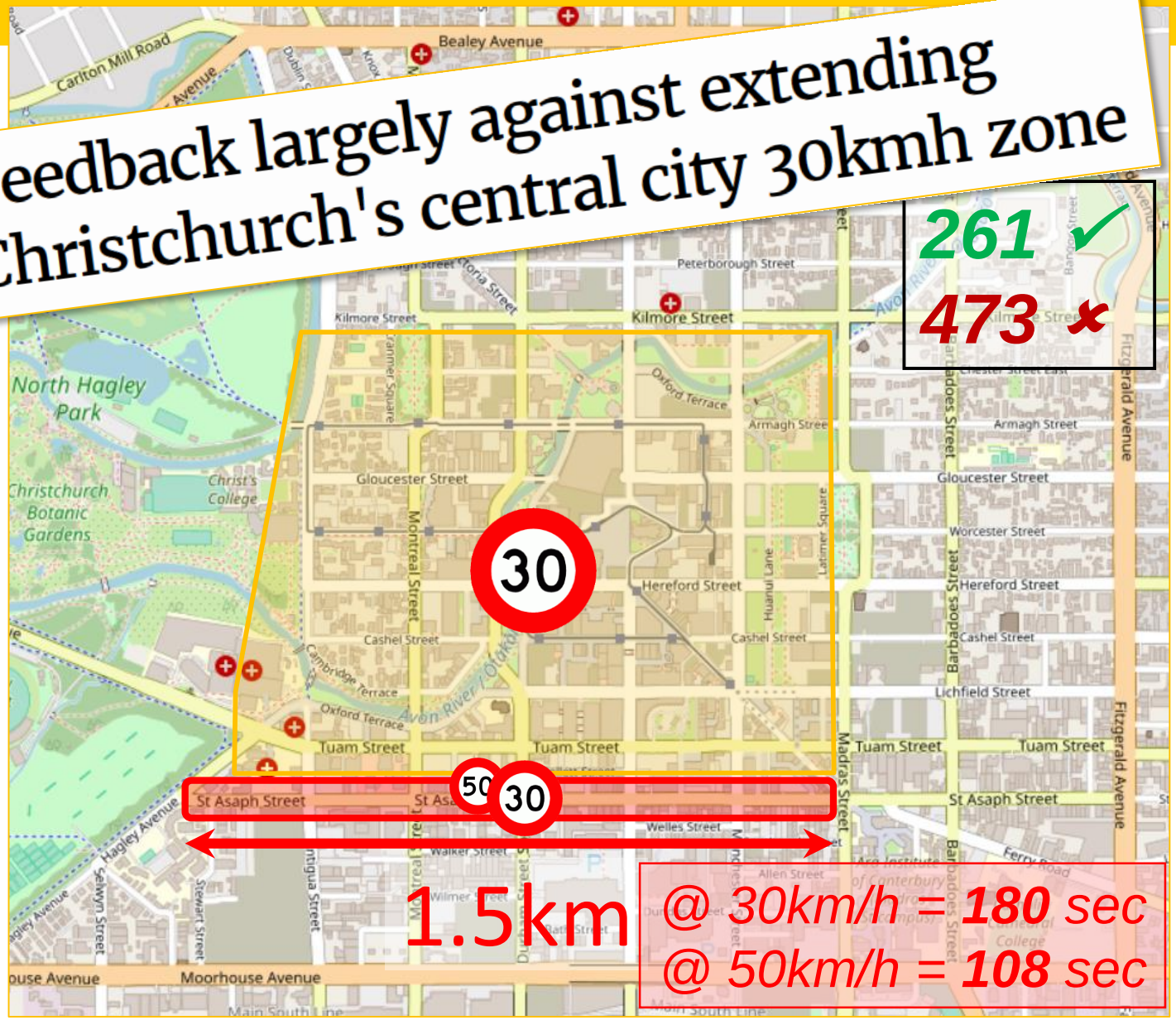
"This only causes congestion. The reduction in speeds does not correlate to safer streets"

"The reduced speed is more dangerous to road users because it is way too slow"

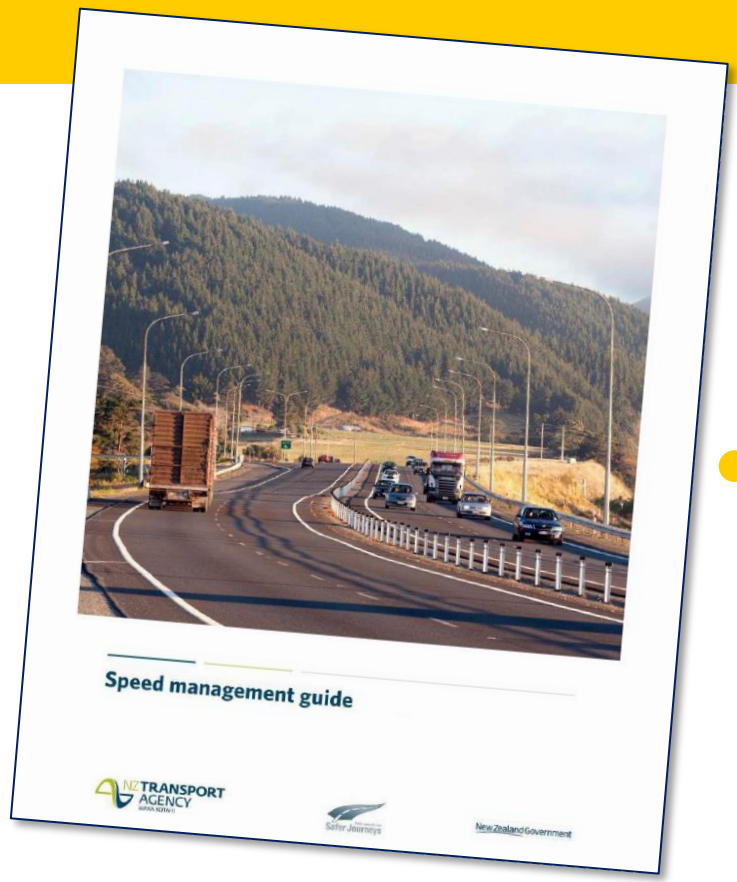
Feedback largely against extending Christchurch's central city 30kmh zone

261 ✓

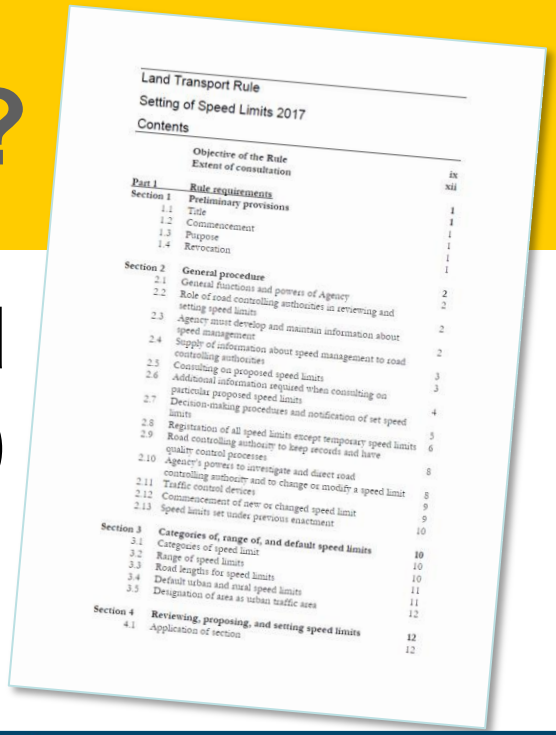
473 ✗



All the tools… Why are we waiting?

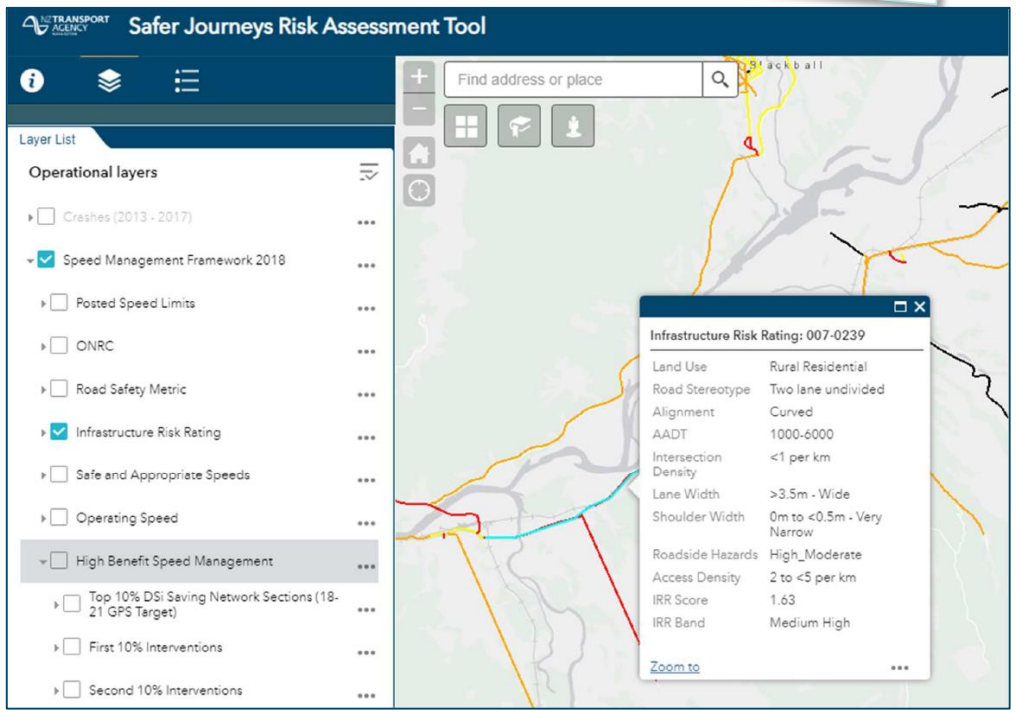


- Setting of Speed Limits Rule (2017)

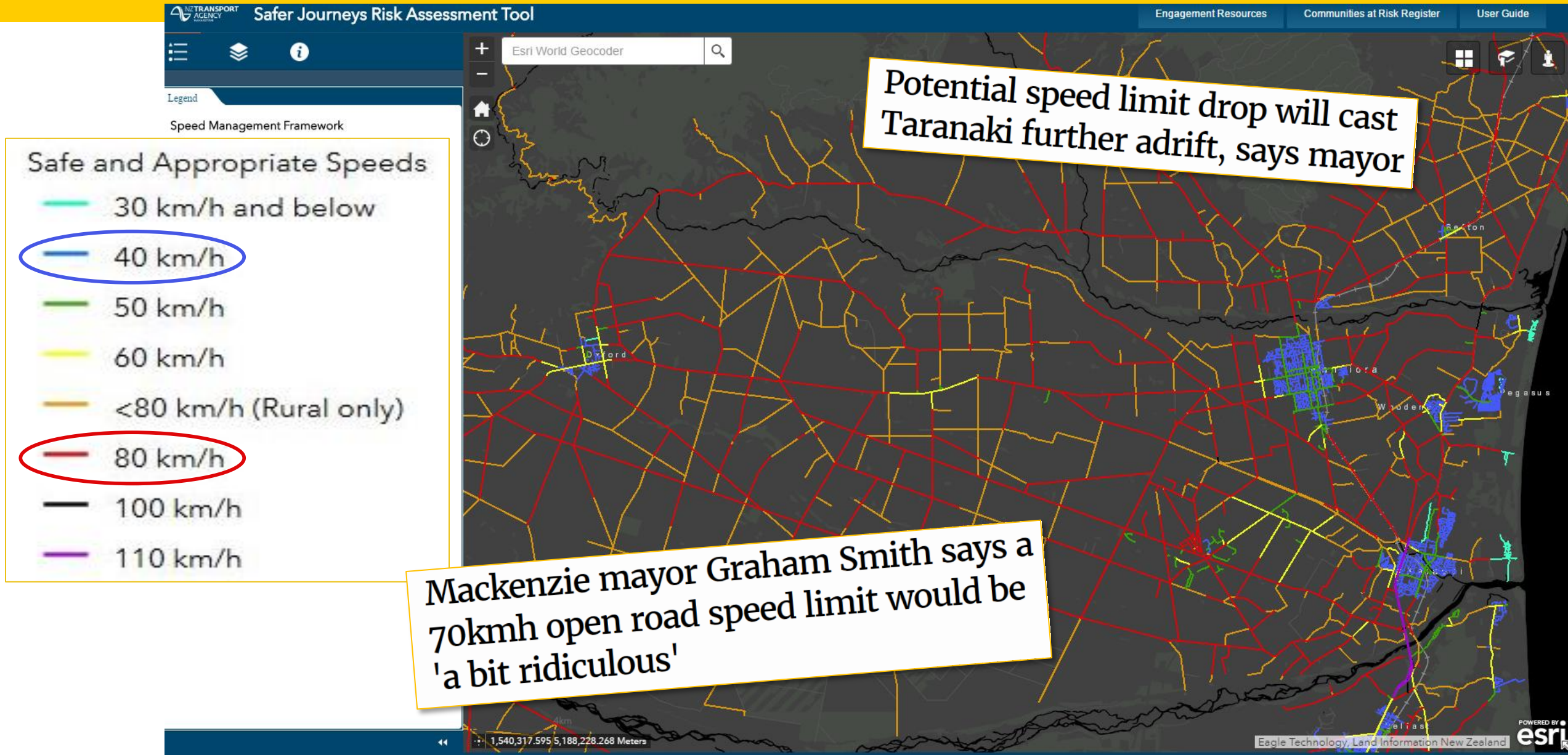

Land Transport Rule
Setting of Speed Limits 2017
Contents

- NZTA *Speed Management Guide* (2016)

- NZTA Risk Assessment Tool ("Mega Maps")



Calculated “Safe and Appropriate” Speeds

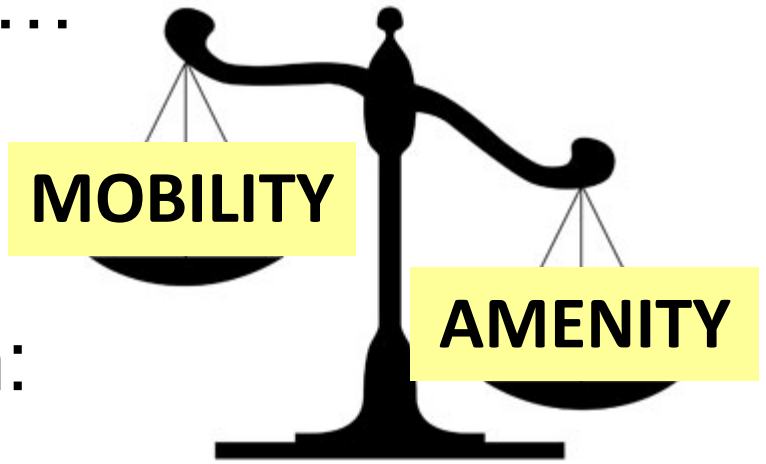


Why do people object to lower speeds?

- *"It **takes a lot longer** to get somewhere"*
  - *= more driver fatigue/frustration = more crashes*
- *"Only changing speed limits **doesn't change travel speeds**"*
- *"It **won't improve safety**"*
  - *Fix the roads and focus on driver skills/behaviour instead!*
- *"I have to **watch my speedo** more"*
- *"It's just **revenue gathering**"*

"Won't lowering speed limits greatly increase Travel Times?"

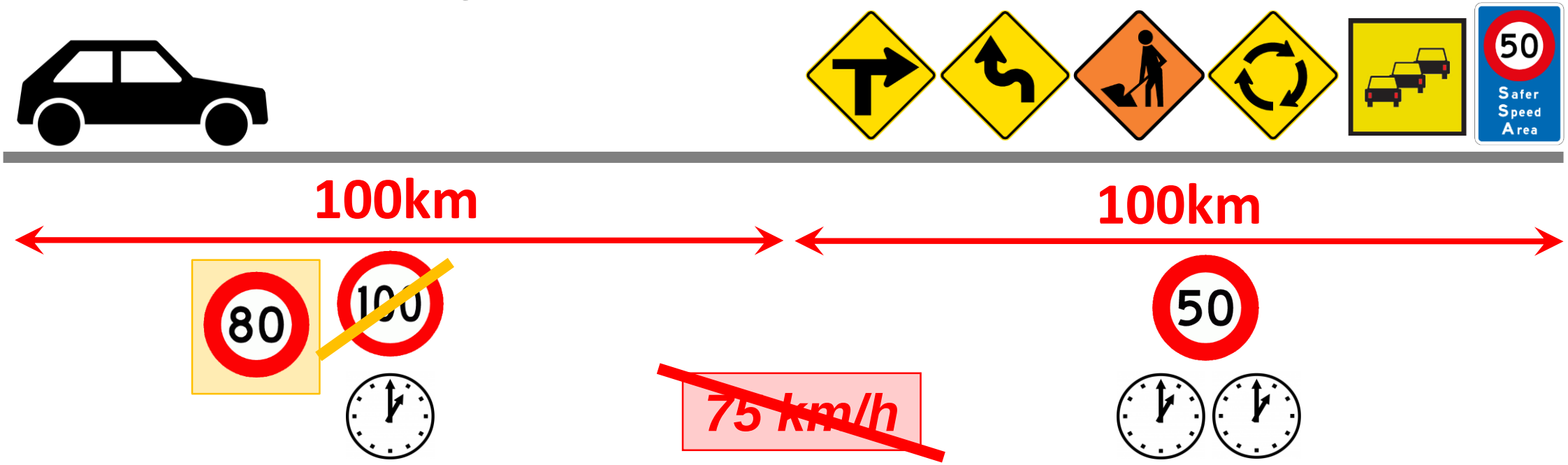
- Maybe a little, but most traffic delay is due…
  - Other **traffic** (local towns, intersections)
  - **Site** restrictions (curves, roadworks)
- You will gain more economic benefits from:
  - **Safety** benefits of reduced speeds
  - **Health** benefits of encouraging more active trpt
  - **Retail**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



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

Travel time savings/gains are over-estimated

- What's the average speed?



*Total: **200 km** over **3:00 hrs = 66.7 km/h** average speed*

3:15 hrs = 61.6 km/h

"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)

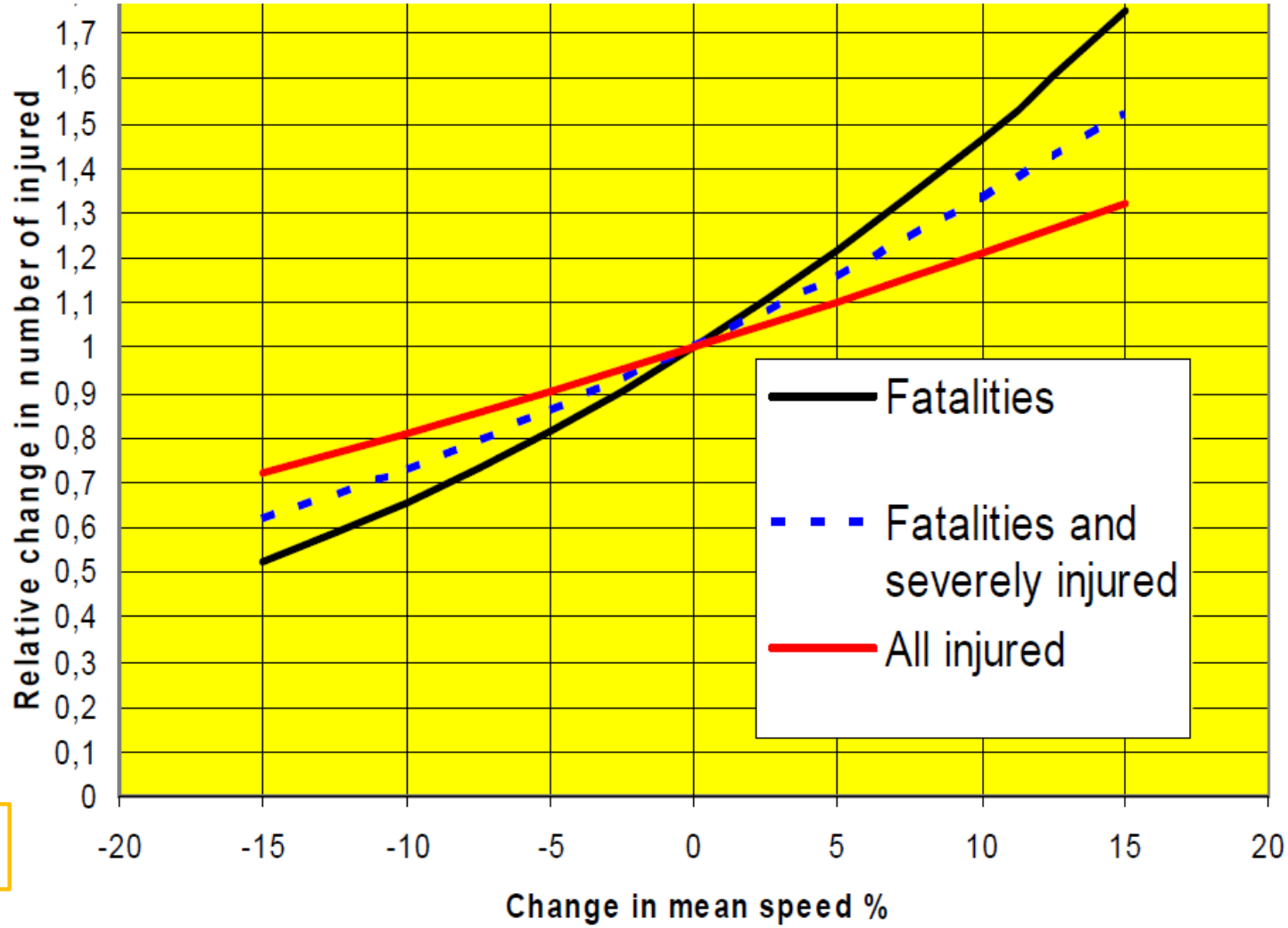
Even small travel speed changes MATTER

- For every **-1%** speed reduction we see:

  ≈ **-2%** all injuries

  -3% serious injuries

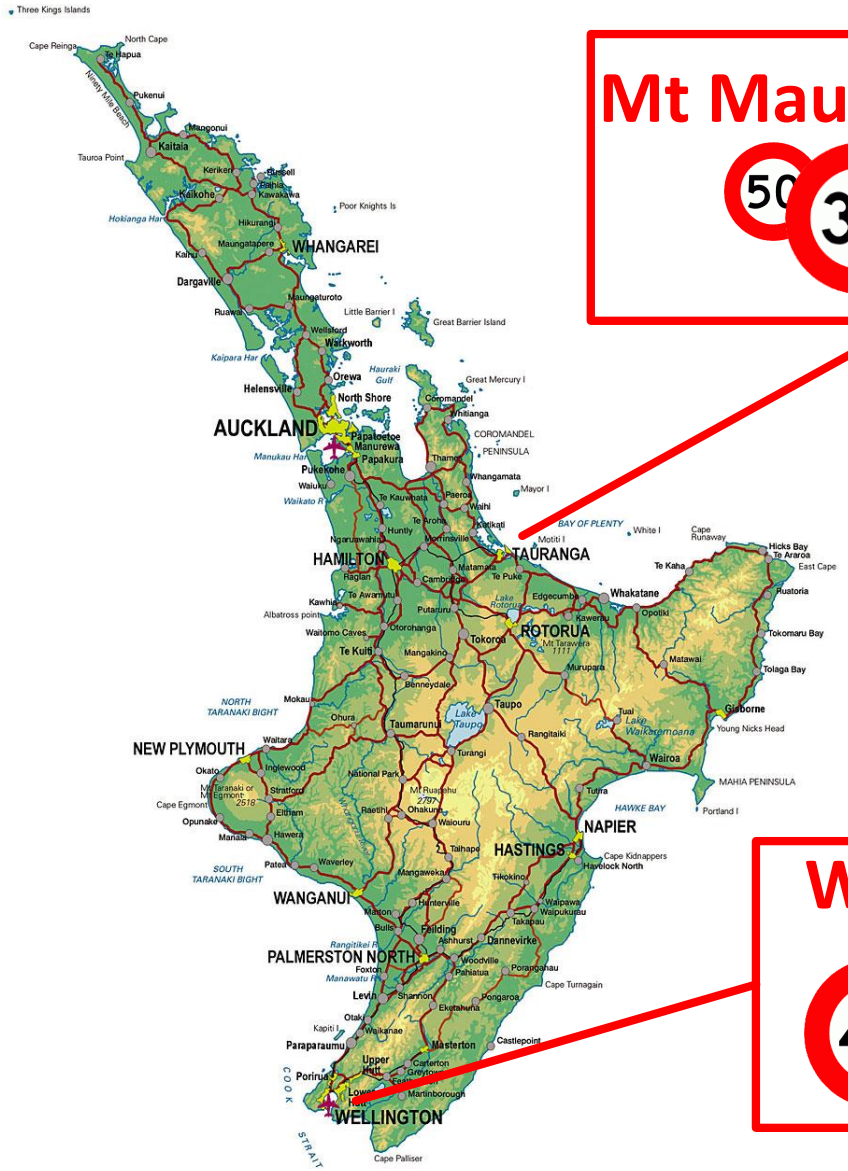
  -4% fatalities



Nilsson (2004)

LOTS of overseas evidence of safety
But we already have NZ evidence too…

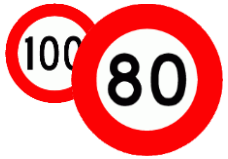
ITF (2017)



Mt Maunganui

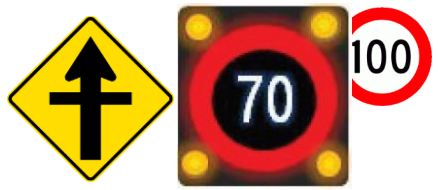
21%

NZ 1973



36%

Rural Int'sns



51%

Wellington

82%

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

80

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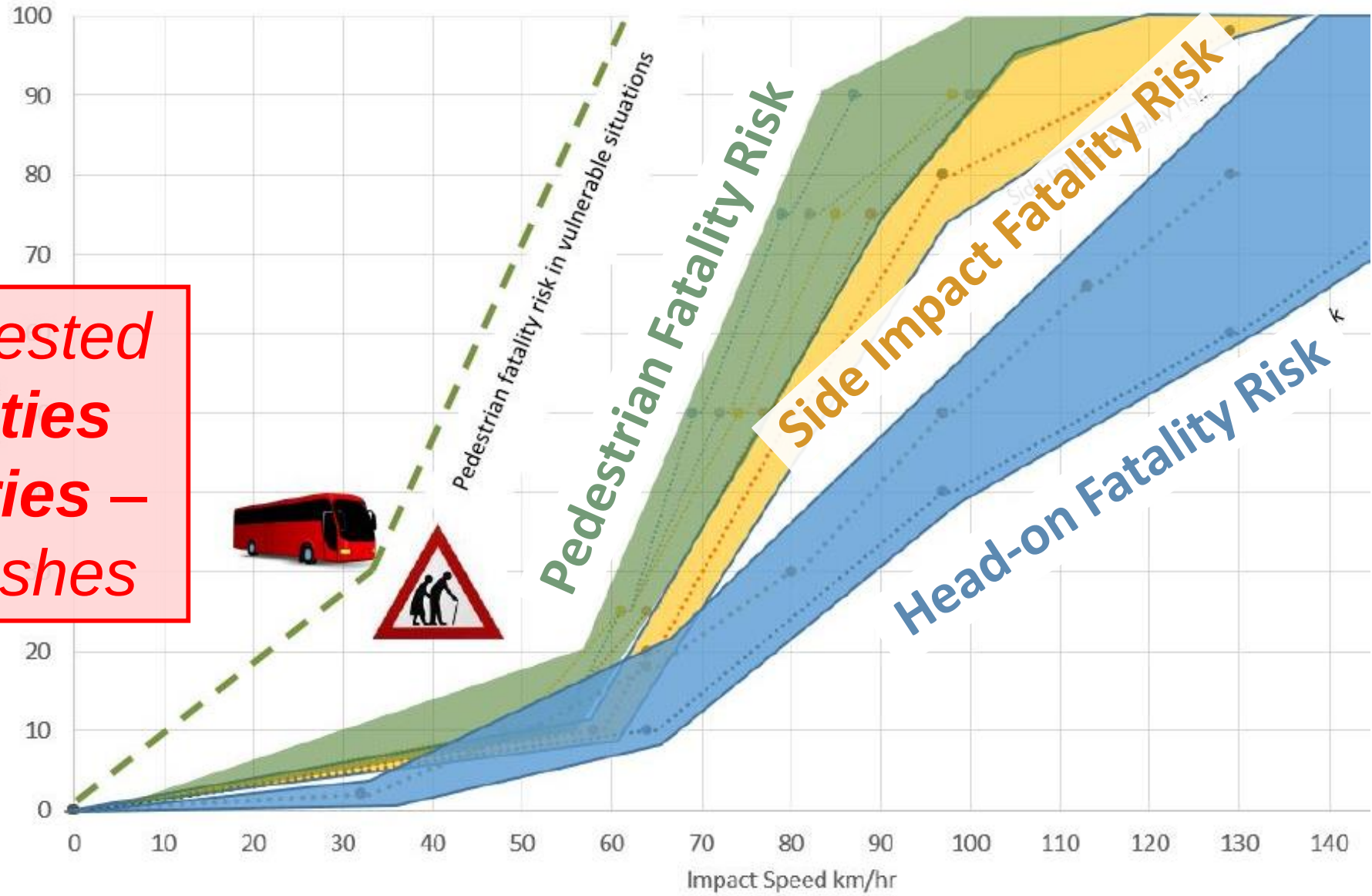
Speed always affects the CONSEQUENCES

(it affects the likelihood too)

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



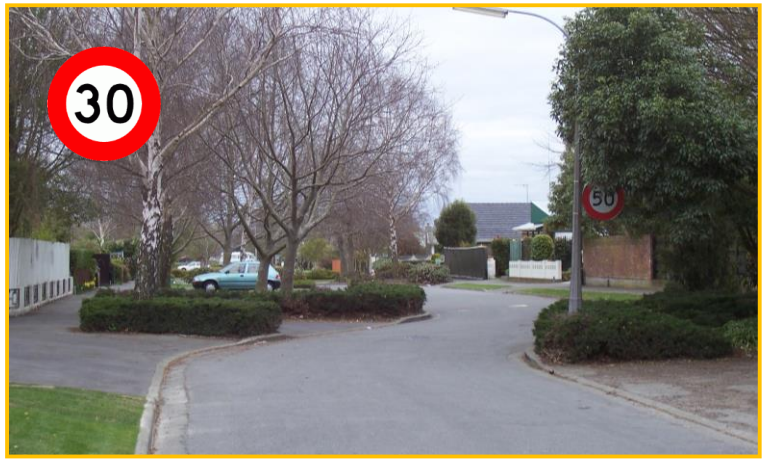
Scott & Mackie 2014

Possible ways forward

Start with the ‘Low Hanging Fruit’

- Suburban/CBD shopping streets

- Residential traffic calmed areas

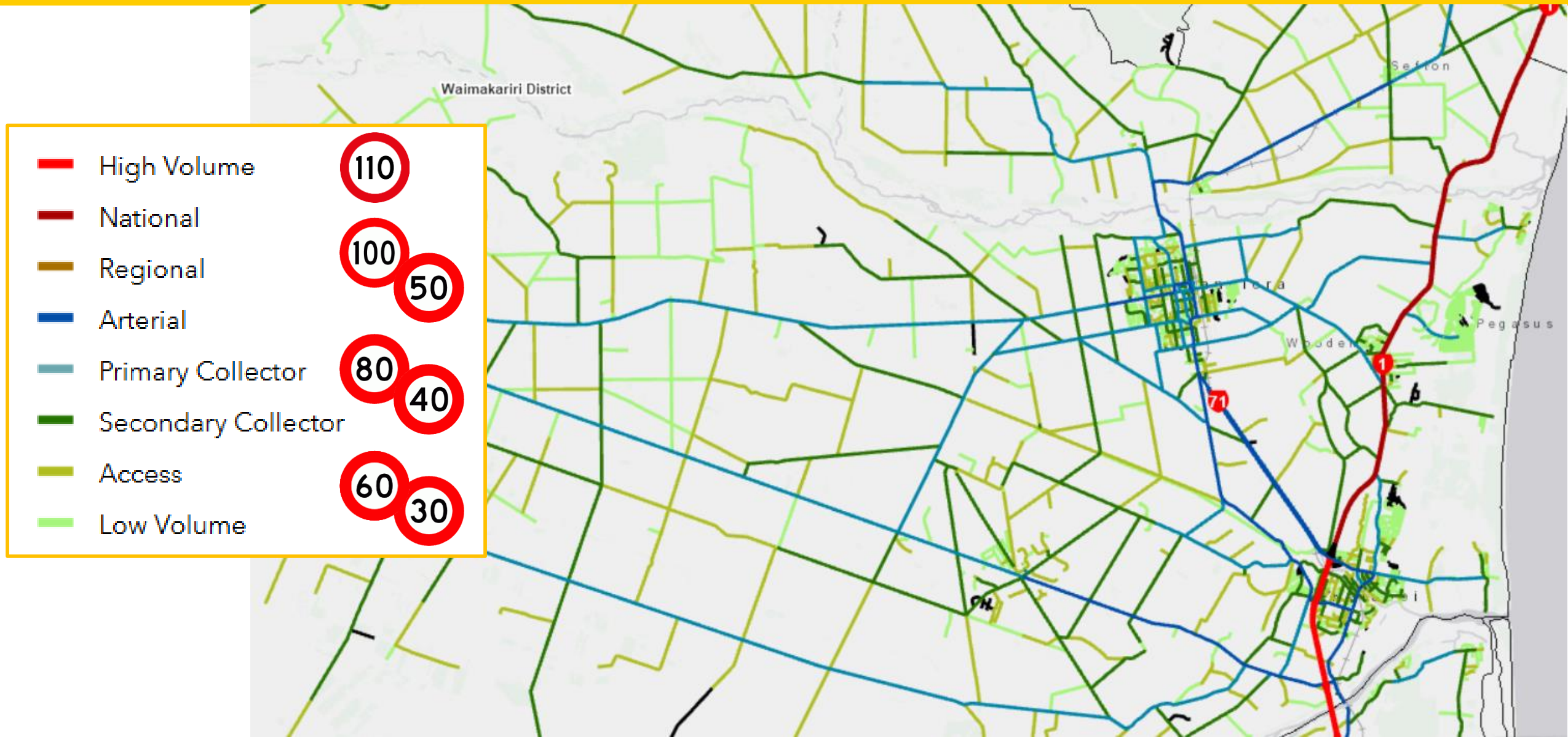


- School zones

- Unsealed/winding/narrow rural roads

Possible ways forward

One Network Road Classification defaults



Possible ways forward

Stop getting hung up on strict compliance

- Currently mean speeds must be < *{Spd Limit + 10%}*
  - Makes trialling new initiatives more difficult

  Is a speed reduction of some degree a "failure"?

- Try posted limit changes first, then treat where necessary
  - Simple calming, road-marking changes, extra signage, or more

*Key question is **not** "is everyone complying?"*
*but rather: "**have traffic speeds gone down?**"*

Possible ways forward

Provide common material to pre-empt concerns

- Every RCA shouldn't have to "reinvent the wheel"

Myths and misconceptions about speed

The setting of speed limits on our roads can be an emotive issue but there is only one objective – and that is to make our roads safer for motorists and pedestrians.

There are many myths and misconceptions about the speed at which we drive – here are a few for you to consider:

"You just want to drop speed limits everywhere."

We are proposing to set new safe and appropriate speed limits for approximately 10% of Auckland's high-risk roads and intersections.

We want to use local knowledge and data to make sure we've done everything we can to make your roads safer. This could mean road improvements so it's safer at the current speed limit, or it could mean lowering the speed limit. There may be places where speed limits could be increased. The aim is to make sure we have the right speeds on the right roads.

"Speed isn't a problem, bad drivers are."

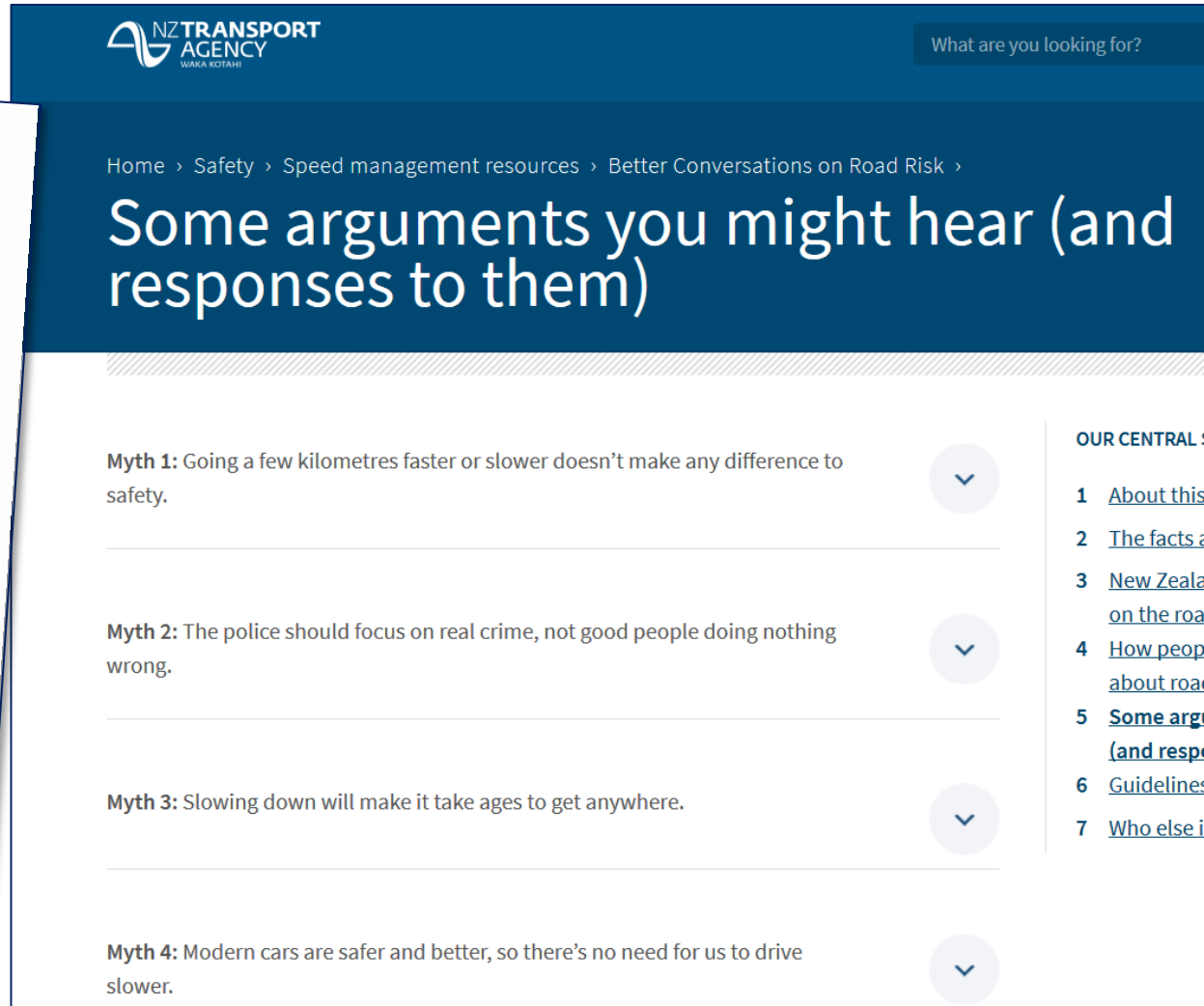
Even the most skilled drivers make mistakes, and most drivers understand New Zealand's roads can be challenging. Good speed management gives drivers the cues they need to judge the safe and appropriate speed for the road they're on.

"Defining a vulnerable road user."

A vulnerable road user is anyone not in a vehicle. People walking, people on motorised twowheelers (motorcycles, mopeds and light mopeds) and people cycling are referred to as vulnerable road users because of their 'unprotected' state.

"Going a few kilometres faster or slower doesn't make any difference to safety."

Actually, it does. Speed is the difference between a correctable mistake and a fatal error. Every extra km/h increases the likelihood of someone being killed or injured in a crash. Regardless of what causes a crash, speed always plays a part.



NZ TRANSPORT AGENCY WAKA KOTAHI

What are you looking for?

Home › Safety › Speed management resources › Better Conversations on Road Risk ›

Some arguments you might hear (and responses to them)

Myth 1: Going a few kilometres faster or slower doesn't make any difference to safety.

Myth 2: The police should focus on real crime, not good people doing nothing wrong.

Myth 3: Slowing down will make it take ages to get anywhere.

Myth 4: Modern cars are safer and better, so there's no need for us to drive slower.

OUR CENTRAL

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2 The facts a
3 New Zeala on the roa
4 How peop about roa
5 Some arg (and resp
6 Guideline
7 Who else i

Possible ways forward

Develop a strategy for speed management

	Engineering DOWN	NO Engineering	Engineering UP
Increase speed limit ⇧		50 60	100 110
No speed change =	50	100	80
Decrease speed limit ⇩	80 60 50 30	50 40 100 80	
Variable speed limit ⇕	SCHOOL ZONE 30 50	70 100	

May need to "trade off" some increases for decreases…

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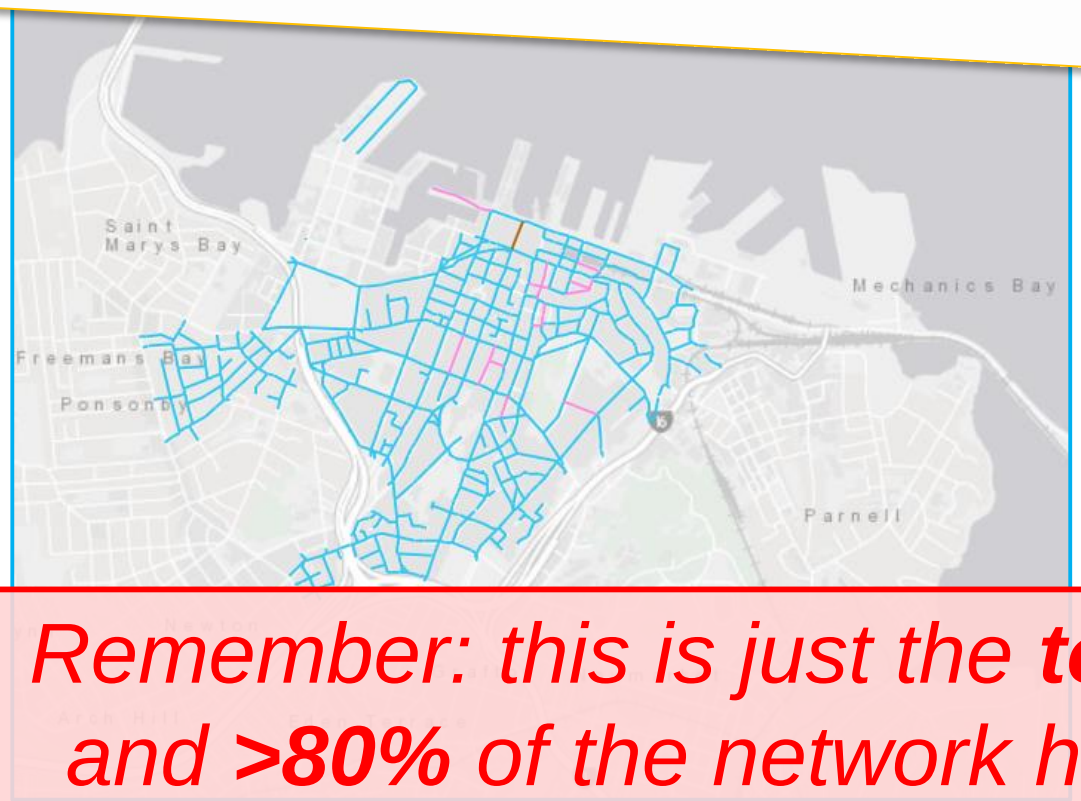
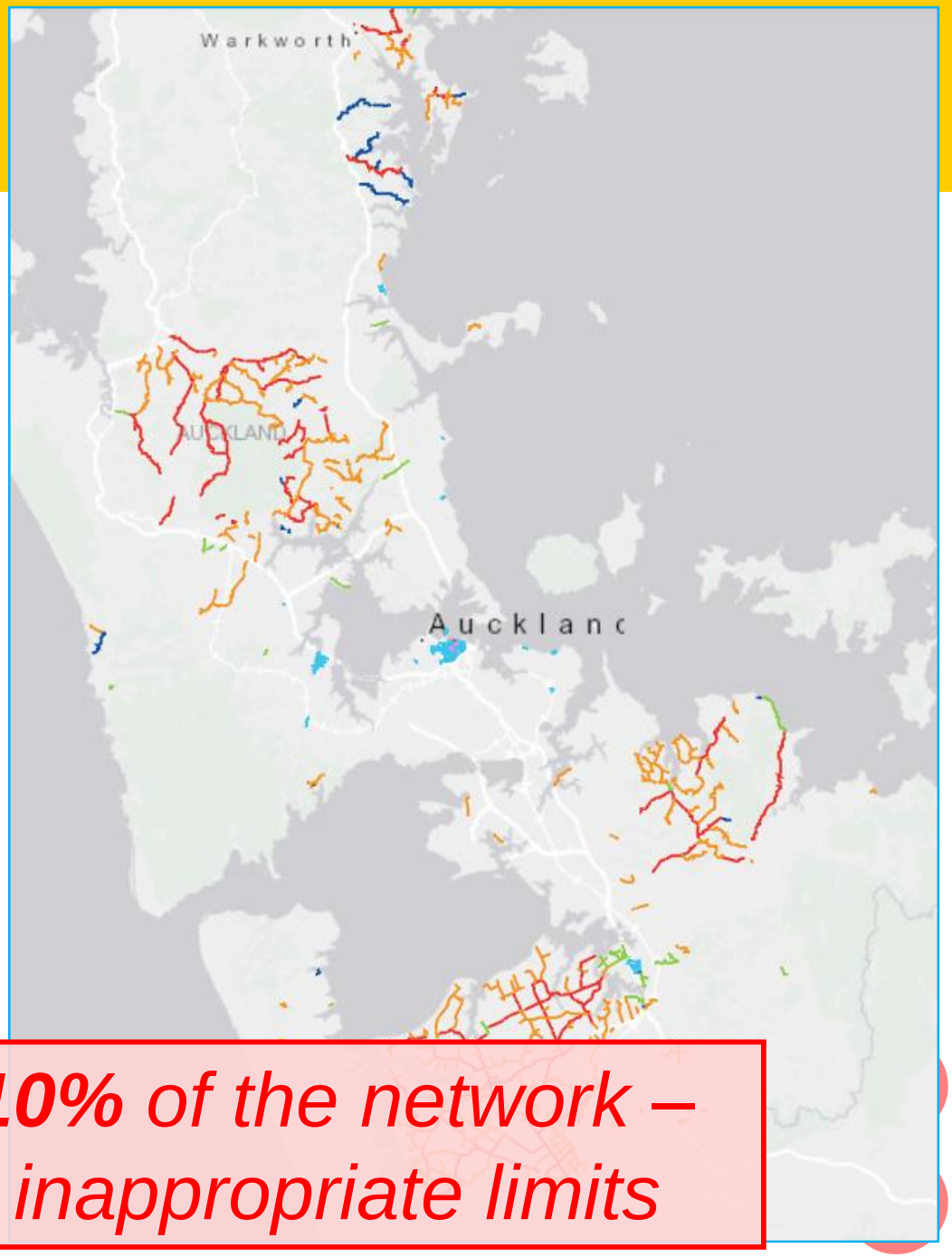
It is starting to happen…

Hundreds of Auckland streets may have speed limits dropped under new council plan





*Remember: this is just the **top 10%** of the network – and **>80%** of the network have inappropriate limits*

Postscript: St Asaph St 30km/h speed limit

St Asaph St 30kmh proposal going forward despite lack of public support

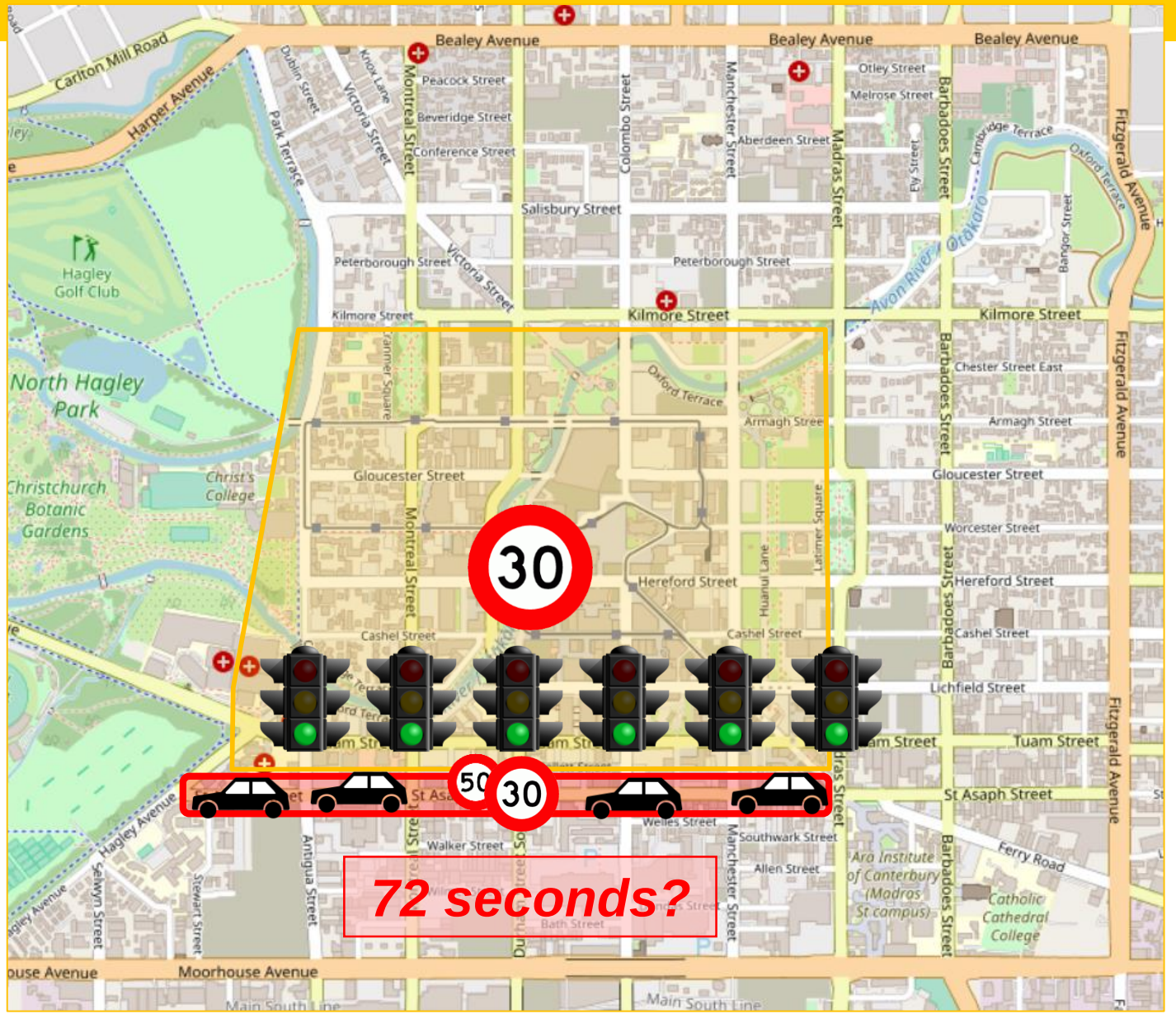
Michael Hayward • 14:48, Dec 08 2018

IAIN MCGREGOR/STUFF

A hearings panel has supported reducing St Asaph St's speed limit to 30kmh, despite largely negative feedback from the public.

A speed limit reduction on Christchurch's St Asaph St will be recommended to the council, despite public feedback largely opposing the idea.

Almost two-thirds of the 737 submissions on the Christchurch City Council plan did not support reducing the speed limit on sections of St Asaph St and Hagley and Riccarton avenues from 50kmh to 30kmh.



Thank You!

- Any Questions?

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  GKoorey