

SPEED LIMITS AND ROAD SAFETY IN REGIONAL NSW

Organisation: 30Please
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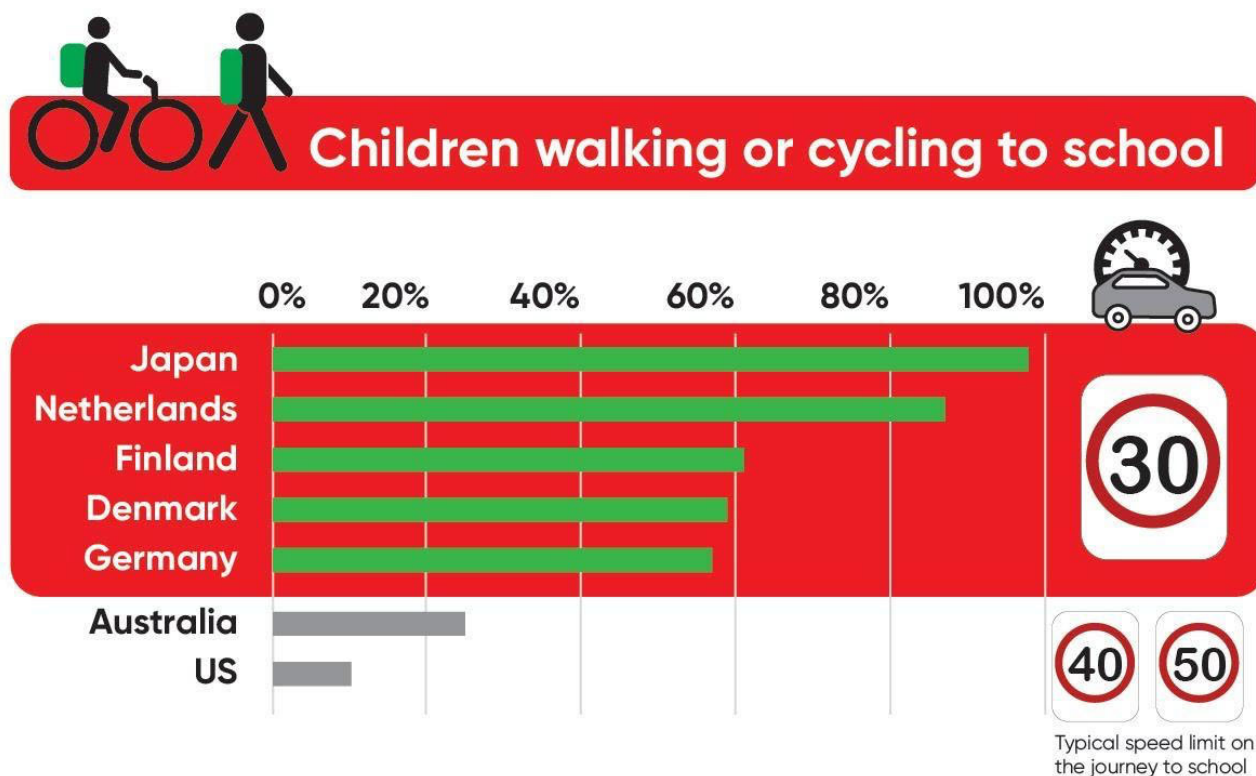
Attention: Joint Standing Committee on Road Safety
Subject: Speed limits and road safety in regional NSW

Submission By 30Please
21st June 2022



I About 30Please and our Vision

30Please is a community grassroots campaign that advocates for 30km/h to become the default speed limit in residential areas in Australia. 30Please is a member of CWANZ.



Sources
Garrard, J (2016) Walking, riding or driving to school: what influences parents' decision making?
<https://destatista.com/statistik/daten/studie/1039428/umfrage/umfrage-zu-genutzten-verkehrsmitteln-auf-dem-schulweg-von-kindern-in-deutschland/>
Kontou, E (2019) U.S. active school travel in 2017: Prevalence and correlates

30Please supports Vision of Zero.

Road crashes are a leading cause of death for children aged 1-14 in Australia.¹ The inaction to take necessary steps to create a forgiving road system in Australia also means that our children are less likely to walk and cycle to school than their international peers. Currently, over 70% of children and 91.5% of young adults are not meeting daily physical activity levels.

¹ <https://www.aihw.gov.au/reports/australias-health/causes-of-death>

II What are safe speed limits

NSW should set speed limits that are safe. The International Transport Forum is an intergovernmental organisation with 59 member countries, including Australia. Their latest report² 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:

- 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)

The faster vehicles travel, the more frequent and severe road crashes become, and the greater the level of injury and death that ensues.

III The Case for 30km/h speed limits on local streets

Many neighbourhoods in regional Australia lack footpaths and there are no funding plans in place to provide these in the future. This safety concern needs to be addressed urgently. According to Austroads, the most effective measure to date to increase pedestrian safety is the adoption of lower urban speed limits.

We now see a growing acceptance of lower speed limits across the world and a notable spread of area-wide and even city-wide 20 mph/30 km/h limits. For example, 13 million people live in default 20 mph zones in the United Kingdom, which are publicised using the slogan '20's Plenty for Us'; 38 per cent of the Swiss population live in 30 km/h zones; and Spain's new general road law envisages 30 km/h limits on most city streets. As far as particular cities are concerned, Edinburgh's 20 mph zones cover 80 per cent of the city's streets; Paris has announced plans for lower speed zones across the whole city; and in the United States, Boston and Seattle are developing lower speed zones and Portland had a default 20 mph speed limit on 70 per cent of its street mileage by 2018. The UN theme for the 6th UN global road safety week in 2021 was: 30km/h for urban areas.³

In Australia, area-wide 30km/h limits in urban areas should be created, allowing for higher speed limits on arterial roads where infrastructure to protect cyclists and pedestrians can be provided. At speeds of below 30 km/h, cyclists and micro mobility devices can mix with motor vehicles in relative safety.

There is clear evidence that 30 km/h speeds in residential streets dramatically improve road safety. The success of these 30 km/h (20mph) speed limits in reducing road crashes is supported by recent research. A Bristol study found that a 20 mph city-wide speed limit intervention led to a city-level reduction of fatal injuries of around 63%. The authors suggested that the city-wide

² International Traffic Safety Data and Analysis Group. Speed and Crash Risk: Research report. Paris: International Transport Forum, 2018

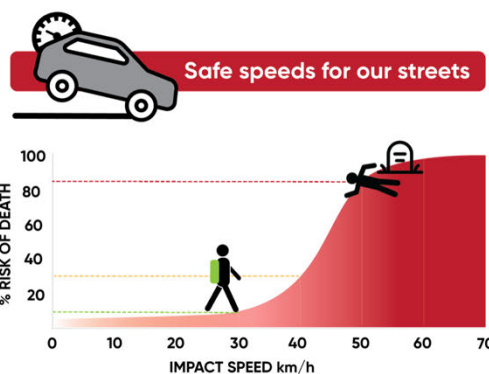
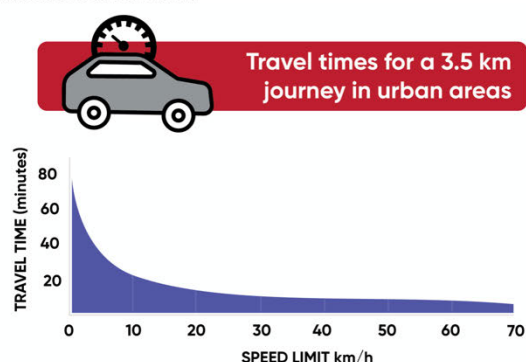
³ <https://www.unroadsafetyweek.org/en/home#letter>

approach to reducing speeds encouraged a more general behaviour change in drivers, which in turn contributed to reducing injuries across the city.⁴

Travel time urban area

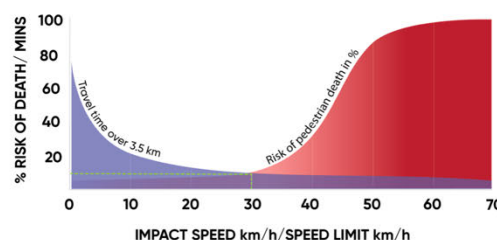
	Average Speed	Travel time for 1km	Travel time for 3.5km
	5km/h	12 min	42 min
	15km/h	4 min	14 min
	21km/h	2.9 min	10 min
	26.4km/h	2.3 min	8 min

*Source: ADAC Tempo 30 Pro Contra (2015)



Source: Chris Saffer by Design (2015), www.safferbydesign.com/publication/cities-saffer-design

Determining optimal speed limits in urban areas



Given that drivers spend the majority of their time on arterial roads, the effect on travel time and perceived inconvenience will be minimal. The introduction of lower speed limits needs strong leadership, as some drivers overestimate the effect of 30km/h limits on travel time, and others might not be in favour of being instructed to share the road with other road users.⁵

A well designed social marketing campaign highlighting the advantages of lower speeds – improved safety and also increased liveability – should be rolled out. Local advocacy groups can help to embrace the change to healthier neighbourhoods.

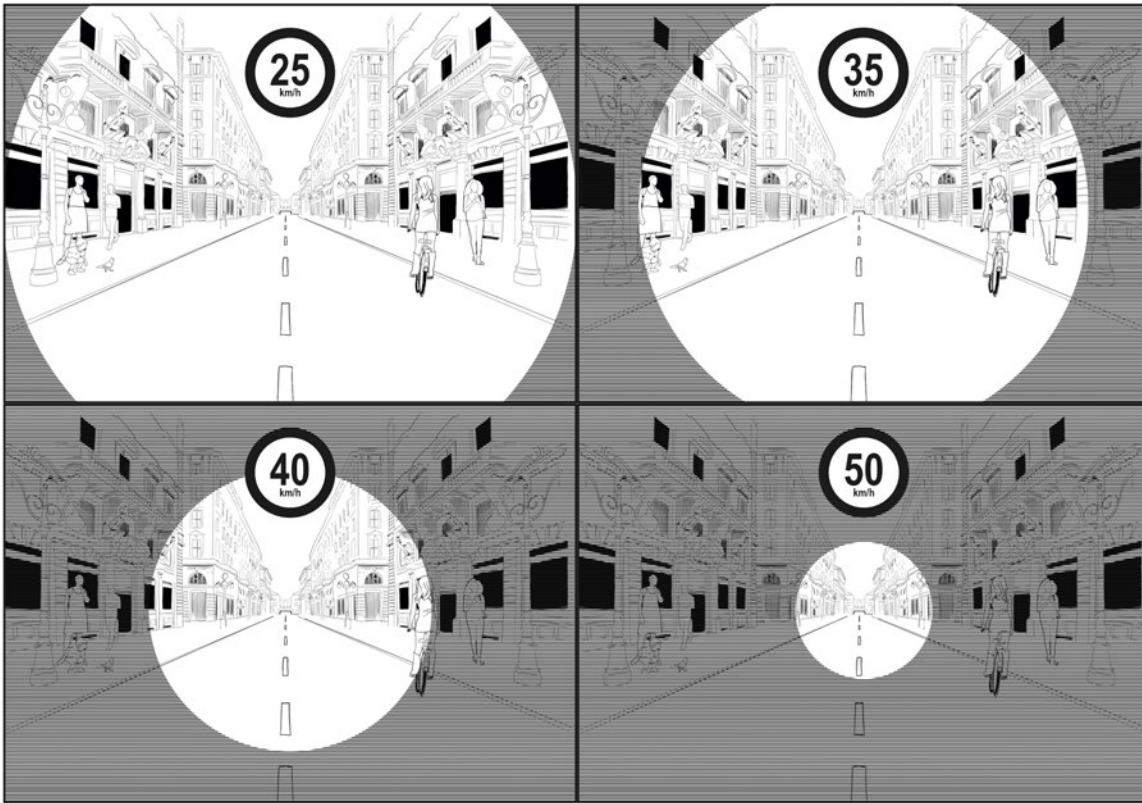
While the majority of Australians already supports lowering speed limits⁶ in neighbourhoods, the acceptance should increase after implementation. This would be consistent with experience from countries like the UK and Germany. Some smaller trials in Melbourne and New Zealand where 30km/h limits had been rolled out before 2020 have been successful and have been even more popular after people experienced the benefits.⁷

⁴ Bornioli, A., Bray, I., Pilkington, P., & Parkin, J. (2020). Effects of city-wide 20 mph (30km/hour) speed limits on road injuries in Bristol, UK. *Injury prevention*, 26(1), 85-88.

⁵ <https://30please.org/wp-content/uploads/2021/02/ACRS-Safe-Street-Neighbourhoods-2019-Update-vs2.1-WA-NSW.pdf>

⁶ The Heart Foundation has found in a survey conducted in 2020 that the majority of Australians supports lower speed limits in neighbourhoods. Only 13% of people surveyed were unsupportive. <https://healthyactivebydesign.com.au/resources/publications/what-australia-wants-report>

⁷ https://www.20splenty.org/20mph_choice



Cone of Vision at different speeds. Credit: Claudio Olivares Medina

On arterial roads, pedestrian priority crossings and traffic lights need to be in place for people to cross the road.

A clearer hierarchy of roads needs to be established that makes it more predictable where to expect people walking and cycling. The legacy road rules and speed limits in Australia make it hard to understand where drivers should go slowly and share the street and where drivers should go fast to not hold up the traffic.⁸

Overall, the reduction of speed limits will not just benefit vulnerable road users but will significantly reduce crashes overall. According to the WHO a 5% cut in average speed can result in 30% reduction in the number of fatal crashes.

IV Rural roads

30please focus is not on rural roads. However, as a supporter of Vision 0, we will give some feedback:

It is interesting to note that New Zealand, a country that is rolling 30km/h speed limits in residential areas also reduces speed limits on some rural roads at the same time (often from 100km/h to 80km/h).

It delivers a consistent message, they use this video to explain the changes to the public.⁹

⁸ https://medium.com/@lena_80140/why-drivers-will-thank-you-for-30km-h-limits-888a7f7896ed

⁹ <https://youtu.be/Y4-VkPxIT0Y>

The criteria they are publishing on their webpage¹⁰ for rural roads are:

“Approximately 90% of the total area we are reducing the speeds of are rural roads.

They have been selected because they:

- are either high-risk roads or close to high-risk roads
- have high crash rates or are close to roads with high crash rates
- have speed limits which are unsuitable – they could be winding, hilly or have unsegregated lanes
- it is not possible to drive to the current posted speed due to the road’s layout
- don’t have a centre median strip.

We are introducing safe and appropriate speeds across areas rather than individual roads.”

It is interesting to note that speed limits of up to 120km/h can be consistent with Vision 0. Sweden, the leader on road safety globally allows for 120km/h speed limits on their modern motorways that have special safety features. However, designing roads to this high standard comes at considerable costs.¹¹

Given the most recent flooding events, many rural roads are in a bad state and the displayed speed limits are too high given the presence of potholes.

Displaying lower speed limits here will save lives. Closing our eyes to the fact that speed limits on many of our rural roads are too high unless lots of money is spend on infrastructure improvements just means people will unnecessarily die.

V Compliance

Enforcement, high penalty fees and the use of telematics for new drivers¹² and fleet drivers can help with high compliance with lower speed limits.

Some physical measures could be used to slow down traffic, but these should be targeted at locations where speed and road danger is highest, similar to the roll out of the 20mph default speed limit in Wales.¹³

Intelligent Speed Assistance (ISA), Automated Emergency Braking (AEB) with vulnerable road user detection, enlarged head impact protection zones, direct vision requirements and Blind Spot Detection Systems for heavy goods vehicles should be made mandatory for new cars.

¹⁰ <https://at.govt.nz/projects-roadworks/vision-zero-for-the-greater-good/safe-speeds-programme/speed-limit-changes-around-auckland/>

¹¹ <https://pubmed.ncbi.nlm.nih.gov/28219638/>

¹² https://www.sira.nsw.gov.au/__data/assets/pdf_file/0010/556264/NSW-Young-Drivers-Telematics-Trial.pdf

¹³ <https://gov.wales/20mph-task-force-group-report>

Given the EU had announced this new legislation already¹⁴, most car makers should be ready to provide these features at minimal extra costs. ISA is probably the single most effective new vehicle safety technology currently available in terms of its life-saving potential. A recent cost assessment for the European Commission found that a camera-based system, shared between several systems such as Automated Emergency Braking (AEB), Lane Keeping Assistance (LKA) and Intelligent Speed Assistance (ISA), would cost in the range of €47–62 (AUD 76-100) per vehicle. The total cost for components (camera, ECU, brackets, trim, wiring) and OEM design and development, tooling costs, etc. was estimated at €186–249 (AUD302-405), based on individual costs extracted from NHTSA, 2012.¹⁵

Another very interesting area to explore is Geofencing for cars. This would work in similar ways to Intelligent Speed Assist but does not rely on cameras to read speed signs. This is technology readily available used in e-scooters and voluntarily in some trials for cars by Ford.¹⁶

Action Points:

1. Implement the UN mandate for 30km/h limits in local neighbourhood streets, especially in walking distance around schools
2. Critical access on which rural roads current speed limits are unsafe and reduce accordingly
3. Work on a social marketing campaign to get community backing for safer speed limits.
4. Mandate a safe and connected walking and cycling network: roads with speed limits more than 30km/h need pedestrian priority crossings, footpaths and cycle lanes
5. Make new life saving technologies mandatory: for example Intelligent Speed Assist will help with compliance with speed limits. With mass adoption and use (as mandated in the EU), ISA is expected to reduce collisions by 30% and deaths by 20%.

We thank you for the opportunity to provide you with our feedback to your inquiry.

30Please.org Australia is part of the Streets for Life global movement led by the United Nations (unroadsafetyweek.org) calling for 30km/h speed limits where people mix with motorized vehicles.

¹⁴ <https://eu.boell.org/en/road-safety-wanted-strategies-to-protect-the-weakest>

¹⁵ https://www.20splenty.org/what_is_isa

¹⁶ <https://media.ford.com/content/fordmedia/feu/en/news/2022/05/24/ford-pro-trials-connected-tech-that-could-automatically-reduce-t.html>