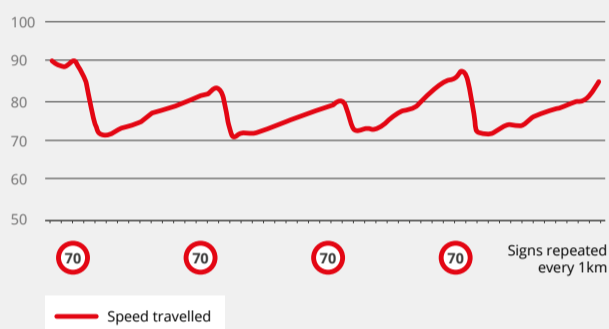


# Can we communicate speed limits better?

With speed limits being reviewed on many roads around New Zealand, do we need to look at better ways to communicate the new limits to drivers?

Research has shown speed limit signs have a periodic effect on drivers' speeds, plus drivers often miss seeing them.

**Speed signs can have periodic effects on drivers' speed**  
70km/h speed limits on former 90km/h roads<sup>1</sup>



<sup>1</sup> Jongen, E. M., Brijs, K., Mollu, K., Brijs, T., and Wets, G. (2011). 70 km/h speed limits on former 90 km/h roads: effects of sign repetition and distraction on speed. *Human Factors*, 53, 771-785.

## Research Question

Could different continuous road markings help drivers know what speed zone they are in?



Waikato University used their driving simulator to test whether drivers manage their speed better when there are different continuous road markings indicating the speed zone.

Only **30%** of roadside signs are seen by drivers.

Research has shown that drivers notice road markings more than signs.

### Markings Tested:

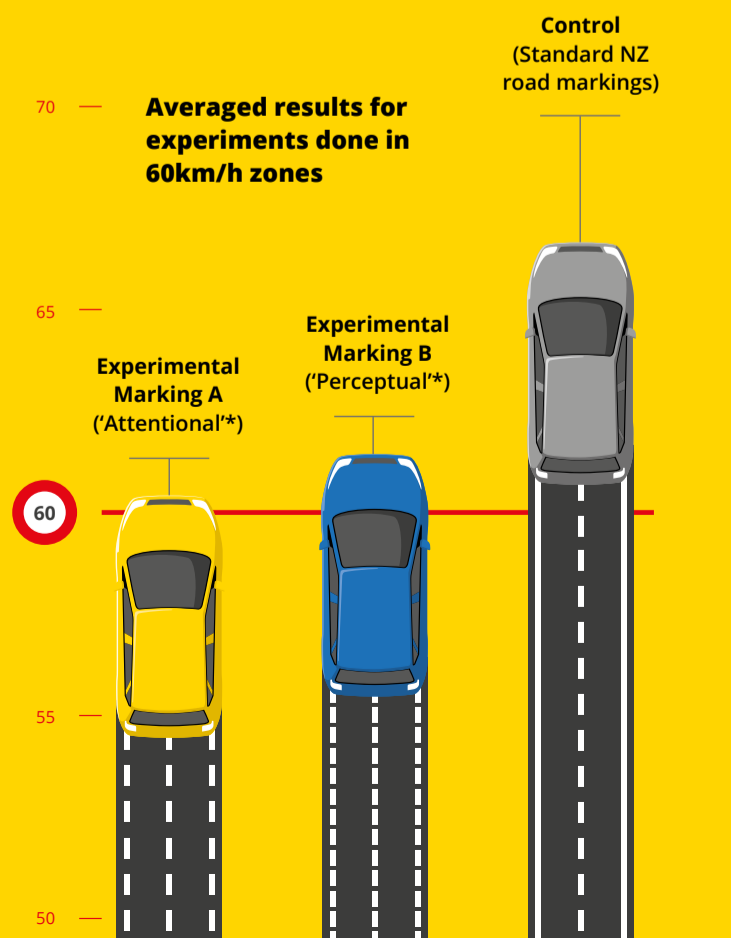
Different experimental markings tested	Standard NZ road markings tested	Different experimental markings tested
 Experimental Marking A	 Used for all 80km/h tests and the control group	 Experimental Marking C
 Experimental Marking B	 Used for all 80km/h tests and the control group	 Experimental Marking D

Except for the standard NZ road marking, the other markings used in this research are not legal New Zealand markings and must not be used by road controlling authorities. They were designed for the purposes of the research only, being distinctive and realistic enough for the experiments in the simulator.

## Overall Findings

On roads with different continuous road markings to indicate the speed zone:

- Drivers chose speeds closer to the speed limit (compared to the 'control' group), with no significant difference noted overall between the different types of experimental markings tested.



\* In this research, 'Attentional' markings were designed to provide visually distinct road markings to indicate a particular speed limit. 'Perceptual' markings were designed to also affect drivers' perception of speed.

## What does the AA want?

- 1 When roads are given new speed limits, complementing speed limit signs with distinct continuous road markings (or another innovative way to communicate the speed zone) would be effective, improving safety, and fairer to motorists.
- 2 This research was supported by the NZ Transport Agency (NZTA). The AA would like to see the NZTA and local authorities conduct on-road trials to further explore the idea, which could potentially lead to new national speed zone road markings.