



NSW Centre for
Road Safety



Newell Highway Line-marking Trial

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- Victorian to Queensland Borders
- 1060km in length
- Up to 45% heavy vehicles (state-wide average around 7%)
- Speed limit 100-110km/h



PARKING
500m
ON LEFT





BATTERY HILL RD



- Large proportion of fatal crashes are off path or rollover
- Fatigue combined with high travelling speeds major factor in many casualty crashes
- Heavy vehicle and interstate controllers involved in high proportion of fatal crashes

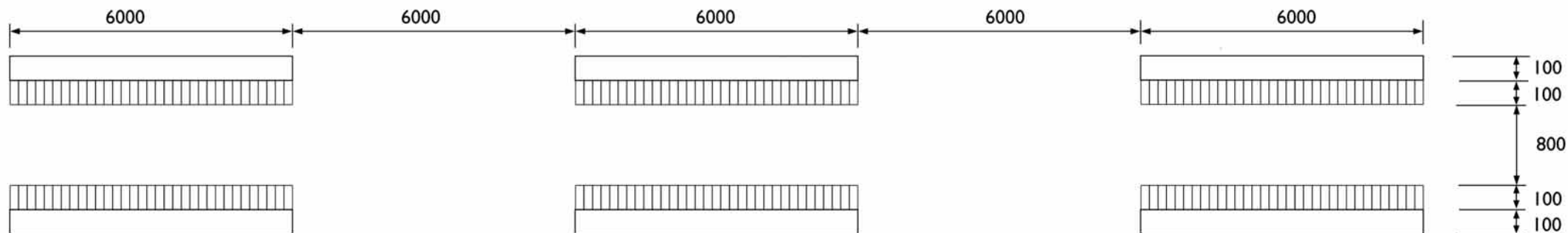
- Relatively high proportion of head-on fatal crashes
 - Rarely overtaking
 - Speed
 - Fatigue
 - Loss of control
- Heavy vehicles involved in 4 of the 5 head-on fatal crashes in 2006
- Most cases light vehicle on the incorrect side

- Very few overtaking opportunities
- Large number of slow moving vehicles (caravans and heavy vehicles)
- Long distances, small populations, not financially viable to provide extensive overtaking lanes or dual carriageway

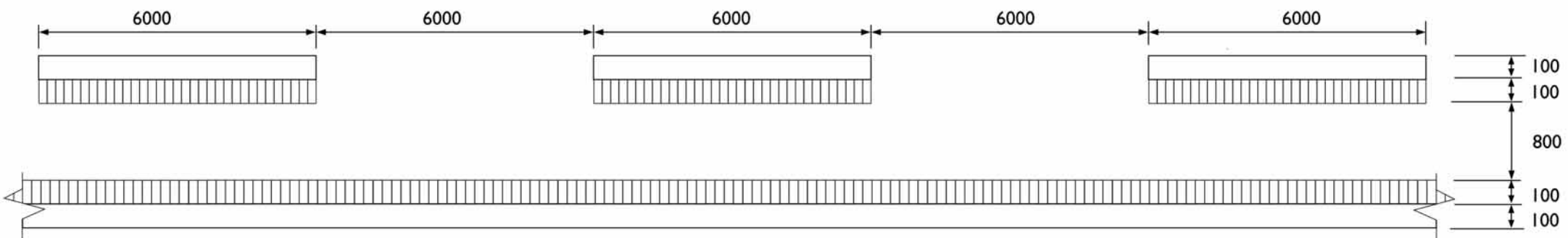
Challenge – separate opposing flows & provide recoverable space whilst still allowing drivers to overtake!

- Wide, audio tactile centreline
- Means of reducing head on crashes
- Room for error - safe systems approach
- Currently no Australian standard
- Trial to assess suitability

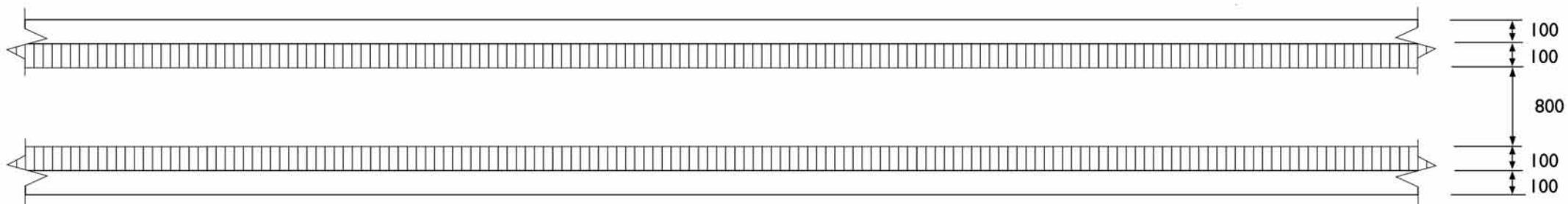
Overtaking permitted in both directions



Overtaking permitted in one direction



Overtaking not permitted



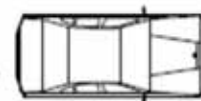
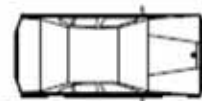
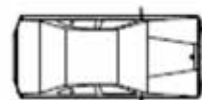
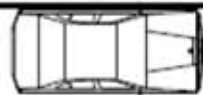
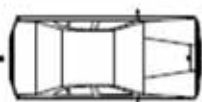
- Two, five kilometre trial lengths chosen
- One north of West Wyalong, South West Region
- One north of Parkes, Western Region
- No pavement strengthening or shoulder widening required
- Special road signs developed to alert drivers to the trial markings
- Public education campaign, local print and radio media



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Edge Marking



Centreline Marking

Position

Wheel to the
left of the
shoulder line
(crossed over)

On shoulder
line

On left side of
lane

In centre of
lane

On right side of
lane

Wheel on
centre marking
Wheel to the
right of centre
marking
(crossed over)

Reference

1

2

3

4

5

6

7

- Assessment of driver behaviour on existing line-marking undertaken
- Assessment of driver behaviour on trial line-marking currently being undertaken
- Analysis and comparison of results from both
- Public feedback on the trial markings









- 90% reduction in vehicles drifting from lane
- General reduction in average vehicle speeds
- Positive feedback from community

<i>Location</i>	<i>Vehicle Type</i>	<i>Mean Speed</i>	
		<i>Before</i>	<i>After</i>
<i>West Wyalong</i>	<i>Light</i>	<i>102.8</i>	<i>99.7</i>
	<i>Heavy</i>	<i>101.0</i>	<i>99.1</i>
<i>Parkes</i>	<i>Light</i>	<i>100.5</i>	<i>99.8</i>
	<i>Heavy</i>	<i>101.0</i>	<i>102.7</i>

- I. Profile “blobs” not reaching required height due to coarseness of the aggregate
- II. 6m line followed by 6m gap from a distance appearing as a solid line to drivers
- III. Trial signage confusing and too bright

- Gain approval for adoption into RTA Delineation Manual
- Gain approval for adoption into RTA Road Design Guide
- Develop proposal for adoption under Austroads