Key road safety data update

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National road safety strategy 2011-2020 progress towards fatality target

![Graph showing annual deaths from 2008 to 2020, with a baseline of 2008-2010 and a target for 30% reduction.](image)
Hospitalised injuries and hospitalised injury rate per 100,000 population

Source: BITRE Road Trauma Annual 2018
Killed and seriously injured, 2018

Road deaths
- 1,137 (3%)

Severe injuries
- 2,922 (7%)

Serious injuries estimate
- 38,845 (90%)

Vehicle occupants
- 64%

Motorcyclist
- 17%

Pedestrian
- 16%

Pedal cycle rider
- 3%

Motorcycle rider
- 27%

Severe injuries*

Pedestrian
- 12%

Pedal cycle rider
- 14%

Motorcycle rider
- 27%

Vehicle occupants
- 47%
Long term trends and projections for road deaths and hospitalised injuries

- Actual fatalities (calendar year)
- Modelled fatalities
- Injuries from crash data
- Hospitalised injuries (to June 2012)
- Hospitalised injuries (from July 2012)
- Estimated injuries
Impact of measures

FatalRate
Impact of seatbelts+RBT+Cams+MDT+mobiles+GFC/alcohol+VehTech+Infrastructure
Impact of seatbelts+RBT+Cams+MDT+mobiles+GFC/alcohol+VehTech
Impact of seatbelts+RBT+Cams+MDT+mobiles+GFC/alcohol
Impact of seatbelts+RBT+Cams+MDT+mobiles
Impact of seatbelts+RBT+Cams+MDT
Impact of seatbelts+RBT+Cams
Impact of seatbelts+RBT
Impact of seatbelts
## Impact of measures

<table>
<thead>
<tr>
<th>Factor</th>
<th>Period</th>
<th>Belts</th>
<th>RBT</th>
<th>Cameras</th>
<th>MDT</th>
<th>Mobiles</th>
<th>Alcohol b</th>
<th>Vehicles</th>
<th>Infrastructure</th>
<th>Total</th>
<th>VKT change</th>
<th>Total change</th>
<th>Actual change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Estimated</td>
<td>2010-2017</td>
<td>-16</td>
<td>-20</td>
<td>-44</td>
<td>-28</td>
<td>112</td>
<td>-410</td>
<td>-139</td>
<td>-34</td>
<td>-580</td>
<td>245</td>
<td>-335</td>
<td>-181</td>
</tr>
<tr>
<td>Predicted</td>
<td>2018-2030</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>-3</td>
<td>13</td>
<td>0</td>
<td>-140</td>
<td>-50</td>
<td>-181</td>
<td>346</td>
<td>166</td>
<td>-</td>
</tr>
</tbody>
</table>

**Notes:**

- **a.** The difference between the number of deaths per year at the end of the period and the number at the beginning
- **b.** Reduced drink driving behaviour post-GFC

**Source:** BITRE estimates

### INFRASTRUCTURE

- **General:** 0.79 lives/year/$b
- **Targeted:** 108 lives/year/$b (Black Spots)
Fatality rates

Rates for OECD nations

Rates for Australia's states and territories

Rates for Australia's Remoteness Areas

Deaths per 100,000 population, 2016

Source BITRE International Comparisons 2017
Australian road deaths by Local Government Area:
Number of years with zero deaths* 2008 to 2017

Number of years with zero road deaths 7 8 9 10

* Counts include deaths on motorways
Source: National Crash Database.
Road deaths: 12 month total
Australia
July 2019

1,212
Road deaths for 12 month total

1.0%
Change on previous 12 months

12 month total by road user
- Driver
- Motorcyclist
- Passenger
- Pedal Cyclist
- Pedestrian
- Unknown

12 month total by age group
- 0 to 16
- 17 to 25
- 26 to 39
- 40 to 64
- 65 to 74
- 75+

Change on previous 12 months by jurisdiction
- NSW
- Vic
- Qld
- SA
- WA
- Tas
- NT
- ACT

Data current to July 2019

Source: Australian Road Deaths Database
Road deaths: Calendar Year
Australia
2018
Motorcyclist

191
Road deaths for calendar year

-9.5%
Change on previous year

Calendar year total

Calendar year total by road user

Calendar year total by age group, 2018

Calendar year total by posted speed limit, 2018

Data current to
July 2019

Source: Australian Road Deaths Database
Road deaths: Calendar Year
Australia
2018
Pedestrian

177
Road deaths for calendar year

9.9%
Change on previous year

Calendar year total

Calendar year total by road user

Calendar year total by age group, 2018

Calendar year total by posted speed limit, 2018

Source: Australian Road Deaths Database

Data current to July 2019
Roadside Drug Testing in 2018 Australia

392,444
Number of roadside drug tests in 2018*

Roadside drug tests by jurisdiction*

- Western Australia 40,291
- South Australia 91,382
- Queensland 67,784
- Victoria 106,793
- New South Wales 115,874

Percentage of positive roadside drug tests*

12%

Number of roadside drug tests compared to 2017*

- Australian Capital Territory: 14.0%
- Victoria: 9.3%
- Queensland: 6.2%
- Western Australia: 9.1%
- Tasmania: 7.4%
- New South Wales: 4.2%
- South Australia: 3.5%

Number of roadside drug tests per 10,000 Licences by jurisdiction*

- South Australia: 412
- Victoria: 235
- Western Australia: 218
- New South Wales: 210
- Queensland: 165
- Tasmania: 103
- Australian Capital Territory: 161

The National Road Safety Action Plan 2016-2020 contains a priority action to increase roadside drug testing significantly in all states and territories.

The Australian Government formed the National Drug Driving Working Group in November 2017 to progress best practice approaches to roadside drug testing in Australia. For more information: www.roadsafty.gov.au

*The number of roadside drug tests are not available for the Northern Territory. Road deaths from crashes where illegal drugs were present are not available for Queensland, Victoria and Western Australia.
Random Breath Testing in 2018
Australia

14,730,351
Random breath tests conducted in 2018

Percentage of positive RBT in 2018*

Jurisdiction
- NSW
- VIC
- QLD
- SA
- WA
- Tas
- NT
- ACT

0.5%

Number of RBTs compared with 2017*

New South Wales
Australian Capital Territory
Western Australia
Tasmania
Queensland
South Australia
Northern Territory

-30%
-20%
-10%
0%
10%
20%

13.1%
12%
1.2%
0.3%
-2.5%
-3.6%
-12.1%

Number of RBTs per 10,000 licences by jurisdiction, 2018*

Tas
NSW
WA
NT
VIC
QLD
SA
ACT

11.623
10.917
10.086
9.917
7.691
7.221
6.474
2.722

Priority action 5 in the National Road Safety Action Plan 2018-2020 is that the overall profile of random breath testing for alcohol will be maintained.

*The number of random breath tests (RBT) are not validated for Victoria before 2018 and have been excluded. The number of RBTs for ACT are available from 2013.
**Road deaths data from crashes involving one or more drivers/motorcyclists with an illegal blood alcohol concentration (BAC) are not available for Victoria and Western Australia.
Data for 2018 road deaths involving an illegal blood alcohol concentration will be provided in 2019. *Data sourced from jurisdiction police and crash data custodians.
Quarterly counts of fatal crashes involving heavy vehicles, Australia, with trends
Effective measures

<table>
<thead>
<tr>
<th>Measure</th>
<th>Potential reduction</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Deaths</td>
<td>Injuries</td>
<td></td>
</tr>
<tr>
<td>Centre median</td>
<td>- 46 / year</td>
<td>- 1,195 / year</td>
<td></td>
</tr>
<tr>
<td>Require AEB all light vehicles</td>
<td>- 37 / year</td>
<td>- 1,506 / year</td>
<td></td>
</tr>
<tr>
<td>Roadside barriers</td>
<td>- 13 / year</td>
<td>- 353 / year</td>
<td></td>
</tr>
<tr>
<td>Rumble strips</td>
<td>- 10 / year</td>
<td>- 253 / year</td>
<td></td>
</tr>
<tr>
<td>More roundabouts</td>
<td>- 72 per cent(^1)</td>
<td>- 79 per cent(^1)</td>
<td></td>
</tr>
<tr>
<td>Eliminate filter turns</td>
<td></td>
<td>- 58 per cent(^1)</td>
<td></td>
</tr>
<tr>
<td>Reduced speed limits NLTN</td>
<td>- 17 per cent(^1)</td>
<td>- 17 per cent(^1)</td>
<td></td>
</tr>
</tbody>
</table>

1. Change compared to the status quo
## Cost effective measures

<table>
<thead>
<tr>
<th>Measure</th>
<th>Average cost</th>
<th>Benefit-cost ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roadside barriers</td>
<td>$26.1m / year</td>
<td>5.0</td>
</tr>
<tr>
<td>Centre median</td>
<td>$116.4m / year</td>
<td>3.8</td>
</tr>
<tr>
<td>More roundabouts</td>
<td>$0.1-0.6m / site</td>
<td>11.3 (3.0)</td>
</tr>
<tr>
<td>Eliminate filter turns</td>
<td></td>
<td>2.6</td>
</tr>
<tr>
<td>Rumble strips</td>
<td>$37.3m / year</td>
<td>2.5</td>
</tr>
<tr>
<td>Reduced speed limits NLTN</td>
<td>negligible</td>
<td>1.9</td>
</tr>
<tr>
<td>Require AEB all light vehicles</td>
<td>$339.8 m</td>
<td>1.3</td>
</tr>
</tbody>
</table>
Summary

• We will likely miss 2020 targets for road deaths
  – and serious injuries increased

• Projections (without new measures) are for increasing deaths and serious injuries beyond 2020
  – As existing counter-measures have diminishing returns

• While fatality rates in cities are equal to world leaders, regional and remote fatality rates are extraordinarily high
Summary, continued

• Recent trends highlight challenges:
  – In Victoria and South Australia
  – For motorcyclists, in 70-90 km/hour speed limits
  – For pedestrians over 75 years of age
  – Increases associated with drug use
  – Involving rigid trucks

• Cost effective measures include:
  – Targeted infrastructure measures
  – Reduced speed limits