

TRANSURBAN INSIGHTS: ROAD SAFETY

November 2022

Transurban Insights reports use data and research from our business, as well as surveys we commission, to look into specific issues relevant to road transport.

We share these insights with government and industry and use them to inform driver and community education campaigns.

In this first edition of Transurban Insights we examine driving behaviours that impact the safety of our customers, employees and first responders on the road.

Research

Online survey conducted between 21 June and 15 July 2022

5,066 respondents aged 18+ with a drivers licence from across Australia (Melbourne, Sydney, Brisbane), United States of America (Greater Washington Area covering Virginia and Maryland) and Canada (Montreal)¹

Survey commissioned by Transurban and conducted by Nature



Driving near emergency vehicles



Driving through roadworks



Driving near heavy vehicles



Safely travelling with children

Across Australia and North America around two million trips are made on our roads every day—providing quicker and safer ways for people to move around their cities. Transurban's Australian roads have been found to be up to twice as safe as like roads by the Monash University Accident Research Centre, using a comparative crash analysis. We achieve this high safety performance through our state-of-the-art safety and traffic management technology, monitoring the roads 24/7, and by controlling conditions such as speed limits and lane closures.

We use data collected by roadside technology, along with third party data, to inform maintenance works as well as upgrades to roads to improve safety. These activities mean that we often require our teams to work in live traffic conditions, and provide support to emergency services personnel attending road incidents. We have strict protocols in place to ensure everyone's safety, some of which require drivers to comply with lane use signs and speed signs.

However, in an independent survey of over 5,000 people across Australia and North America commissioned by Transurban it was found that 12% of people from the Australian cities surveyed either never slow down or do not always slow down to the required speed limit when driving past emergency services.

Even more respondents (27% across all cities surveyed) say they never slow down or do not always slow down to the posted speed limit when driving through roadwork zones.

When it comes to driver behaviour around heavy vehicles—which make up 16% of traffic on our roads—most people surveyed are confused about the locations of a truck's blind spots². Less than 5% of people surveyed could accurately identify all truck blind spots on a diagram.

In the Australian cities surveyed there are also low levels of awareness among parents or people living with a child at home, about when a child can safely travel in a vehicle without a child car seat. We found only 3% of respondents with children living at home could correctly identify all of the Five Step Test criteria, which is set out in the National Child Restraint Guidelines to help parents assess whether a child can safely travel using an adult seat belt.

While varied in nature, these issues not only affect the safety of Transurban's roads, they also affect the broader road network. We plan to use these insights to educate our 9.7 million customers, and the community about how to drive safely around roadworkers, emergency services and heavy vehicles, and how to ensure children travelling with them are safely restrained.



Driving near emergency vehicles

In Victoria and New South Wales drivers are required to slow down to 40km/h when passing stationary enforcement or emergency vehicles with flashing lights. In Queensland, drivers are required to 'move over, slow down' meaning drivers must slow down to a safe speed limit or change lanes.

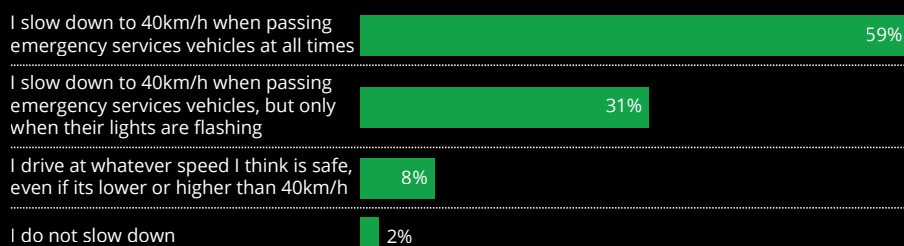
We found 12% of respondents (weighted average across Melbourne, Sydney and Brisbane) either never slow down or do not always slow down to the required speed limit when driving past emergency service vehicles (Figure 1). This behaviour not only endangers the driver, but also the emergency services personnel, those they are responding to, and other motorists.

Transurban's Traffic Control Room Operators support emergency services and first responders on our roads by lowering speed limits and closing lanes. Find out more about how Transurban uses traffic management technology to manage road conditions and safety on the Transurban Insights hub.

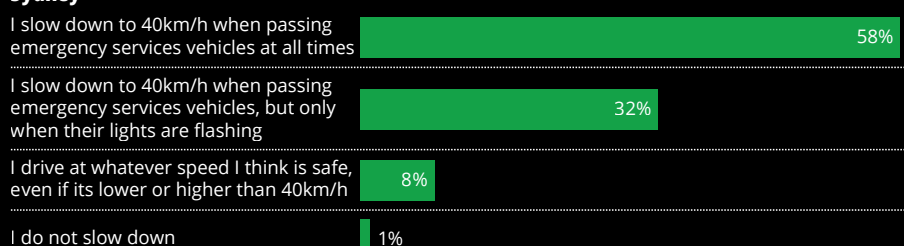
 Visit the Transurban Insights hub, insights.transurban.com

Figure 1: Driving behaviour when passing emergency services—Australia

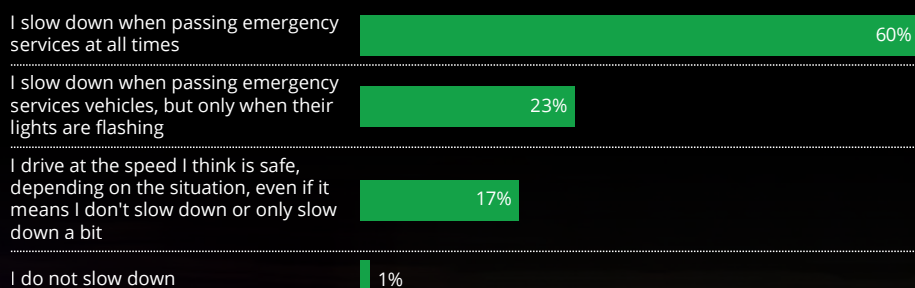
Melbourne



Sydney



Brisbane





Driving through roadworks

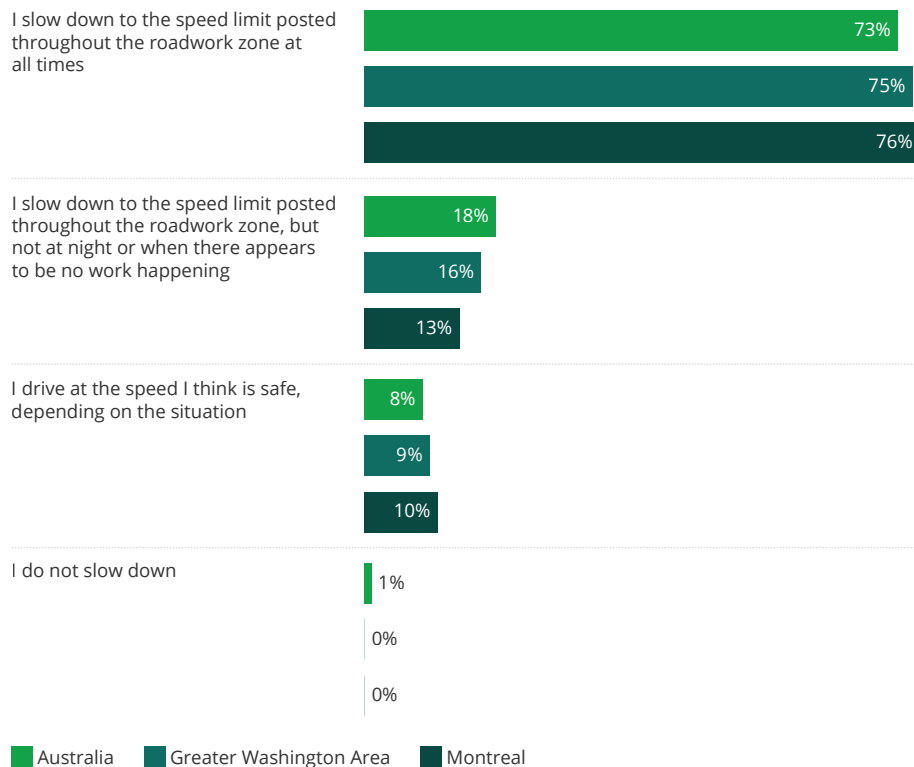
While Figure 2 shows most respondents (70%+) claim to always slow down to the posted speed limit when driving through roadworks, this high level of self-reported compliance is at odds with Transurban's experience of driving behaviour around roadwork zones on our roads.

Between December 2019 and January 2020 Transurban performed audits on our roadworks sites on the CityLink / Tullamarine Freeway in Melbourne and found that average speeds through the length of the closure were 10-15km above the posted speed limit.

Roadwork speed limits are in place to keep our road workers and motorists using our roads safe. Even when it may appear no work is happening there are many reasons for a lower speed limit to apply. For example, a lower speed limit gives motorists more time to navigate traffic management such as lane closures or changes to line markings.

We regularly run customer and community communications campaigns to increase awareness of the importance of slowing down to the posted speed limit through roadwork zones.

Figure 2: Driving behaviour when driving through roadworks—Australia, Greater Washington Area and Montreal





Driving near heavy vehicles

Feelings of safety when driving around heavy vehicles is mixed, with a similar number of respondents feeling safe as there are who feel unsafe (Figure 3). Respondents from the Australian cities surveyed feel more unsafe driving around heavy vehicles than respondents from North America.

While 81% of respondents from the Australian cities surveyed, 78% from the Greater Washington Area and 73% from Montreal were able to correctly identify at least one truck blind spot, only 4% of respondents in Australia, 1% from the Greater Washington Area and 3% from Montreal were able to identify all truck blind spots (Figure 4). There is particularly low awareness of blind spots located immediately in front of trucks. For some trucks, a blind spot is created when vehicles are travelling too close to the front of the truck (Figure 5).

Low awareness of truck blind spots can lead to incidents such as side-swipe or rear-end crashes, which are some of the most common incidents we respond to on our roads. Rear-end crashes account for 48% of all incidents we respond to. We work with trucking associations to educate our light vehicle customers about truck blind spots and how to share the road with trucks safely.

Find out more about truck blind spots, transurban.com/blindspots

Figure 3: Feelings of safety when driving near heavy vehicles—Australia, Greater Washington Area and Montreal



Figure 4: Number of truck blind spots correctly identified—Australia, Greater Washington Area and Montreal

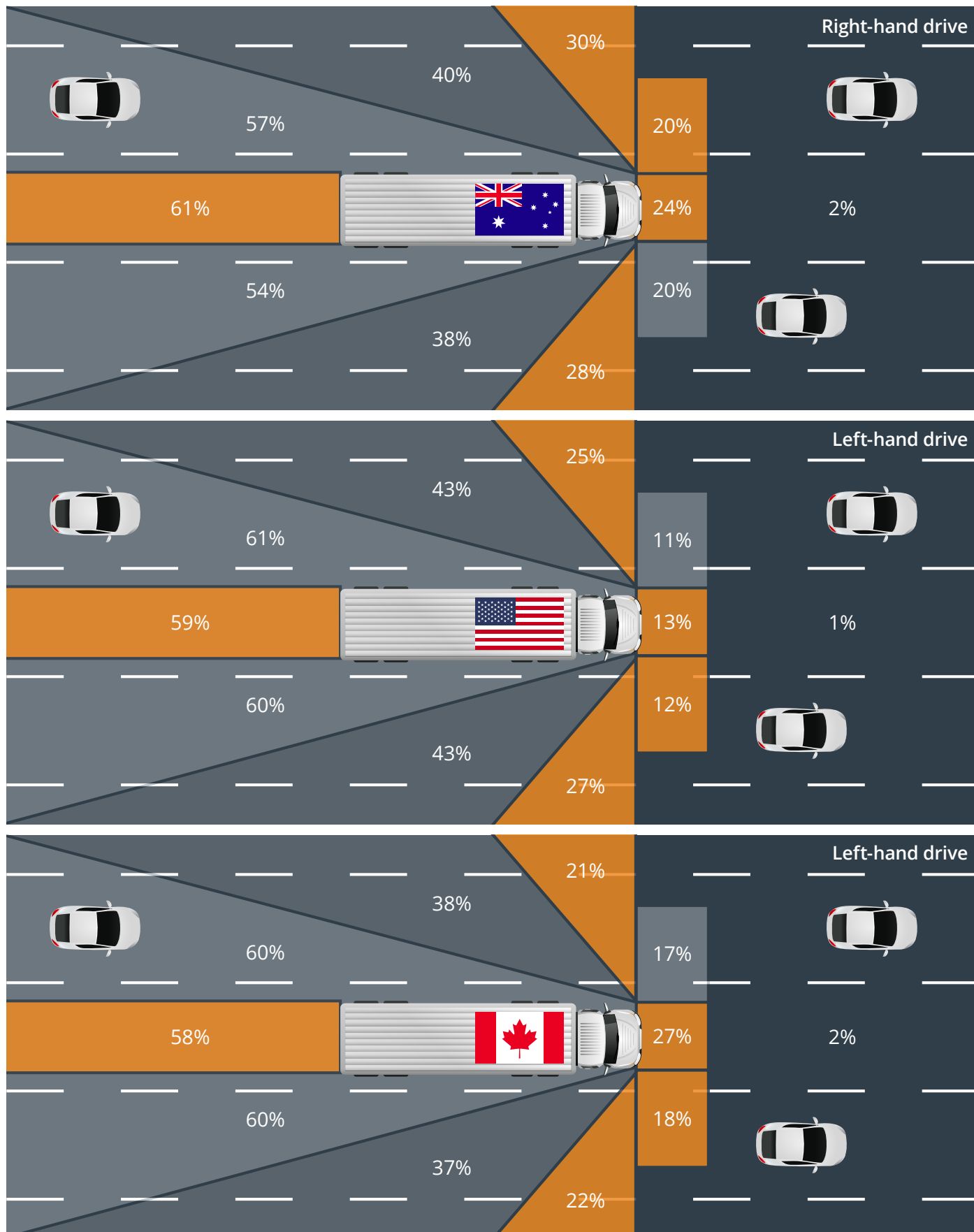
Of the eleven zones shown around the diagram of a truck driving down a multi-lane road (displayed in Figure 5), only five of the zones were actual blind spots.

	None	At least 1	At least 2	At least 3	At least 4	All 5
Australia	19%	81%	44%	24%	10%	4%
Greater Washington Area	22%	78%	36%	17%	6%	1%
Montreal	27%	73%	36%	18%	8%	3%



Figure 5: Awareness of truck blind spots—Australia, Greater Washington Area and Montreal

Depending on their location (Australia or North America), respondents were shown one of two images and asked to nominate which sections of the image are truck blind spots based on left or right-hand drive. The correct sections are displayed in orange along with the % of respondents who identified it as a truck blind spot.





Safely travelling with child car seats

Young children are some of the most vulnerable people on our roads and making sure they have a safe car seat is one of the best ways to protect them. A correctly fitted child car seat can reduce the risk of injury in an accident by up to 70%.

We found that 61% of respondents from the Australian cities surveyed who travel with a child car seat fitted it themselves (Figure 6). This number is higher, 74%, in the Greater Washington Area and Montreal.

The high level of self-installation is concerning because car seats can be tricky to install. We recently teamed up with Kidsafe for a car seat safety blitz, carrying out free safety checks on over 620 child car seats across Melbourne, Sydney and Brisbane. We found that over 90% of the seats checked needed adjustments—and in some cases, total reinstallation. We are using this information to educate our customers about the importance of professional child car seat fittings.

 [Read more on child car seat fittings, transurban.com/kidsafe](https://transurban.com/kidsafe)

Figure 6: Child car seat fitting—Australia, Greater Washington Area and Montreal



-  Fitted it myself
-  Got it professionally fitted or checked

Proportion of respondents who have child car seats or boosters installed: 22% in Australia, 14% in Greater Washington DC, 20% in Montreal



Transitioning children to adult seat belts

The decision to move from a child car seat to an adult seat belt is big milestone and, if done prematurely, can present significant safety risks to a child. In the Australian cities surveyed we found 53% of respondents with children living at home could correctly identify at least one the Five Step Test criteria. These steps are set out in the National Child Restraint Guidelines to help parents assess whether a child can safely travel using an adult seat belt (Figure 7). However, only 3% could correctly identify all five of the criteria.

Despite alarmingly low levels of awareness, 72% of respondents with children living at home say they are complying with the National Child Restraint Guidelines when travelling with a child (Figure 8). This still leaves 18% of respondents allowing children to travel using an adult seat belt before it is safe. We are working with Kidsafe across Australia to educate our customers about how to assess whether a child is ready to travel using an adult seat belt.

 **Read more on when it's safe for children to use an adult seat belt,** transurban.com/kidsafe

The National Child Restraint Guidelines outline that a child must meet the criteria set out in the Five Step Test (outlined in Figure 7) before they can safely travel using an adult seat belt. They also state a child should be aged over 12 years to sit safely in the front seat of a vehicle.

Please note there are also road rules in each state that restrict children aged under seven years to travel in the front seat.

Figure 7: Understanding of the National Child Restraint Guidelines Five Step Test—Australia

Respondents with children living at home were asked to select the correct Five Step Test criteria from a list of statements that included a mix of criteria and non-criteria options.

Five Step Test criteria

The seat belt sash/strap sits across the middle of the shoulder	35%
The child must be able to stay seated for the whole of the trip	29%
The lap belt sits low across the hips, touching the thighs	22%
The child can sit with their back against the vehicle seat	21%
The child's knees must be able to bend over the front edge of the seat	21%

Not part of the Five Step Test

The child is aged 12 years or older	38%
The child is over 145cm in height	35%
I don't know	26%
The child weighs over 30kg	23%
The child's head reaches the head rest	23%
The child's arms can reach the front dashboard of the vehicle	6%

Figure 8: Compliance with the National Child Restraint Guidelines Five Step Test—Australia

Respondents with children living at home were asked how often they let children who do not meet the criteria set out by the National Child Restraint Guideline travel in the front seat.

Never	72%
Whenever the front seat is available	6%
Rarely (i.e. one in every 10 trips)	6%
When all rear seats are occupied by younger children	6%
Occasionally (i.e. one in every 5 trips)	5%
When it's their turn or as a reward	4%

Australia



Melbourne (head office)

Tower Five, Collins Square
727 Collins Street
Docklands
Victoria 3008

Sydney

1 Chifley Square
Sydney
New South Wales 2000

Brisbane (Transurban Queensland)

Brisbane Quarter
300 George Street
Brisbane
Queensland 4000

Phone +61 3 8656 8900

Fax +61 3 8656 8585

North America

Greater Washington Area

Suite T500, 7900 Westpark Drive
Tysons, VA 22102

Phone +1 571-419-6100

Email corporate@transurban.com