

TrackSafe – Heavy Vehicle Driver Behaviour at Railway Level Crossing Research

Final Quantitative Report
June 2018



Background

TrackSAFE is a charitable trust established to raise awareness about rail safety in New Zealand and to educate the public on how to keep themselves safe around tracks and trains. Key activities involving education and awareness raising activities include:

- Rail safety advertising
- Publicity and media relations
- Awareness raising events and campaigns
- Promoting best practice safety education to schools and the rail industry.

A key area of concern is heavy vehicle driver behaviour at rail level crossings.

A heavy vehicle awareness campaign was last conducted in 2009.

TrackSAFE now wants to conduct research to inform a future awareness and education communications campaign among heavy vehicle drivers.

Research objectives and target audience

The **objectives** for the research are to:

- understand how heavy vehicle drivers' perceive and regard the risk around railway level crossings
- explore current behaviours around railway level crossings, and
- identify key messages that will support safer heavy vehicle driver behaviour around railway level crossings.

The **target audience** for this research is heavy vehicles drivers including:

- Concrete trucks
- Milk tankers
- House moving vehicles
- Caravans
- Logging trucks
- General haulage vehicles
- Dangerous goods vehicles
- Stock truck and trailers
- Farm vehicles and buses (including school buses)

Methodology

The research approach includes quantitative and qualitative methods.

- An initial online quantitative survey to measure heavy vehicle drivers' knowledge and behaviours.
- Follow-up qualitative research to explore the underlying reasons for the held perceptions, attitudes and knowledge.

This document includes the findings from the **initial online quantitative research**.

Fieldwork

- Fieldwork was conducted from the 16th of April to the 16th of May 2018.
- 361 invites were sent out to participants who volunteered to part in the survey. Of the 361 participants, 199 completed the survey.
- The margin of error for a sample size of 199 for a 50% figure at the confidence level is $\pm 4.7\%$.
- The online survey for the TrackSAFE survey was hosted using the Qualtrics Survey platform.

Reporting notes

- This survey used five-point scales for some questions. When reporting the data from these questions we generally report on the sum of 1+2 of the scale (the positive end of the scale), 3, which is considered the midpoint (those with a more neutral view or no feeling either way) and 4+5 (the negative end of the scale).
- For example, on a 1 to 5 safety scale 1+2 are the people who declare safety about the topic and 4+5 who feel unsafe about the topic.

Note on rounding:

- All numbers are shown rounded to zero decimal places. Hence specified totals are not always exactly equal to the sum of the specified sub-totals. The differences are seldom more than 1%.
- For example: $2.7 + 3.5 = 6.2$ would appear: $3 + 4 = 6$

Conclusions and opportunities



Conclusions and opportunities

Conclusions

- Half of the surveyed respondents said they drive across a railway level crossing several times a day using a heavy vehicle and an even larger proportion regularly drive across a crossing using their private (small) vehicle (83%).
- Just over (56%) declared that railways crossings are generally safe. However, only 29% felt New Zealand roads are generally safe for heavy vehicle drivers.
- A majority believed half arm barriers, plus flashing lights and bells (88%), level crossings in cities or towns (72%) and flashing lights and bells (61%) were safe crossings.
- Four fifth of respondents declared they have driven over a railway crossing where their heavy vehicle was longer than the distance from the road intersection to the railway tracks.
 - Similar percentage (81%) declared these crossings as unsafe.
 - Two thirds said they route to avoid these crossings.
- Around three quarter (72%) said driving a small vehicle influences their decision making on the road. 83% said driving an HGV influences their decision making when driving a smaller vehicle.
- Over three quarters (78%) declared they did not drive over a railway crossing when they could hear or see the train while using a small vehicle. However a slightly smaller proportion declared to not do this while driving a heavy vehicle (69%).
- Relatively low percentage of respondents (28%) said they recalled rail safety messages or advertising aimed at heavy vehicle drivers.

Opportunities

- Findings indicate HGV drivers believe there is clearly opportunities for safety improvements on railway level crossings
- Participants acknowledge an overwhelming lack of safety associated with crossings where the heavy vehicle is longer than the distance from the road intersection to the railway tracks, yet a clear majority (80%) have driven across these crossings.
 - Participants suggested that safety at these and railway crossings generally may be improved by better warnings, message boards, improved technology, track improvements and better road planning/designing. Short term ideas included cutting back vegetation/removing obstacle, educating drivers and apps to support drivers.
- Cutting back vegetation /removing obstacles to improve visibility may also help.
- Recollection of rail safety messages and advertising is poor and a more focused campaign aimed at HGV drivers may help to create a greater safety culture and awareness around railway level crossings.
 - Ideally, campaigns, messages and education need to be widespread and be released through a range of channels such as radio, television, websites, social media and even personally as text messages.
 - Government Agencies, Employers and National Bodies are all expected to play a part in disseminating safety messages and education.

Use of railway level crossings



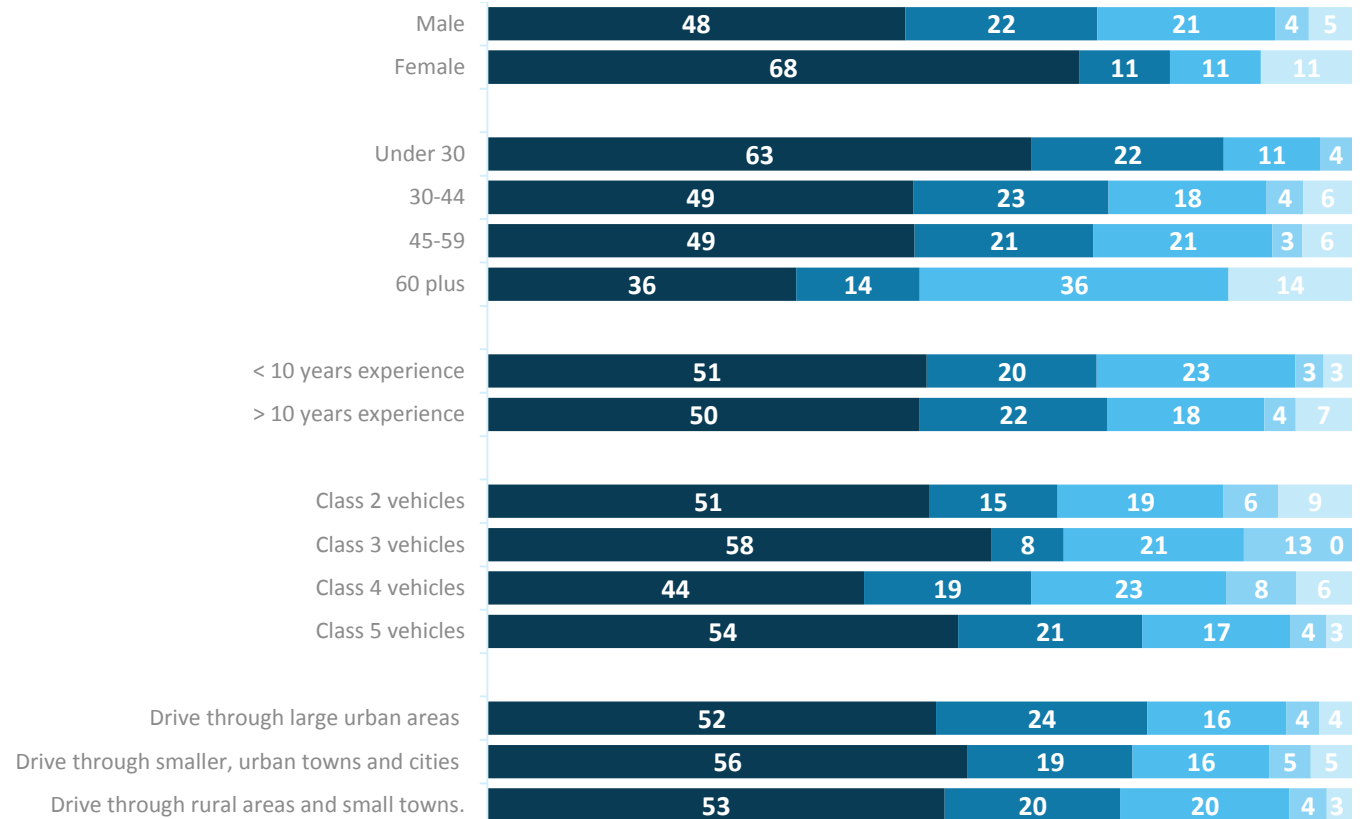
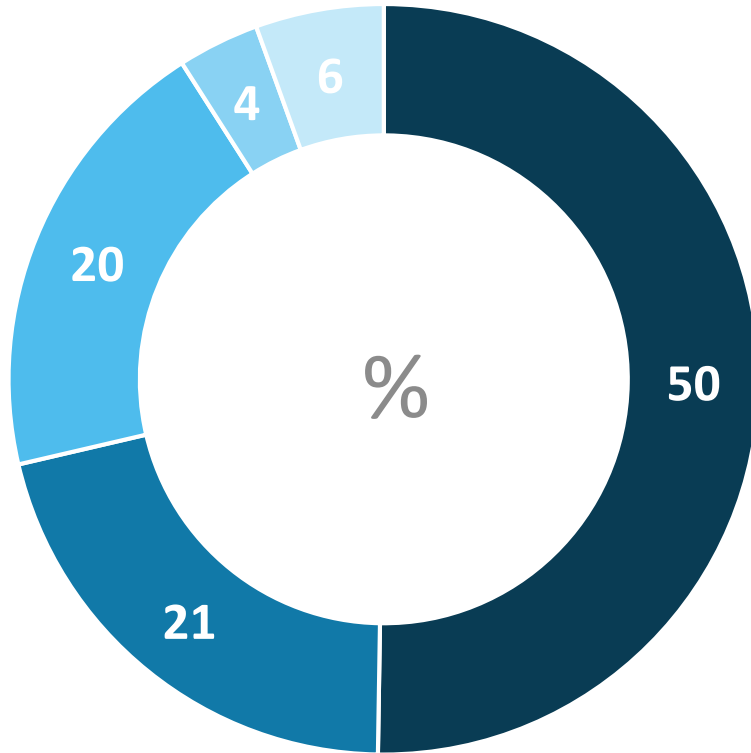
Key findings

- Half of the respondents surveyed drives across a railway level crossing several times a day using a heavy vehicle.
 - A fifth drive across a railway crossing once or twice a day (21%) and few times a week (20%).
 - Respondents who drive a class 5 vehicle were more likely to drive across a crossing several times a day (54%) as were those who regularly drive through smaller, urban towns and cities (56%).
- A clear majority (83%) regularly drives across a railway level crossing when using their own private vehicle.

Railway level crossing use in a HGV



How often would you say you drive across a railway level crossing in a heavy vehicle?



■ Several times a day
 ■ Once or twice a day
 ■ A few times a week
 ■ Once a week
 ■ Less often than once a week

%

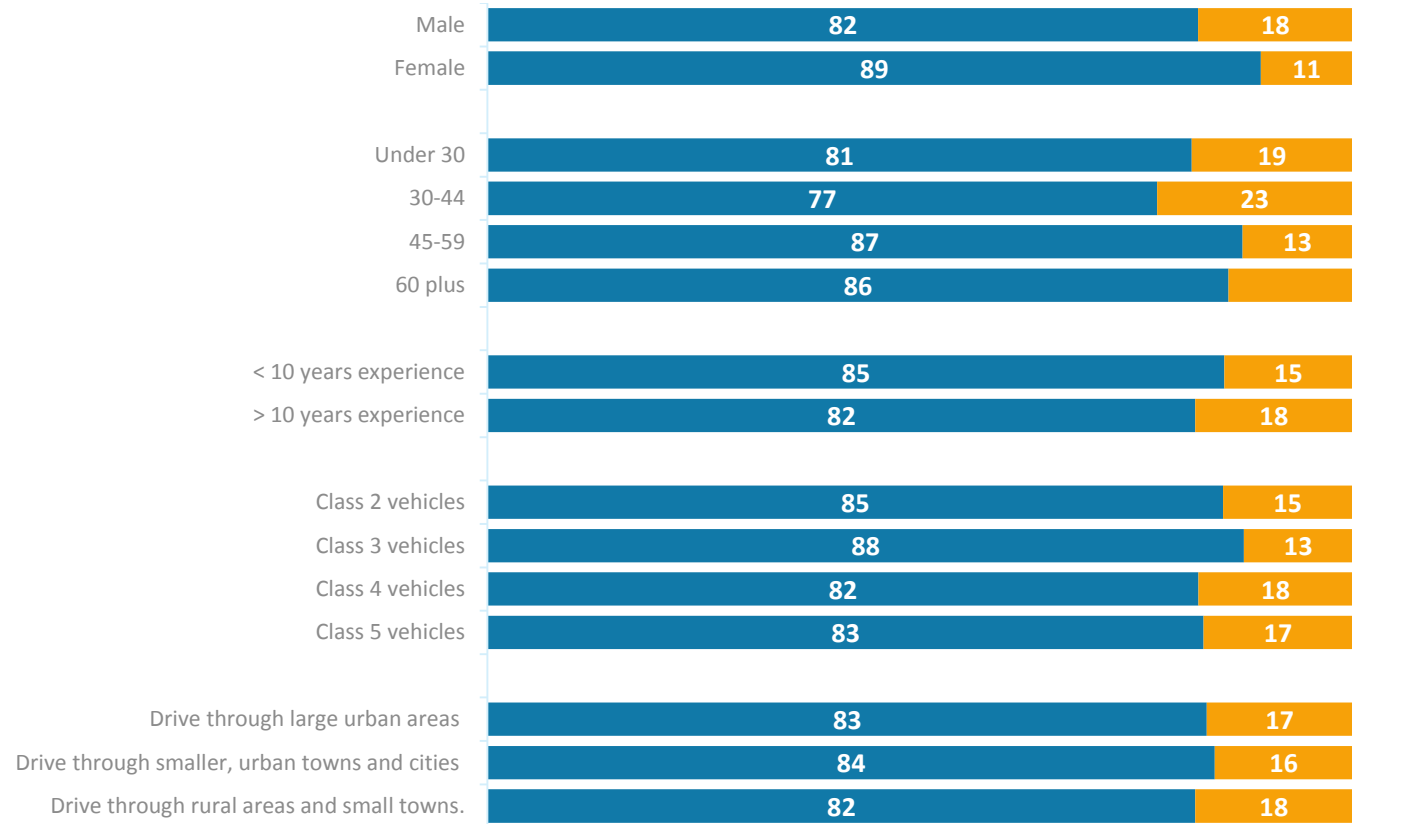
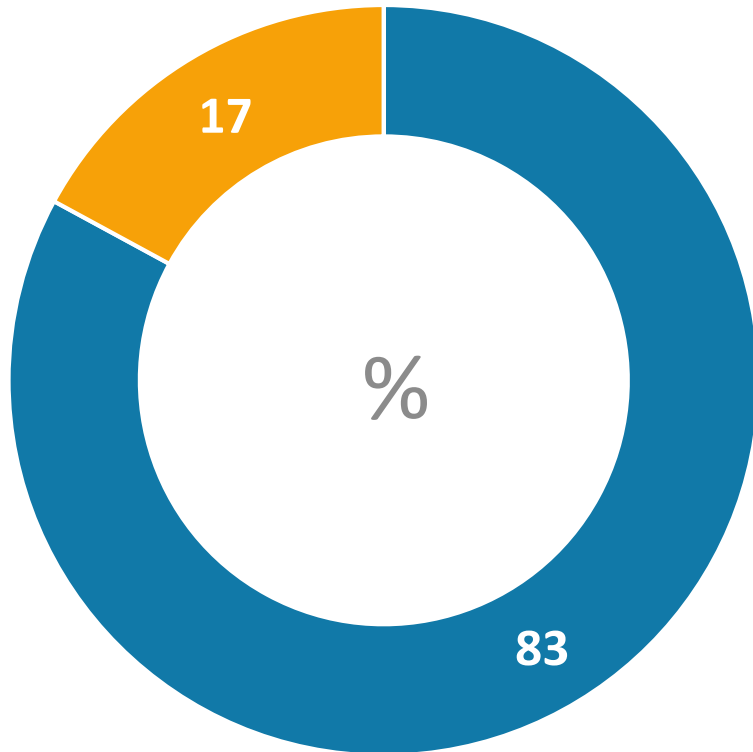
Base n=199 (all respondents)



Railway level crossing use in a private vehicle



When driving in your own private vehicle i.e. a car or small vehicle, do you regularly drive over railway crossings?



■ Yes

■ No

■ Unsure

%

Base n=199 (all respondents)



Perceptions of safety on railway level crossings and NZ roads



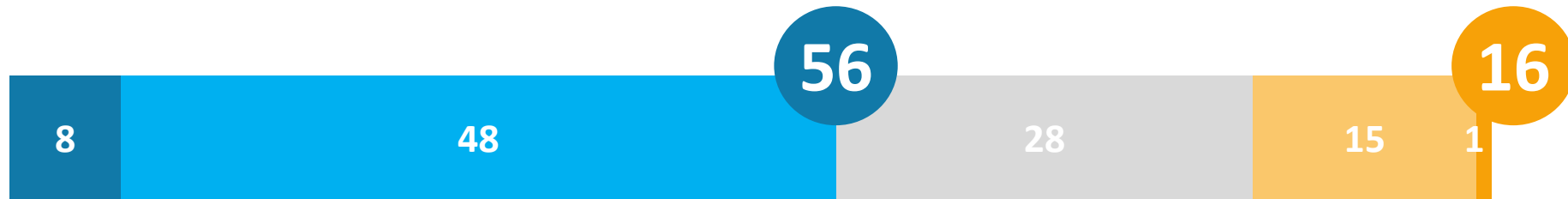
Key findings

- Over half (56%) declared that railway crossings are generally safe (1-very safe + 2 safe). Under a third (28%) declared its neither safe nor unsafe and 16% thought it was unsafe (4 – unsafe + 5 – very unsafe).
 - Less than 1 in 10 respondents (8%) declared railways crossings as very safe.
 - Older respondents (60 plus) tend to declare a greater safety regarding the railway crossings (79%).
 - Safety rating was relatively stable across type of vehicle driven and the areas regularly drive through.
- Less than a third (29%) thought roads in New Zealand are generally safe for heavy vehicles. Just under 4 in 10 respondents (39%) thought it was neither safe nor unsafe and a third declared New Zealand roads as unsafe.
 - There were no statistically significant differences amongst the demographics.
- When asked to rate safety of specific kinds of railway level crossing, a clear majority (88%) rated half arm barriers, plus flashing lights and bells. Level crossings in a city or town was the second safest kind of a level crossing (72%) followed by flashing lights and bells (61%).
 - The specific kind of level crossing rated the least safest was a crossing on a private land with no signs or alarms (6%).
 - Those who regularly drive through urban areas were less likely to see a crossing on a private land with no signs or alarms as safe (3%).
- A vast majority (86%) declared that it would take 500 meters or more for a fully laden freight train at top speed to stop.
 - Those who regularly drive through rural areas and small towns were more likely to declare that it would take 500 meters or more for freight train to stop when travelling at top speed (91%).

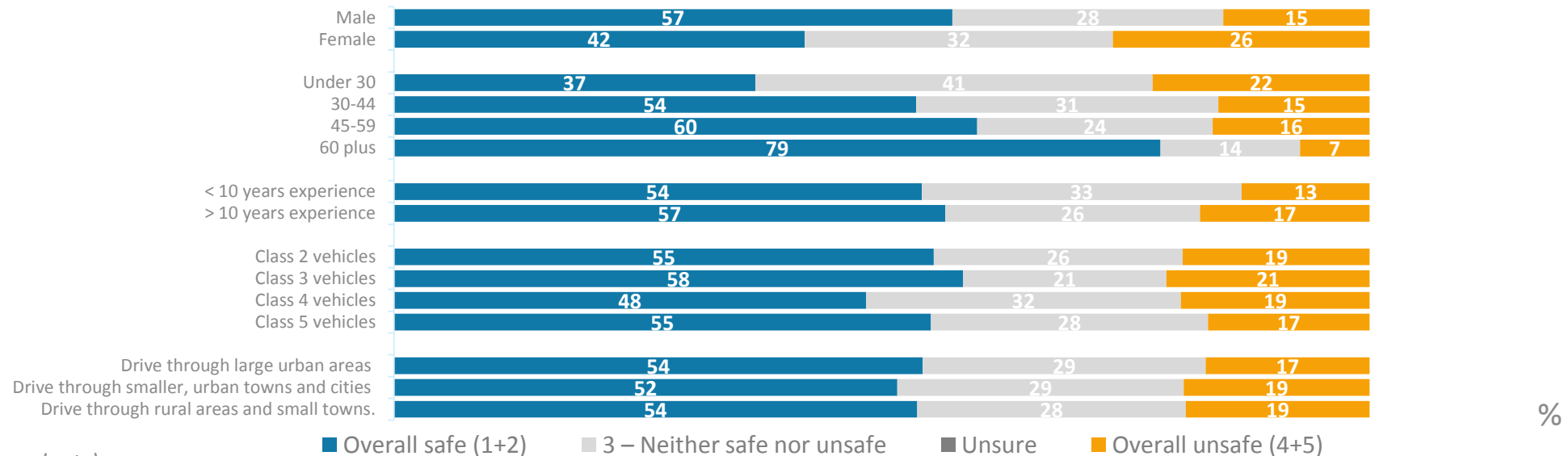
Railway level crossing safety for heavy vehicles



All things considered, how safe are railway level crossings for heavy vehicles generally?



■ 1 - Very safe ■ 2 - Safe ■ 3 - Neither safe nor unsafe ■ Unsure ■ 4 - Unsafe ■ 5 - Very Unsafe



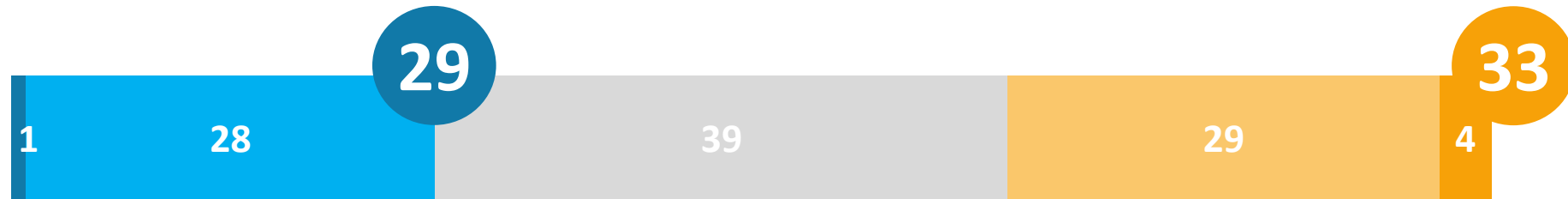
%

■ Overall safe (1+2) ■ 3 - Neither safe nor unsafe ■ Unsure ■ Overall unsafe (4+5)

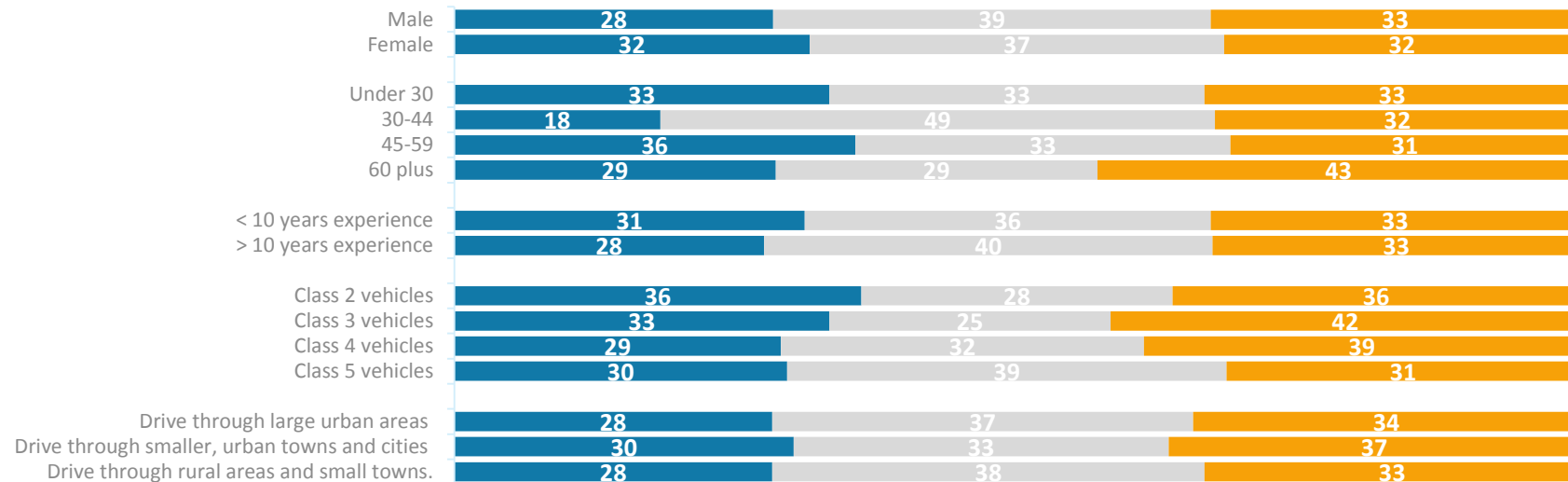
Base n=199 (all respondents)

Road safety for heavy vehicles

Q And using the same scale how safe do you think the roads in New Zealand are generally for heavy vehicles?



■ 1 - Very safe ■ 2 - Safe ■ 3 - Neither safe nor unsafe ■ Unsure ■ 4 - Unsafe ■ 5 - Very Unsafe



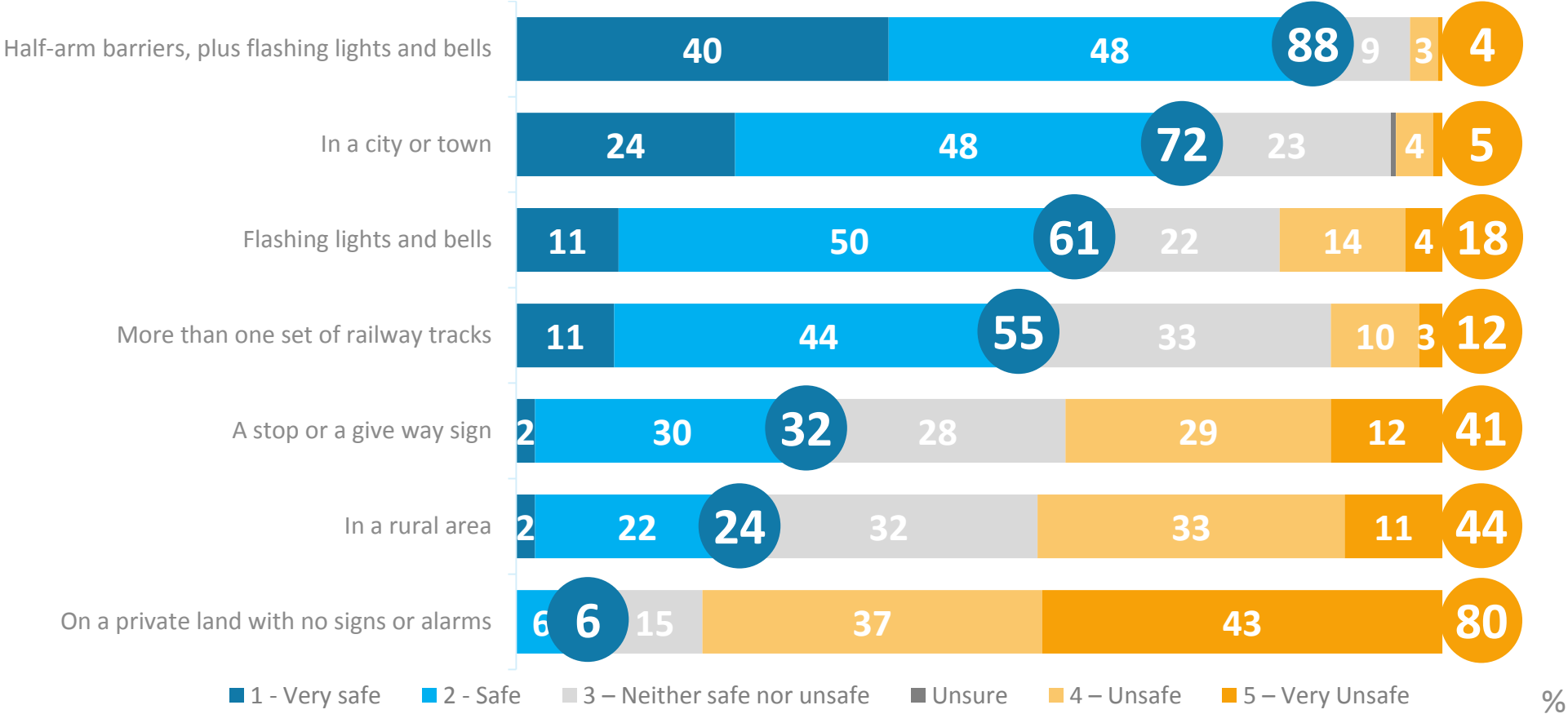
%

■ Overall safe (1+2) ■ 3 - Neither safe nor unsafe ■ Unsure ■ Overall unsafe (4+5)

Base n=199 (all respondents)

Safety perceptions of specific railway level crossings

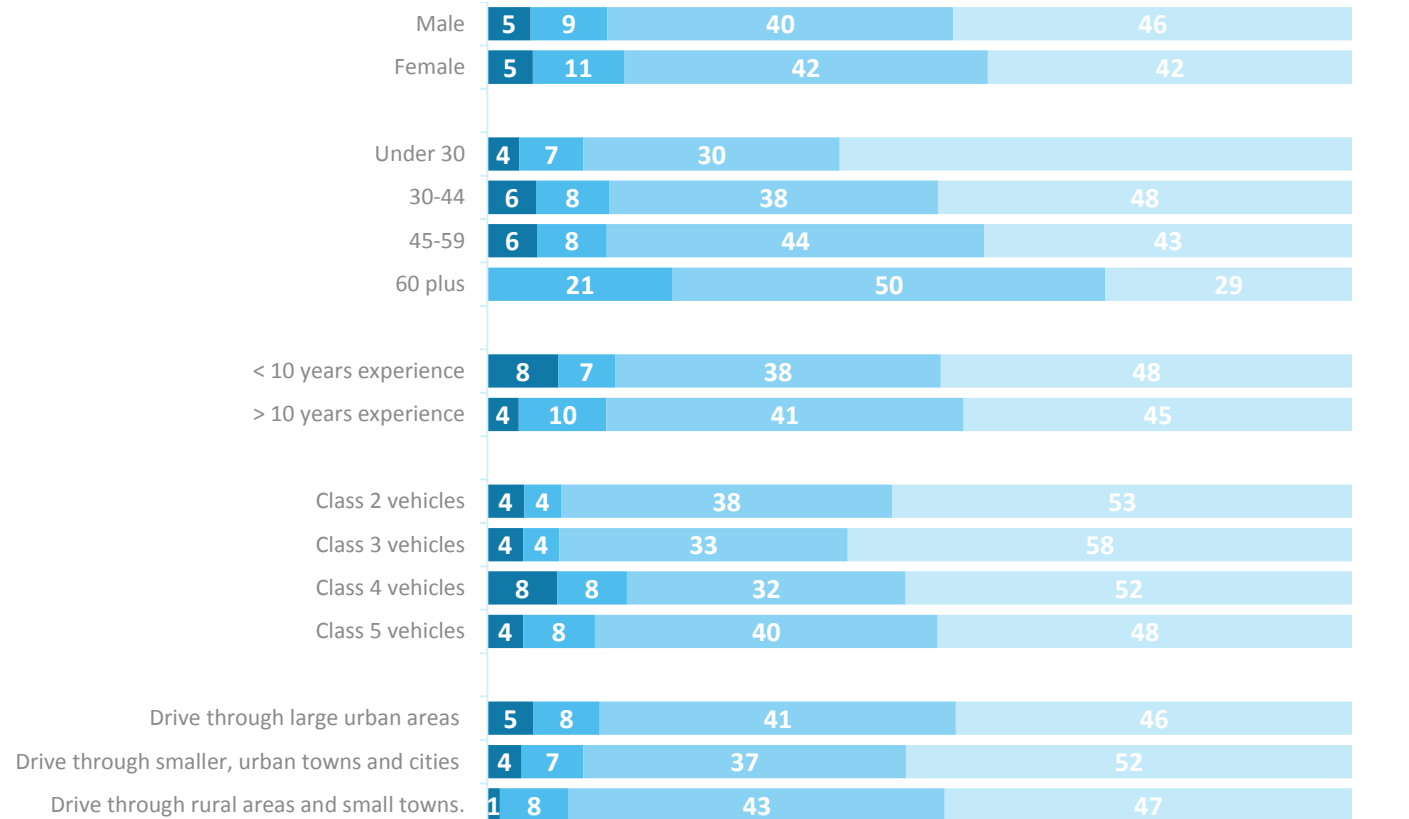
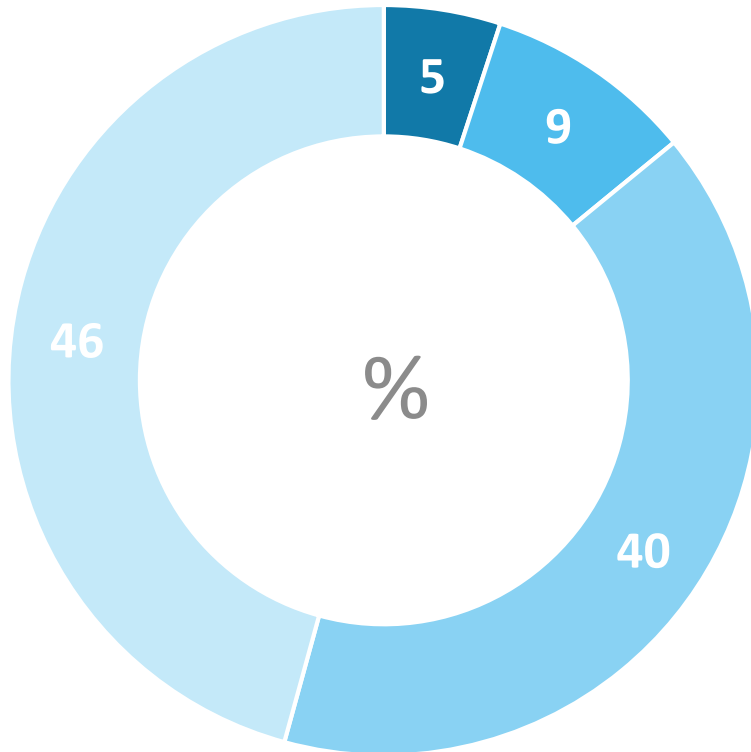
Now thinking about specific kinds of railway level crossings, and using the 1 to 5 scale, how safe do you think the following types of railway crossing are for heavy vehicles?



Base n=199 (all respondents)

Distance for a fully laden freight train to stop

Q Approximately what distance do you think it would take a fully laden freight train at top speed, approximately 80km per hour, to stop?



Less than 100 metres
 100 to 250 metres
 250 to 500 metres
 500 metres to a kilometre
 Longer than a kilometre.
 Unsure

%

Base n=199 (all respondents)

HGVs which are longer than the distance between the railway level crossing and the road



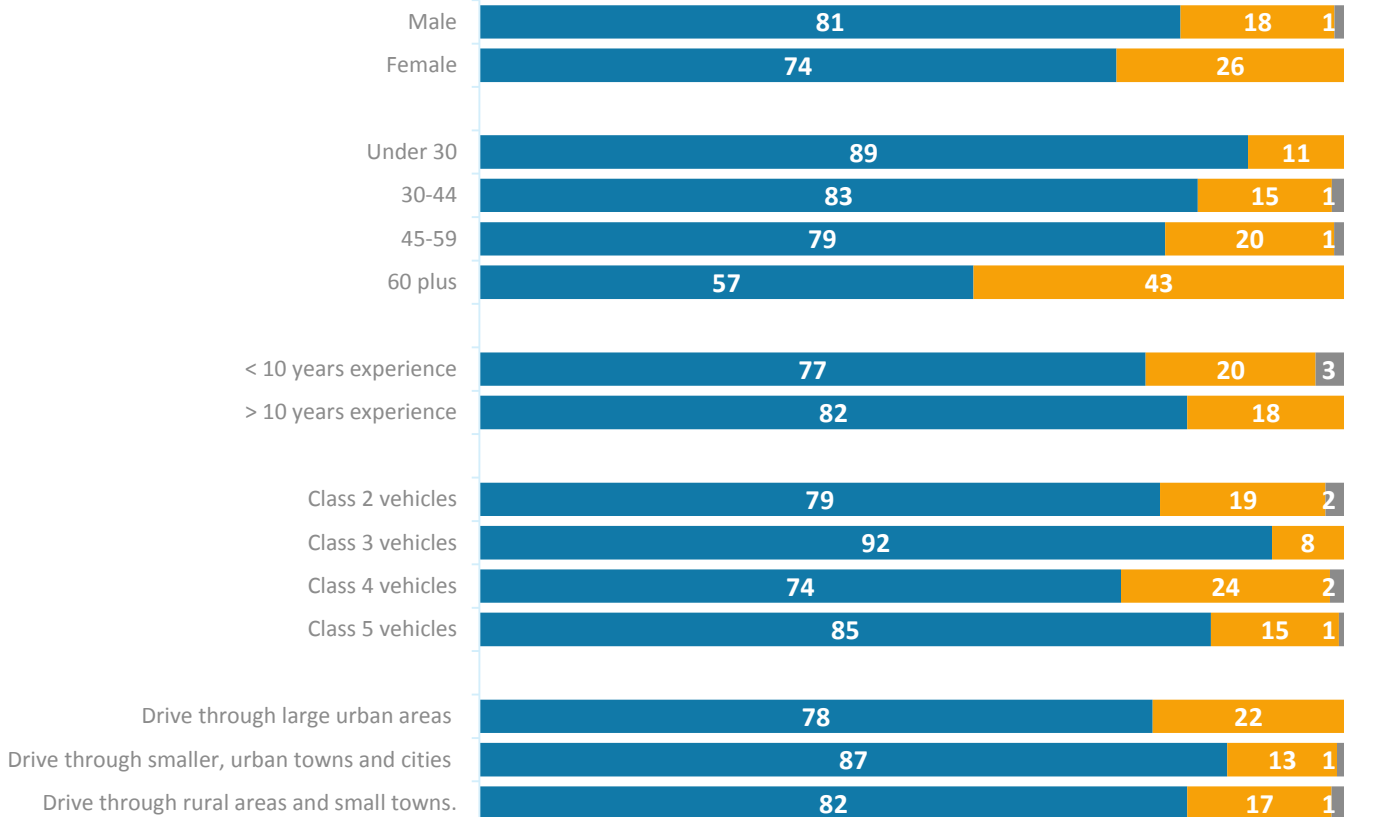
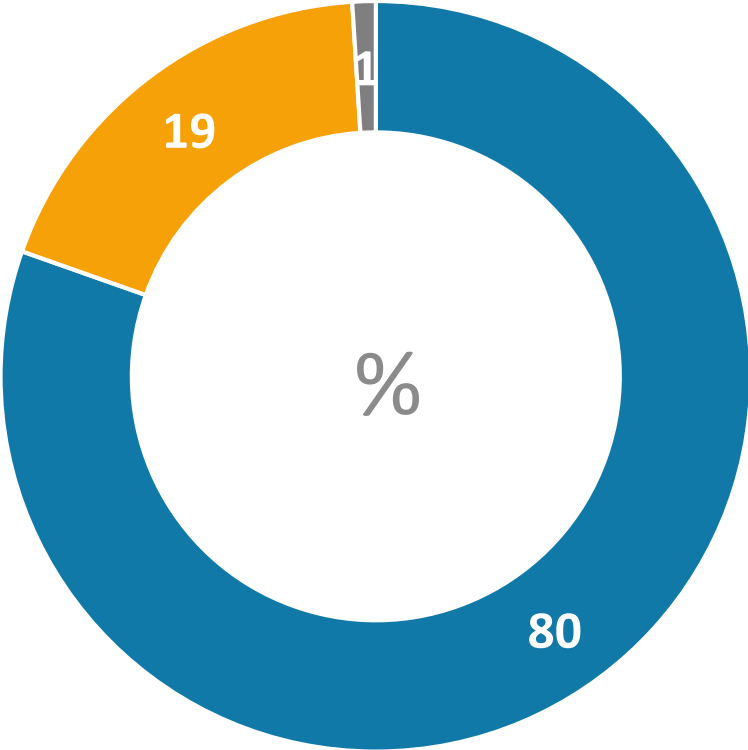
Key findings

- Four fifths of respondents declared that they have driven a heavy vehicle across a railway level crossing where their heavy vehicle was longer than the distance from the road intersection to the railway tracks.
 - Those who drive a class 5 vehicle and those who drive through smaller, urban cities and towns were more likely to declare that they have crossed a level crossing where their heavy vehicle was longer than the distance from the road intersection to the railway tracks (85% and 87% respectively).
 - Older drivers (60 plus) were less likely to drive through a crossing with such a heavy vehicle (57%).
- A clear majority (81%) declared such crossings as unsafe. A very small percentage (6%) declared them as safe and 12% believed these crossings are neither safe nor unsafe or unsafe.
- When respondents were asked how they would drive over such a crossing, the most common method mentioned was to wait behind the tracks until no one else was in front, be aware of trains and traffic and move quickly when a gap eventuates. However, truck drivers overall were aware of the risks and danger when driving over such a crossing.
 - Many drivers mentioned the importance of being cautious when using such a crossing.
 - Some drivers said they have to use 'local/situational knowledge' of train timetables and which railway lights to look at.
- Two thirds declared that they would consider changing their route to avoid such a level crossing. 27% wouldn't change their route and 8% were unsure.
 - Respondents who regularly drive through large urban areas were more likely to change their route (72%).
- When asked what improvements could be made to address the problem, participants provided both short term and long term solutions. However many were sceptical of government agencies and their ability to act on improvements as well as they aware of the costs and difficulties involved in making improvements.
 - Short term suggestions included:
 - Cutting back vegetation/removing obstacles
 - Education drivers
 - Placing the stop signs before the level crossing, improve signage and earlier warnings.
 - Apps
 - Long term suggestions included:
 - Better warnings
 - Minimal distractions
 - Message boards
 - Improved technology
 - Track improvements
 - Better road planning/designing
- Detailed suggestions are provided on slide 24 and 25.

Use of railway level crossings with a short distance between the road and the tracks



Have you ever driven your heavy vehicle across a railway level crossing where your heavy vehicle (including towed vehicles) was longer than the distance from the road intersection to the railway tracks?



■ Yes ■ No ■ Unsure

%

Base n=199 (all respondents)

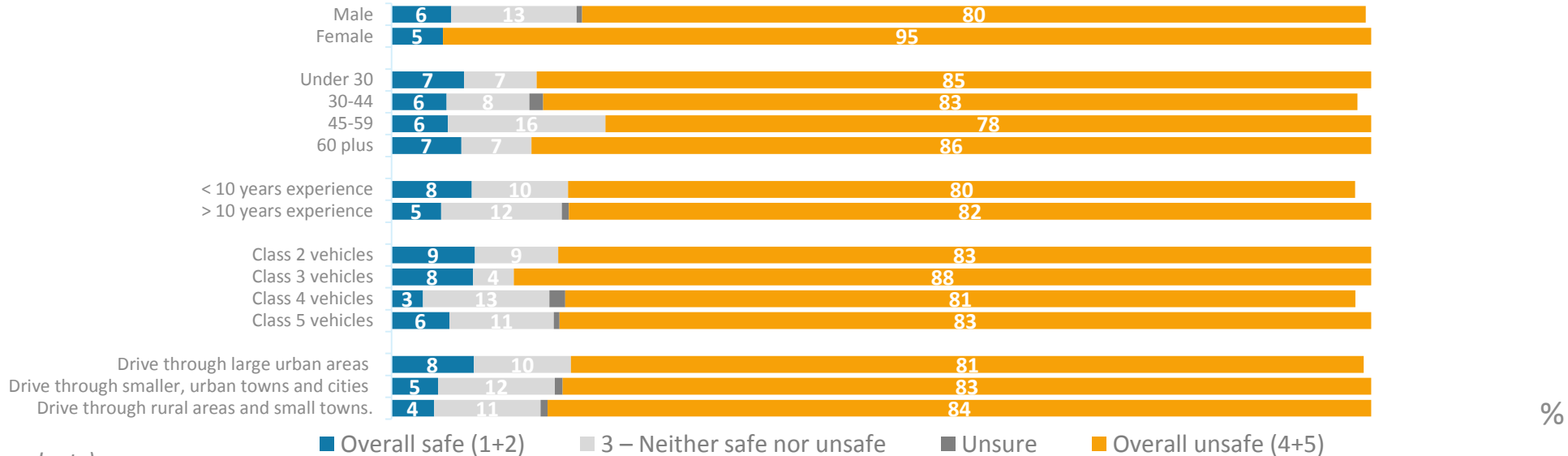


Safety of railway level crossings with a short distance between the road and the tracks

Q How safe do you think these crossings are?



■ 1 - Very safe ■ 2 - Safe ■ 3 - Neither safe nor unsafe ■ Unsure ■ 4 - Unsafe ■ 5 - Very Unsafe



%

Base n=199 (all respondents)



Use of railway level crossings with a short distance between the road and the tracks (open ended)

Participants were asked to describe how they usually drive over a level crossing where they know there is not enough space for their heavy vehicle between the intersection ahead and the railway tracks.

Overall, truck drivers are very wary of these crossings; they are inherently dangerous and pose real, and potentially, serious, safety risks for users. 81% of drivers think they are unsafe.

While truck drivers have devised strategies to cross them, they do feel they are in a 'no-win' situation and no choice or plan of action is ideal. If they stop before the train tracks, it can be difficult to see the road traffic and to move quickly and nimbly enough to take advantage of a gap in traffic. Following traffic can get impatient and attempt risky over-taking manoeuvres. The alternative is to 'force' their way into traffic if they are stuck with their rig across the tracks and the warning bells / lights start.

Departing farms in a truck and trailer combination onto a highway is a times a "best guess" some crossings you have no choice but to cross because you still cannot see if the road is clear on highway you are about to enter and at times have to stop across tracks, seatbelt off get ready to jump.

The most common approach was to wait behind the railway tracks until no-one else was in front, keep looking for trains, watch and monitor traffic flows and, when a gap in the traffic eventuated, to move very quickly. This strategy was not without risks though and was exacerbated by:

- Poor visibility along the railway tracks.
- Busy and/ or poor visibility of oncoming traffic.

- Inability to move quickly in a fully laden rig; especially on gravelly surfaces or when the level crossing had a large hump or rise in the middle.
- Tight turns. Trucks need space to swing out, which sometimes meant crossing the centre line when turning left.
- Turning right could be almost impossible. Sometimes drivers preferred to turn left and to turn around further along the road.

Many drivers reiterated the necessity for extreme caution and described moving slowly, carefully and keeping their wits about them at all time. Sometimes drivers got out of their truck to assess the situation. They looked at the traffic flow, turning circles and considered their options if they were stuck on the track with a train coming.

In this vein, some drivers relied on 'situational or local knowledge'; they knew the train timetables and / or which railway lights to look at.

Critical was to stay alert and to keep looking and listening; looking for trains, listening for trains, bells and whistles and looking for traffic. Looking both ways and being prepared to take evasive action if necessary.

Some drivers chose to avoid these crossings. 66% said they would consider changing their route. However, this was not always possible and drivers new to an area sometimes had little, if any, warning these crossings / intersections were ahead.

Use of railway level crossings with a short distance between the road and the tracks (verbatim)

I cross a level crossing daily in a heavy Truck and Trailer, my vehicle is 23 meters long and the distance from the tracks to the intersection is only about 17-18 meters. if I stop before the level crossing I cannot see if the road is clear. I must proceed over the crossing and stop with my trailer on the railway lines, so I can if the way is clear.

I stay behind the tracks until I have a gap in traffic & then cross over and enter the intersection. This method can annoy car drivers if they end up braking to allow me in.

Do not enter on to the tracks until the road is clear for turning on to, otherwise if your waiting for the road to clear and a train come whilst you're on the track then your screwed.

I always stop, look both directions down track to make sure no trains are coming. I also pay attention to colour of lights for the track. I tend to prefer to have my nose poking out of intersections rather than my arse hanging over a railway line.

I either avoid them altogether (as in crossings in Te Kuiti I never use middle crossing) if there is no choice (Glen Eden etc) I make sure I stop before the crossing whether alarms are operating or not. Once I am certain I can proceed across the crossing without stopping at the other side I continue into intersection.

Look both ways on a rail crossing then drive up to the intersection look both ways for cars and put my foot down to get my trailer off the rails

If I had to travel over a crossing with insufficient space for the vehicle, I would stop before the line, hopefully there is enough vision in both directions of the road and track, wait in a safe place behind the line until a clear and safe space has opened up on the road for the heavy vehicle to pull out.

I would wherever possible avoid the crossing. If unable to avoid crossing, where possible I will stop before the crossing to check the intersection. Failing two previous answers I enter intersection and pray no trains come before intersection is clear.

If I knew about it before hand I would choose a different route. If I discovered that there was no room I would elect to turn left onto the road and force my way into the traffic, using my horn and flashing lights if necessary given the serious danger.

I will stop before the train tracks and check both ways for trains. I will then look at how many cars are going past me on the road I want to turn on to. If there are lots of cars I will stay put if there are minimal cars I will do my best to look for a gap in the traffic, pick my moment to move then look both ways up the train tracks again before making my move to cross and turn. Unfortunately, you cannot see both ways on all tracks due to trees or hedges or obstruction in the line of vision and sometimes end up on the tracks where you do not want to be before making your turn. There needs to be a law on how close obstructions can be near the turn off as we are so long, we need that length to see both directions.

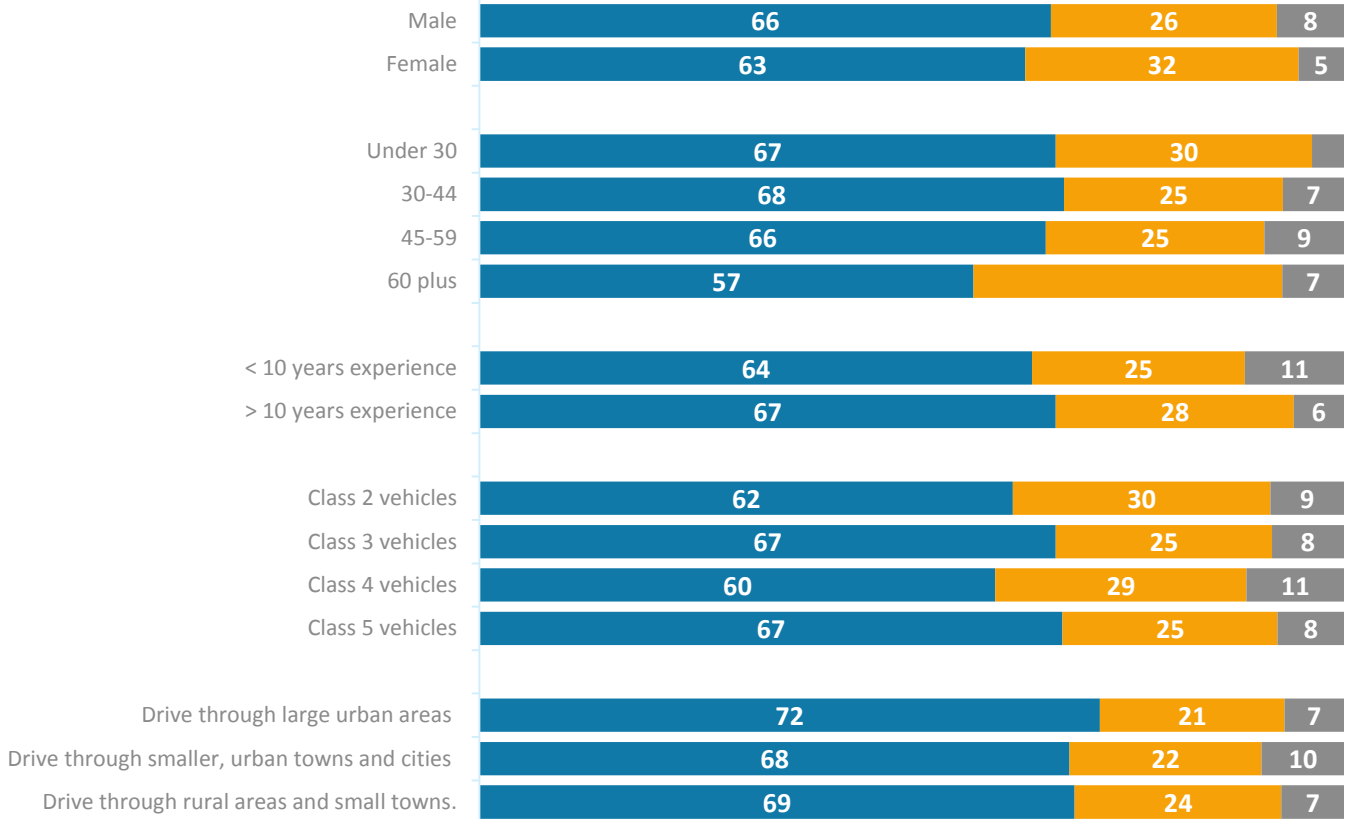
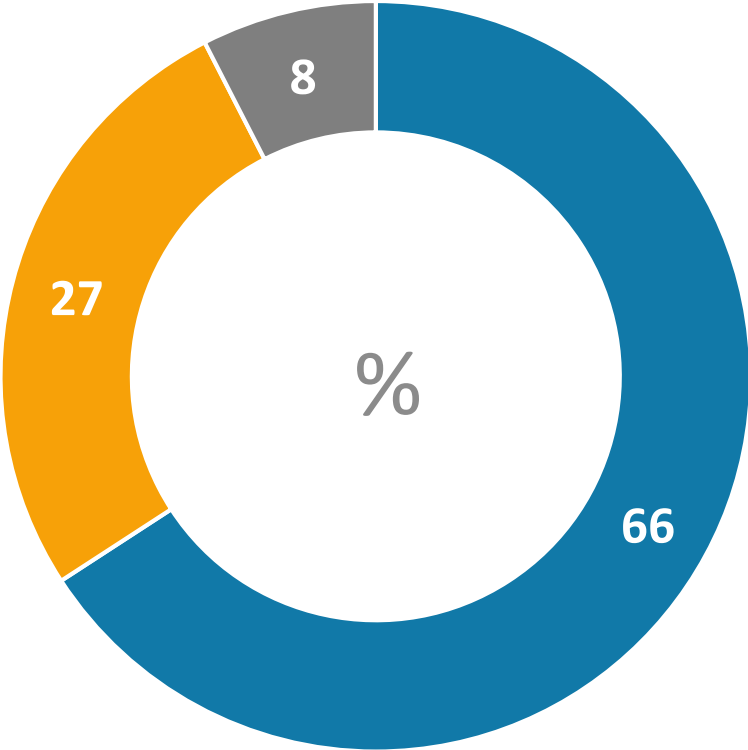
I would stop before entering the crossing and look both ways several times at the road I want to enter and with windows down, radio off and no other distractions, slowly enter the crossing continuously checking there is nothing coming during the entire manoeuvre.

Normally know the roads would avoid them were possible but if I had to travel across one I would very slowly move across the line into oncoming traffic sounding my air horn to warn that I am move into oncoming traffic unwillingly and communicate with oncoming heavy vehicles via cb radios as a bad situation the lesser of the two impacts would be the oncoming traffic rather than train

Changing routes to avoid railway level crossings with a short distance between the road and the tracks



Would you consider changing your route to avoid having to cross such a level crossing?



■ Yes ■ No ■ Unsure

%

Base n=199 (all respondents)



Infrastructure improvements (open ended)

Participants were asked to describe what infrastructure improvements they could think of to address the problem.

While truck drivers had multiple ideas for infrastructure (and other) improvements, many were aware of the difficulties and significant costs involved. They were sceptical the Government Agencies responsible had the resources (or the inclination) to make these improvements.

Some potential quicker - cheaper and easier - suggestions included:

- Cutting back vegetation / removing obstacles to improve visibility, so drivers can see further along the track.
- Educating car drivers i.e. why trucks are waiting on the wrong side of the tracks (not at the intersection) and why they might need to pull out suddenly.
- Educating / reminding truck drivers about these crossings (thru employers and National bodies.
- Placing the stop sign before the level crossing; as a reminder to truck drivers and so following drivers will know why the truck has stopped.
- Improved signage warning drivers of these types of intersections;
- An App which describes where these intersections are and alternative routes.
- Slowing down / warning approaching traffic on the highway; allowing large vehicles right of way when joining the road. Traffic lights?
- Earlier warning trains are approaching and a longer gap between bells/ lights, barrier arms and the train.

More long term (expensive) suggestions included:

- Better warnings – bells / lights / barrier arms – at all crossings.
- Minimal distractions; sometimes there are multiple signs and distractions at crossings.
- Message boards warning how long until the next train.
- Improved **technology** which alerts train drivers there is something on the track, when they still have time to stop.
- Realigning tracks and/ or roads.
- Moving intersections / redesigning intersections.
- Building merge / pull on lanes.
- Bigger turning circles or positioning intersections at an angle so trucks can see and manoeuvre more easily.
- Flattening out crossings, so trucks can move off quickly.
- Building underpasses and overpasses.

Some truck drivers suggested banning over-length vehicles from using these level crossings, but also acknowledged the difficult logistics or practicalities of doing so if there were no alternative routes or if alternative routes added considerable time and mileage to their journey.

Also important is improved planning, foresight and collaboration when building roads and when deciding what size (length) of rig to allow on NZ roads. One driver criticised LTNZ for allowing longer rigs on the roads with no thoughts for the consequences.

Infrastructure improvements (verbatim)

Better signage prior to crossing, those things they have on left lane, place those before approaching the crossing will ensure your awareness / Add signage to advise of short distance between track and stop signs. Also around my area some of the stops can be moved further out into the merging road. /

A warning device fitted to the train alerting the driver of any obstacles blocking the train tracks, perhaps a lower speed approaching these problem areas, truck drivers have a responsibility to drive with the utmost care and do so defensively with the exceptional few cowboys these intersections not only are the responsibility of truck drivers but all road users and road designers, engineers, council, and governments.

A longer warning for oncoming trains, so lights or barrier arms are working long before the train crosses.

Address visibility issues (Highway 1B (Telephone Rd/Holland Rd / ECTM intersection) is a prime example). Truck drivers can see clearly both rail and road, car drivers cannot, and therein lies an issue both truck drivers and train drivers have.

I know with my smaller truck, I have restricted vision on intersections are curved, or not perpendicular.

On very low volume roads/or crossings, have the preceding road, track as flat as possible. / Railway crossings should be smoother, even, and level with the roads that come up to it and leaving it.

If there aren't barriers or crossing alarms, there should be a very bright LED light or equivalent set a distance that could be further warning of oncoming train movement on the lines.

Increased use of 'merge lanes' at intersections close to rail crossing [example -Brookes St / Matai St intersection, Inglewood].

Getting into a road when you have not enough room is not nice, but you can always wait till no one comes (if there is visibility), however, getting out of the highway with a pair of meters away having to cross an un-signalled level crossing is a big risk. Visibility is very bad, and 90 degrees turn with the trailer is dangerous. To do it safe I have to come really slow and open wide using all my highway lane. That means the people behind me has to go from 90 kph to 20 kph same as me, no room to overtake. I use emergency lights for such thing, but I am rising some one's life if they are distracted.

As I drive a low loader most of my problems are the fact your crossings are too steep and have been stuck on them in the past and the only way to fix the problem if no room is to create room by moving road further away or making a left turn only with a merging lane.

Changing roads that have corners or curves that limit viability at level crossings also changing roads that mean we cross at anything other than 90 degrees.

Change the distance between rail and intersection. Like the intersection at the Opiki Shannon intersection.

Prohibit the crossing of vehicles exceeding a specified length. / For all trucks with trailers you would need a sign indicating about your length is not permitted to cross. Then work out the nearest place for a truck and trailer to know about this so the truck can divert into another direction.

For signal railway crossings please increase warning times. Yes, trucks are heavier longer and the more warning of a train crossing activation the better. (E.g. Mangaweka crossing. We look for the train first before the lights when heading north bound down the hill to the crossing). This also includes metro crossings. O'Rourke Road Penrose is a long and painful crossing wait at. But I think it's your best crossing. Plenty of warning time.

Influence of driving HGVs and / or cars on driving smaller and / or larger vehicles

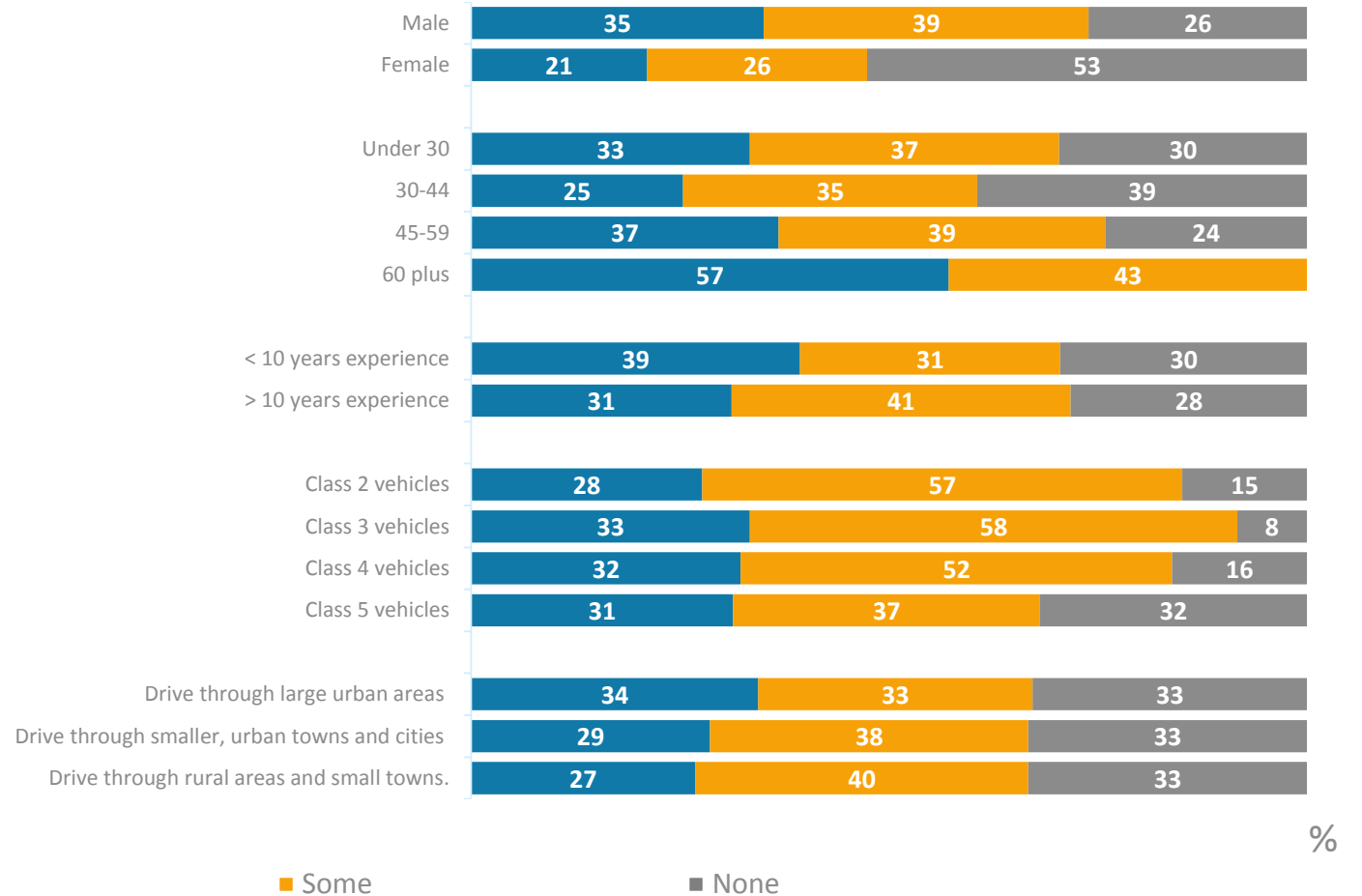
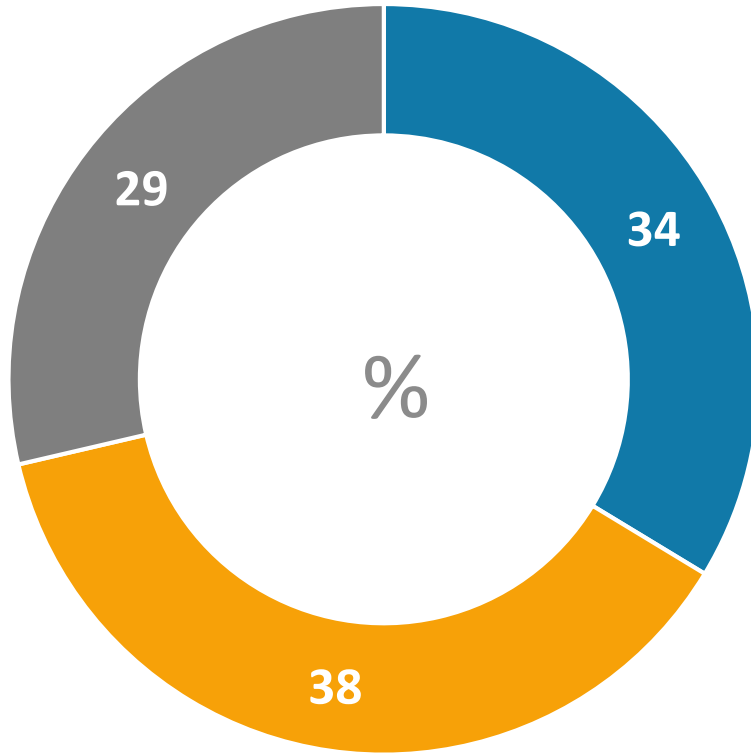


Key findings

- Nearly three quarters (72%) of respondents said a car or a small vehicle driver has influenced (a lot + some) their decision making when driving a heavy vehicle. 3 in 10 respondents (29%) said they were not influenced by car or small vehicle drivers.
 - Class 5 vehicle drivers were more likely to declare that small vehicle drivers had no influence on their decision making when driving a heavy vehicle (32%).
 - Class 2, 3, and 4 vehicle drivers had a greater tendency to declare that small vehicle drivers had some influence on their decision making (57%, 58% and 52% respectively).
 - Those who drive through smaller urban areas and through rural areas and small towns regularly were less likely to declare small vehicle drivers have a lot of influence (29% and 27% respectively).
- Respondents were asked how and what these influences were and the main theme which came through was that experiences in a small car made respondents a better and safer heavy vehicle driver. This allowed them to better understand other driver's mindsets.
- Respondents declared that driving a small vehicle helped them to
 - Drive more carefully
 - Be more aware and alert
 - Be more tolerant and patient
 - Be more courteous and polite
 - Obey road rules

Influence of small vehicle driving on HGV driving

How much influence would you say that your experiences as a car or small vehicle driver has influenced your decisions when driving a heavy vehicle?



■ A lot

■ Some

■ None

%

Base n=199 (all respondents)

Influence of small vehicle driving on HGV driving (open ended)

Participants who said their experiences as a car or small vehicle driver had influenced their decisions when driving a heavy vehicle (72%), were asked how and what these influences were.

Drivers described multiple influences but, the overarching one, was that their experiences in a small car made them a better and safer HGV Driver.

Driving in a smaller vehicle gave HGV experience of the car drivers' perspective and was an important reminder of just how big and cumbersome an HGV is; how much space they take, how noisy they are and how small and vulnerable you feel in a car.

It helped them to understand other drivers' mindsets and why some are nervous or sometimes drive erratically when HGVs are near them.

They also understood the frustrations other drivers' felt at being stuck behind an HGV, though this did not excuse risky – crazy – overtaking manoeuvres, both on the highway and at railway level crossings.

Being in a car reminded truck drivers of poor car driving habits generally; to expect the unexpected and to under, not over-estimate drivers' skill and attention on the roads.

It reminded them visibility of other vehicles can be compromised in a HGV and that smaller vehicles can be invisible to them.

But, in other circumstances, cars have far less visibility than HGV; they may make decisions they shouldn't if their visibility was improved.

A couple of drivers used smaller vehicles to scope out HGV routes i.e. for safety, crossings, width and length restrictions.

Driving a smaller vehicle encouraged HGV drivers to:

- Drive more carefully,
- Be more aware and alert; to be constantly vigilant and to keep looking and watching (the road conditions and other traffic).
- Be more tolerant and patient,
- Be more courteous and polite; keep to the left and let other drivers' through or past.
- To obey the road rules.
- And, in a nutshell, to drive more safely and defensively.

Influence of small vehicle driving on HGV driving (verbatim)

Always obey the rules when crossing a railway according to the road code info and to what is logic according to the signs. as long as you can read and look then there's no excuse.

As a driver of a small vehicle I realise there are idiots out there who try to hide, they don't use headlights during poor light or buy cars with poorly identified colours, so when in a truck one has to take more time to look at the road carefully because here are idiots there.

Being aware of surroundings, other traffic, visibility to each side when approaching a crossing, weather & road conditions. Ability and time needed to safely clear tracks.

Being more aware of size of vehicles and something that may be safe in a small vehicle isn't safe in a truck.

Better viability while driving a car make me realize how much my vision is often limited in a truck.

Can understand what car drivers are thinking and so can avoid situations if I can see they're about to happen.

Situational awareness is critical to staying alive by reading other road user intentions or behaviour (anticipate what action before they do through clues). I apply the same experience and Additional training in heavy class 5 vehicles.

More aware of how stupid some road users are toward heavy vehicles and their lack of appreciation of the space required for these trucks to manoeuvre, stop and negotiate tight spaces. Often don't see the stupid antics of small vehicles when driving the truck as many are in blind spots and invisible to the truck driver.

I'm always checking out the road for suitability for trucks in case I need to travel down there in a truck one day.

I look more than once for small vehicles and allow for erratic behaviour from other road users..

I realise how scary trucks can be when you're in a car.

Driving a car, you realise how your vision is so restricted from seeing over traffic hills and terrain so it's good to help the faster flowing traffic get around you when you're in the truck.

Interaction with heavy vehicles whilst driving my car influences my courtesy to cars in the truck.

The Manawatu crossings I have been over them a lot & scan in my car to prepare for when I might have to cross in a truck.

Respect each crossing, as in a car you usually have less visibility.

You are more aware of the restrictions a truck has in seeing abilities to the rear and side sudden movement

You do not have the vision perhaps as you do in the truck so will drive accordingly.

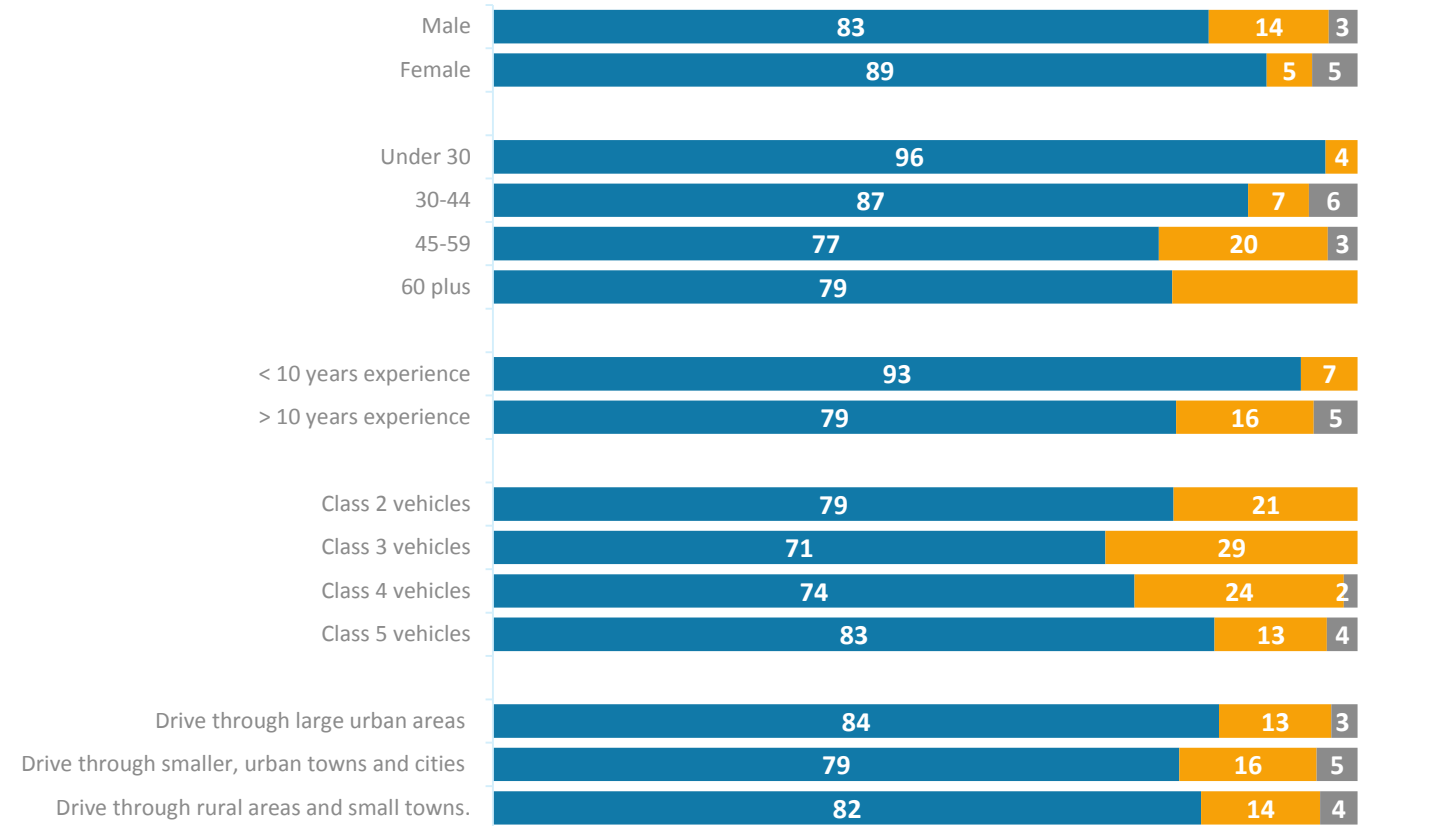
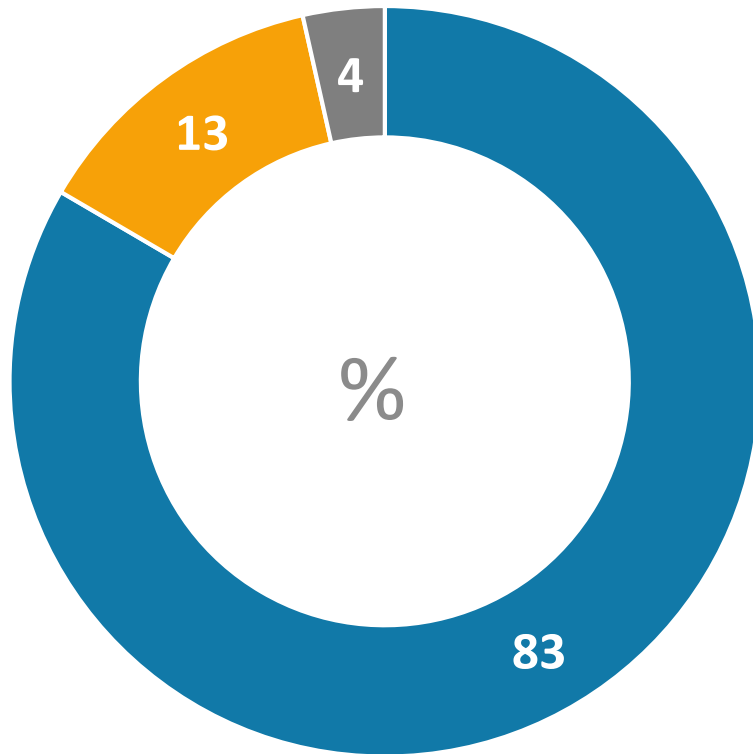
I am always considerate of faster moving vehicles, I stay far left long after passing lanes end

You learn how to look out for cars as they are small and can be in blind spots.

Influence of HGV driving on small vehicle driving



How much influence would you say that your experiences as a heavy vehicle driver has influenced your decisions when driving a car or small vehicle?



%

■ A lot ■ Some ■ None

Base n=199 (all respondents)



Influence of HGV driving on small vehicle driving (open ended)

Participants who said their experiences as a heavy vehicle driver had influenced their decisions when driving a small vehicle or car (97%), were asked how and what these influences were.

Participants experiences as a HGV driver when driving a small vehicle or car were very influential (and vice versa), which suggests that driving a mix of size of vehicles gives participants a better understanding and appreciation of other road users and the impacts that vehicle size has on their vision, behaviour and actions.

HGV drivers saw and were more aware of instances of bad driving practices and that people drive erratically and unsafely.

They had a better understanding of truck drivers / trucks e.g. limited visibility, stopping distances, that they were big and cumbersome and needed plenty of room to turn. Participants described staying out of the way, giving trucks enough room and staying visible.

They were more aware and wary of their speed, surroundings, road conditions, stopping distances, distance between other vehicles.

They are more aware of the challenges associated with each type of vehicle and the adjustments and skills required to drive safely. Understanding both perspectives means better and safer driving all round.

Specific influences included:

- Being more patient and tolerant.
- Being more alert and vigilant.
- Driving more carefully; they did not take unnecessary risks.
- Driving more defensively.
- Being 'better' drivers, with more 'respect' for the road and other road users.
- Being reminded of timing and space required.
- Being aware of what car drivers don't know (see).
- Being more courteous and showing more respect to HGV drivers.
- Driving predictably; and,
- Not taking unnecessary risks.

Several drivers described feeling unsafe in a small vehicle after witnessing so many instances of unsafe driving and accidents.

Influence of HGV driving on small vehicle driving (verbatim)

After driving a HEAVY vehicle, you learn the respect of the road and other road users and their actual ability to safely drive a motor vehicle, with consideration that possibly 75% of the population only use their vehicle to go to and from work, and on a holiday long weekend or vacation break.

After operating a heavy vehicle, it has made me more careful and vigilant on the road, it has taught me to look ahead, read traffic and look for children where I would have not looked for them before. Operating a heavy vehicle has definitely made me a better and safer driver.

you learn from driving a truck and doing things and you sometimes take that information and put it into your driving ability for a car..

As a truck driver I am subjected on a daily basis to incompetent, impatient drivers who take unnecessary risks to get ahead of my truck and trailer. Often pulling out of intersections with little or no room in front of my vehicle and attempting to pass at the very end of passing lanes. Following to close to the rear of my vehicle then sitting in the oncoming lane to try and see ahead..

I no longer feel safe driving my personal car after many of the near misses I have had in my heavy vehicle. I will often drive slower than the posted speed limit and avoid certain roads and areas.

I give heavy vehicles a lot more room in the roads. I understand they take a lot longer to slow down and or stop so I make sure my movements around trucks are considerate and planned. I'm aware that truck drivers may be fatigued and so I plan my driving I accordance to that. The absolute key that I have learnt though is PATIENCE

Awareness of stopping distances and time to move is greatly influenced my driving. Also, visibility such as blind spots to a heavy vehicle also has influenced my driving of small vehicles.

Being aware of distances on any style of road. Slow down before all intersections. Be fully aware of all types of movement around your vehicle. Think big instead of small vehicle while you are driving.

Better visibility from high up seeing other safety issues further out., Can see people doing dump stuff before it happens.

Drive with a lot more respect around trucks as I know they have limited visibility. Don't sit in the blind spots and always give a good gap when following.

Driving trucks all week you appreciate the extra space they require to manoeuvre through intersections and traffic, so you tend to give them extra room and time when you can..

Have more respect for them because I know what it's like on the other foot.

I am always considerate of other truck drivers when near crossings & will make a gap in my car to allow trucks space to navigate safely..

I know the stopping distance a truck needs and so give fellow Professional Drivers the space they need always.

I try and stay clear of bigger vehicles and drive in such a way as to not make trucks make sudden decisions.... i.e. I drive predictably.

Making sure you can see the driver in their mirror before passing. Making sure the driver can see you. giving trucks room when pulling in as they can't brake as well as you.

Risky / dangerous railway level crossing behaviour

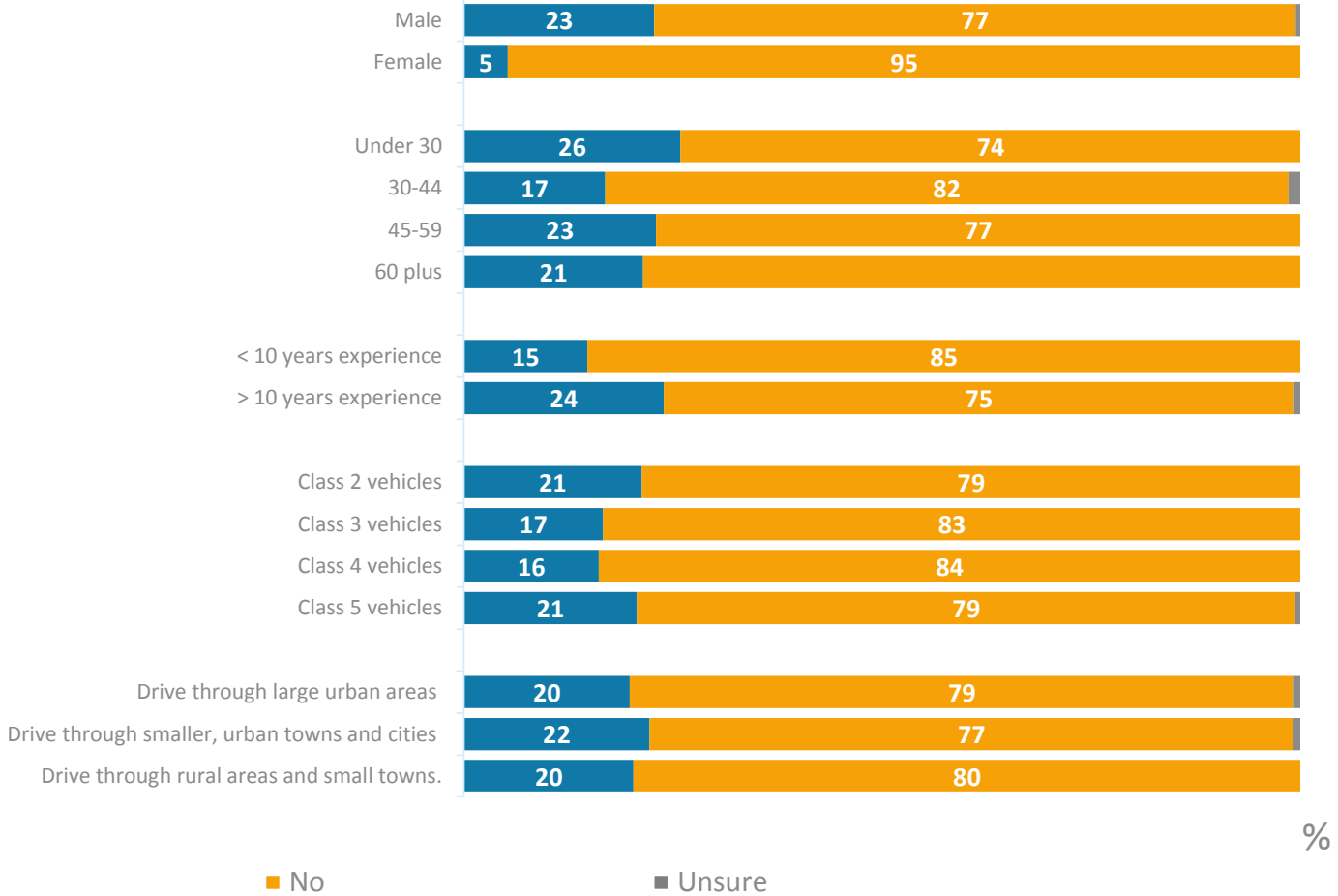
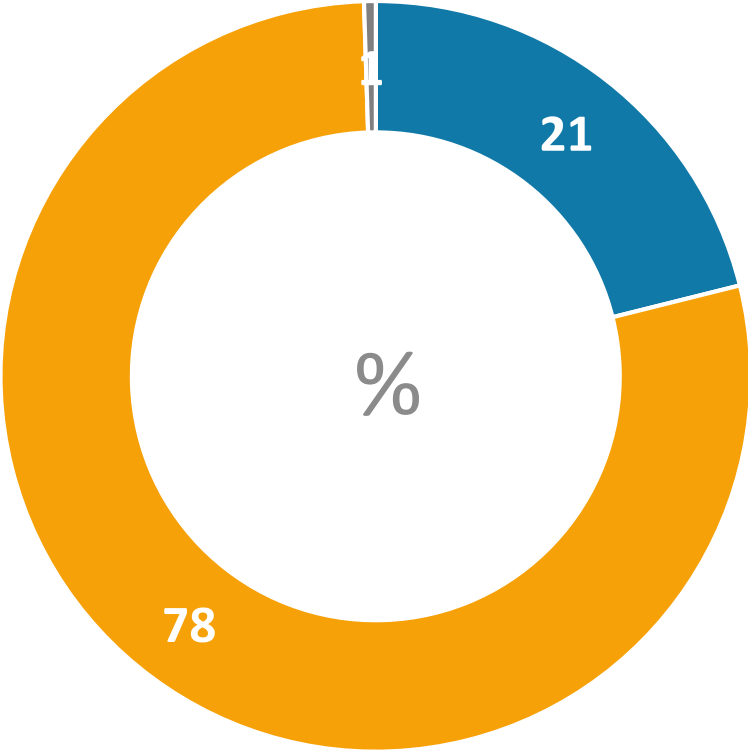


Key findings

- Around a fifth (21%) declared that they have driven over a railway level crossing when they could see or hear a train using their private vehicle. However, over three quarters (78%) declared that they have not done this.
- Smaller proportion of respondents (69%) declared that they have never driven across a railway level crossing using a heavy vehicle when a train was approaching. Nearly a fifth (17%) declared it has happened more than three times and 12% said it happened once or twice.
 - Those who regularly drive through smaller, urban towns and cities were less likely to declare they have never driven over a crossing with a heavy vehicle when a train was approaching (64%).
- From four various actions were tested, 26% said they failed to stop at a railway level crossing that had a stop warning sign.
 - Respondents were least likely to have driven around a barrier at a railway level crossing (5%).
 - 1 in 10 did not obey lights and bells at a railway level crossing and 17% failed to check if a train was approaching at a railway level crossing that had a give way warning sign or stop sign.
 - Generally the most common reason for committing to these actions was that they could not see the train.
 - Other reasons for taking dangerous actions at a railway level crossing included:
 - Awkward crossing
 - Less dangerous to keep moving than stopping
 - Poor visibility
 - Good visibility
 - Local/situational knowledge
- A clear majority declared that they have not been involved in an incident or a near miss with a train at a railway crossing (87%) with only 13% declaring that they have.
- Those who were involved in a near miss or an incident were asked to describe the incident/s.
 - Most common reasons for the incident/s were:
 - Sunstrike
 - Fog
 - Vegetation and/or obstruction
 - Other scenarios included:
 - Being distracted
 - Stalling
 - Short distance between intersection and tracks
 - Poor positioning of roundabout
 - Bell/lights turned off or broken
 - Short time between lights flashing and barrier
 - One person said they were intoxicated

Railway level crossing use when drivers could see or hear a train

When driving in your own private vehicle i.e. a car or small vehicle, for whatever reason, have you ever driven over a railway level crossing when you could see or hear a train??



■ Yes ■ No ■ Unsure

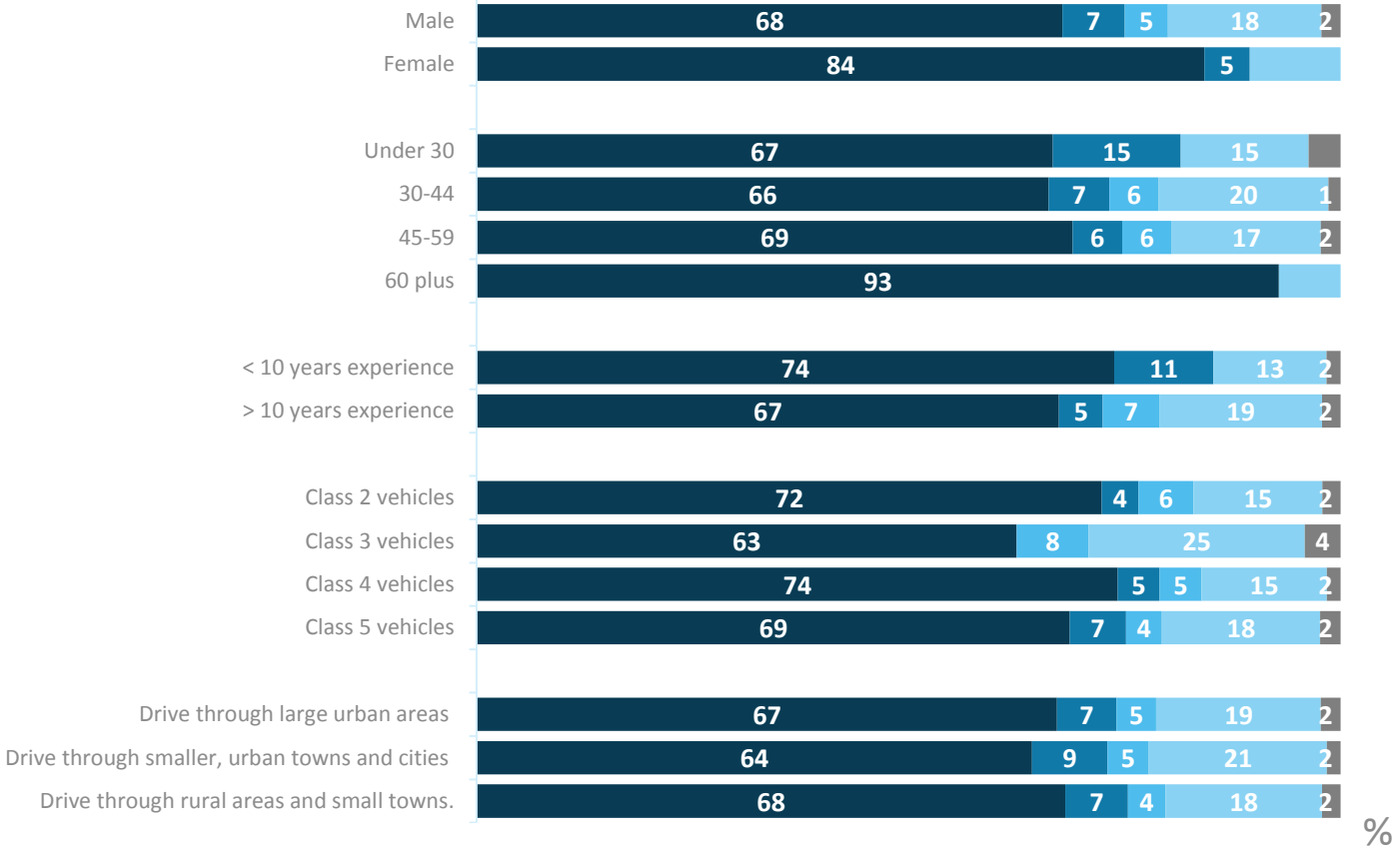
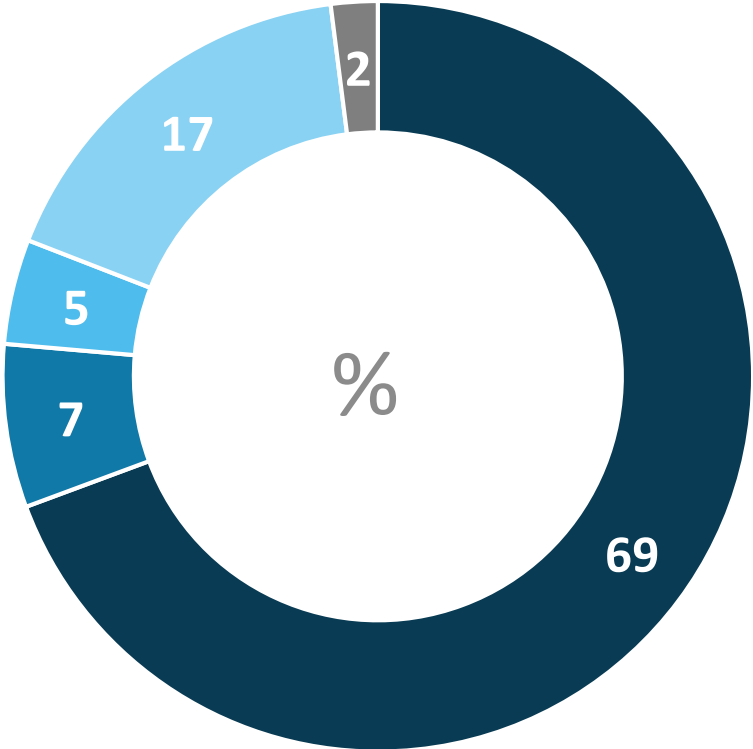
Base n=199 (all respondents)



Railway level crossing use when a train was approaching



How many times in the last year or so have you driven over any railway level crossings when a train approaching you, for whatever reasons, while driving a heavy vehicle?



Base n=199 (all respondents)

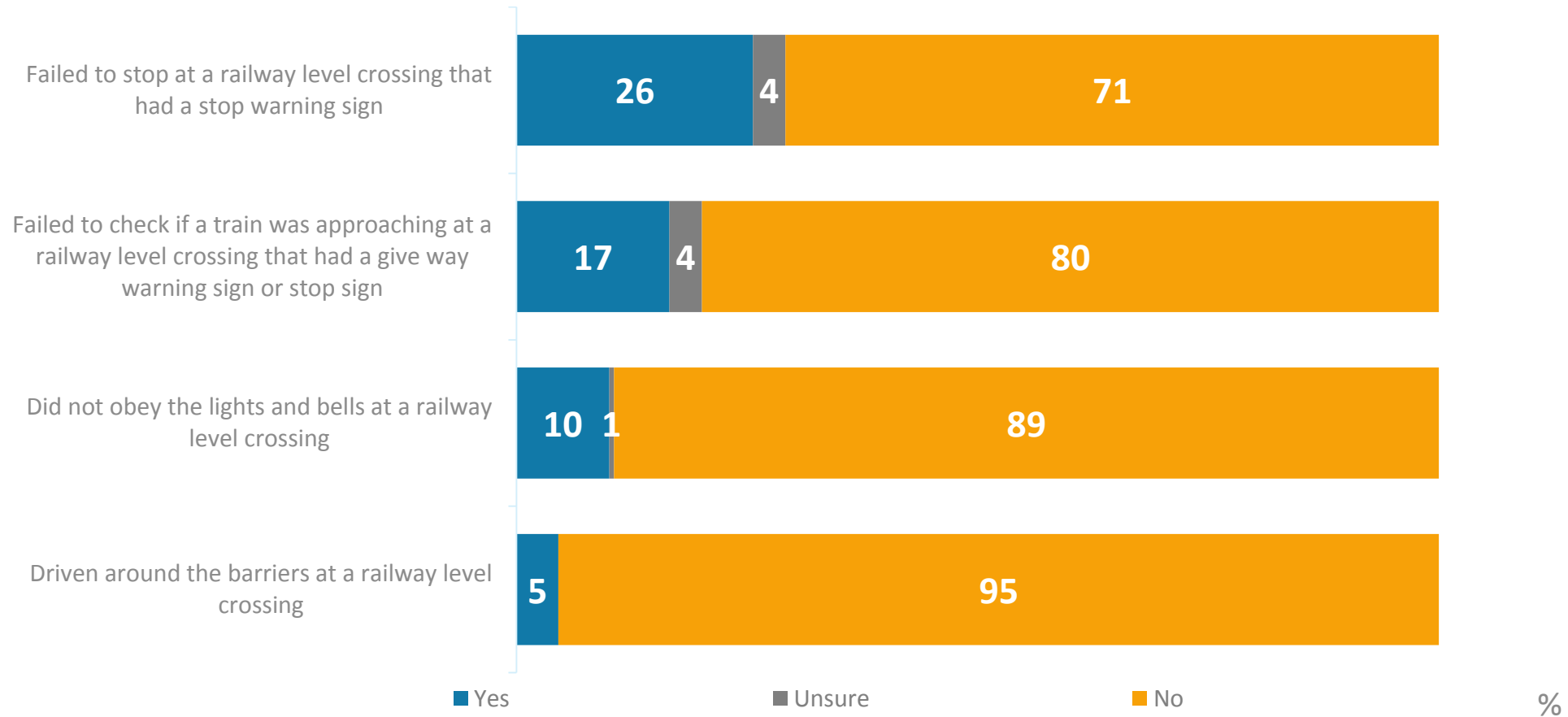
■ Never ■ Once ■ Twice ■ Three or more ■ Unsure



Actions at railway level crossing - Statement testing



Have you ever, for whatever reason, done any of the following?



Base n=199 (all respondents)

Reasons for actions at railway level crossings



Which of the following best describes why you

	Failed to check if a train was approaching at a giv...	Drove around the barriers at a level crossing?	Did not obey barrier arms, lights or bells?	Failed to stop at a stop sign?
	(%)	(%)	(%)	(%)
Could not see the train	24	11	25	29
Could not hear the train	3	0	10	10
The train was a long distance away from me,	15	0	5	10
The train had already passed me by	3	0	15	16
Saw the train but thought I could safely cross before it reached the railway level crossing;	9	0	0	4
Forgot to look for train	30	0	0	4
I was distracted	18	0	0	8
Other (please specify)	21	100	75	45
Base	33	9	20	51

Multi response question, thus total may not add up to 100%

Reasons for actions at railway level crossings (other reasons)

Participants who had taken specific actions at railway level crossings, were shown a list of options which best described why they had taken these actions. When no suitable option was available, they were asked to describe the reason. Reasons why participants had taken potentially dangerous actions at railway level crossings included:

- It was an awkward crossing where the driver risked getting stuck;
- It was less dangerous to keep moving than to risk stalling or losing traction on gravel or a rise;
- Poor visibility; safest option was to look as approaching the crossing or as driving across;
- Good visibility; participants could see both ways and a long distance;
- Local / situational knowledge.

Awkward crossing, stopping would create traction issues when moving off, thus risking being stuck on track.

Could see both ways for a long distance and there was nothing coming should possibly be a give way sign there and not a stop sign.

Had clear view that there was no train, but tracks was on a sweeping bend so slowed almost to a stop but rolled thru to avoid having the delay of getting moving again from a complete stop. The Time exposed to danger was greater from a standstill.

It was a crossing where trains approaching from my left would not be visible unless I stopped the truck and got out to look.

The stop sign was on a gravel farm track crossing the railway. Traction is hard enough to maintain without stopping and then trying to move off and cross slippery steel tracks. Visibility was excellent, I could see there were no trains coming.

Years ago, could see miles in both direction it was clear.

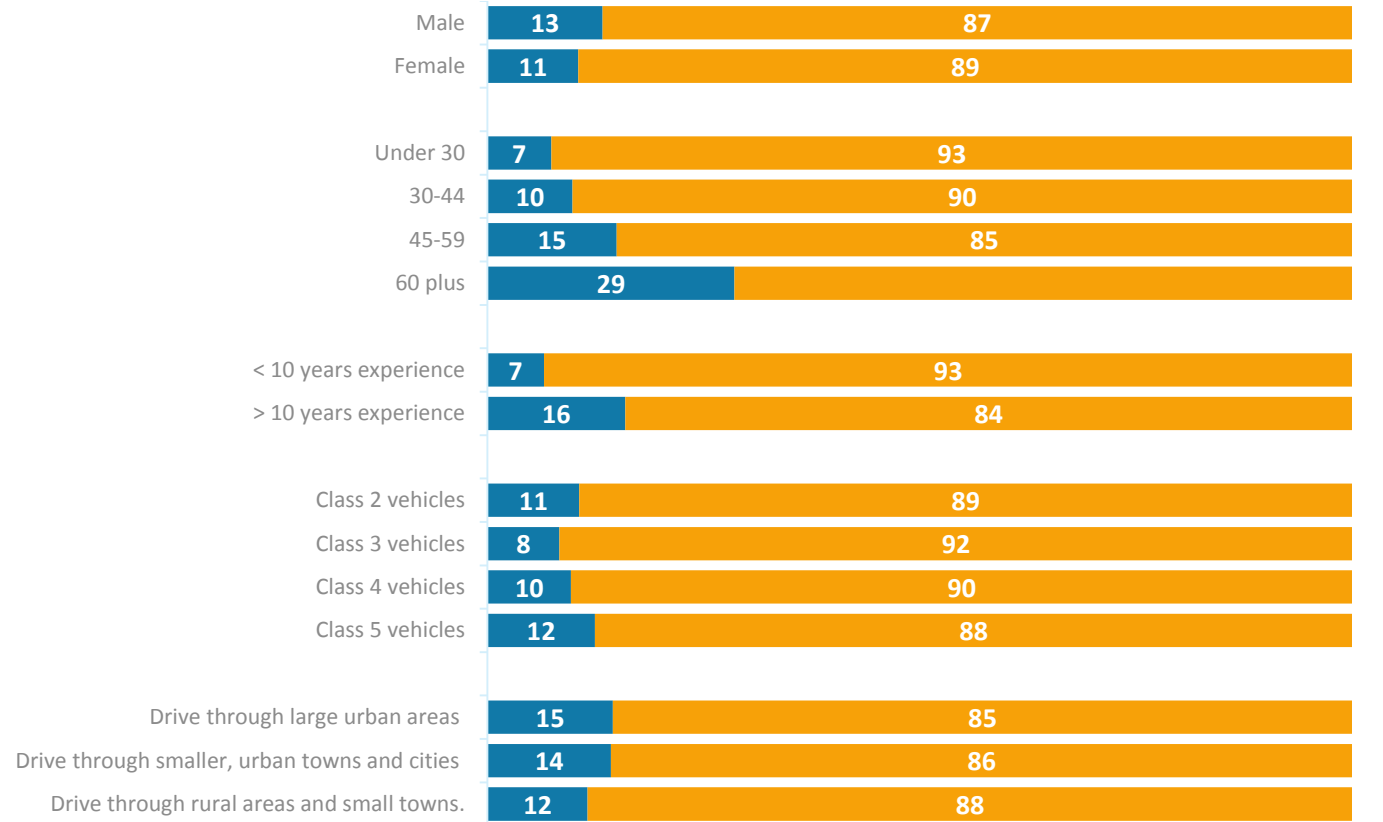
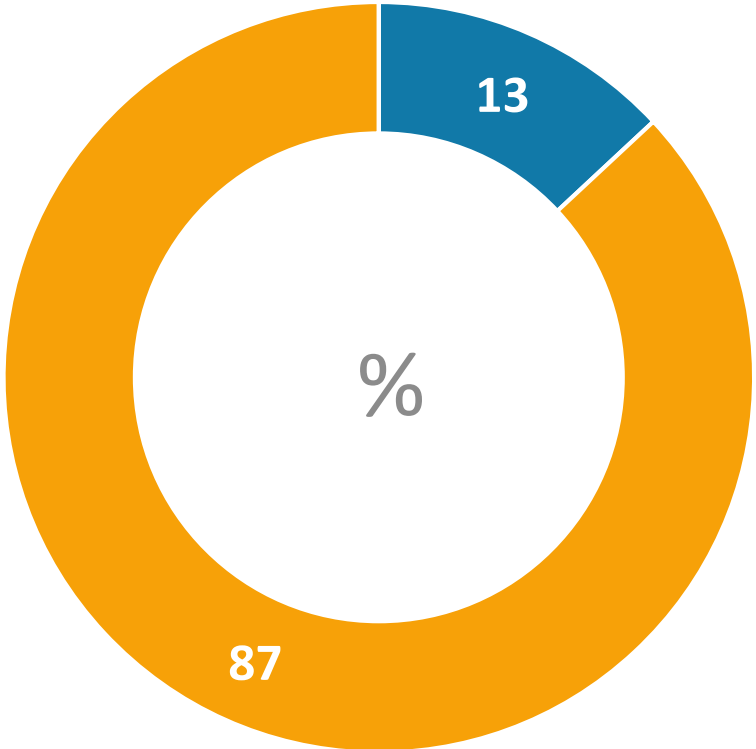
Knew gate was closed further up the line.

If the track is clear and there is a large incline at the stop sign and I am fully loaded.

Incidents or near misses with a train at a railway level crossing



Have you been involved in an incident or a near miss with a train at a railway level crossing?



■ Yes ■ No ■ Unsure

Base n=199 (all respondents)



Incidents or near misses with a train at a railway level crossing (open ended)

Participants who had been involved in a near miss or an incident with a train(13%) were asked to briefly describe the incident/s.

The most common reason for being involved in a near miss or incident was poor visibility. Participants had not seen the train, due to:

- Sunstrike.
- Fog; which also deadens sound.
- Vegetation and / or obstructions down the line.

In a few cases, drivers described incidents they had witnessed. For example, when other vehicles had near misses, due to poor driving or inattention.

Was driving passenger service vehicle and approaching a in controlled crossing where it is law that I must come to a complete stop which I did, and a train was approaching. When I stopped two cars passed me on the crossing on double yellow lines.

Whilst waiting at a level crossing in Rakaia a motorist passed me in front of approaching goods train.

One participant was in a train which hit a vehicle.

I was the locomotive engineer when a car pulled out of a private siding he stopped, and then thought he could beat the train and I took him out. this is one of many incidents or near missis I had as an engineer

Other scenarios included:

- Being distracted by music or other people in the cab.
- One driver admitted he had been young and drunk; they had not seen or heard the bells and lights.
- Stalling.
- A short distance between the intersection and tracks (as discussed earlier in this document).
- Poor positioning of a roundabout; short distance between the roundabout and the tracks.
- Bells and/ or lights had been turned off or were broken.
- Short time between the lights flashing and the barrier arms coming down.

Incidents or near misses with a train at a railway level crossing (verbatim)

40+ years ago. was drunk coming back from the pub & had music blasting. Didn't hear train or see lights

45 years ago. Car stalled as I began crossing tracks in an uphill direction on a rough gravel road. Tracks cleared by using starter motor with car in reverse gear to allow oncoming train safely past. (manual gearbox car)

A near miss about two years ago the bells were off because of the time of day in a town and the lights failed, I had plenty of room but was not impressed and lights should have a back-up system or if the lights fail the bells go automatically regardless of the time.

2016, 2 am Orari level crossing, I came from Highway one, with my Bdouble, not too heavy, after turning I accelerated to go over the railway crossing when the lights started so I decided to break. Luckily, I was not full 46 tonne, so I stopped very close to the barriers but still 20 cm clear of them. they came down immediately. Then the train passed very fast after that. I have the video somewhere. Scary. If I was full (45 tonne) I would have no time to break to stop on time, I would probably would have decided to accelerate while the lights were on to pass fast. I did not know that on that occasion the lights, barriers and train was a very fast sequence!

Coming out of Matura freezing works cattle plant in Southland. Had to stop to wait for gap in traffic on SH1. Trailer is still on tracks. Heard train sound horn so pulled out into traffic.

With a truck just stopped in time with the barrier arm over my truck. or I may have just stopped to far forward of the white line, but yes that's a bit close.

Crossing with no lights or bells only stop sign. I stopped and looked but the distances that could be seen from my heavy vehicle due to trees etc wasn't much and as I got part way across a train came and I only just got through in time.

I witnessed an uncle of mine hit a train in his bulk truck and trailer in Normanby 20 years ago it use to be very hard seeing the train approaching from the north due to the large trees they use to have back then. There was also no lights and signals back then.

Uncontrolled rural crossing and did not see the train approaching because of the angle of the road and track intersection. Had room to get across but could easily have been a serious incident.

Lights were not working/ going. crossing had no bars and sun strike, lead to my wife giving the all clear when a train was actually approaching.

Mt Maunganui Bay Park roundabout where the railroad crosses the roundabout near miss..

Was at a level crossing where I could not see far enough down the track to left side of the Truck! Due to the approach of the road being a Tight "S" configuration. I stopped the vehicle Checked as much as I could (standing up from the driver's seat) to see down track and then began to cross thinking it was clear ... then herd the Train Horn Sound! And "Backed the Truck Up" Fast! Would like to Thank the Train Driver for the horn that day. He Saved My Life!

Tree covered view so couldn't see train coming lucky got over before train

Railway level crossing safety communication



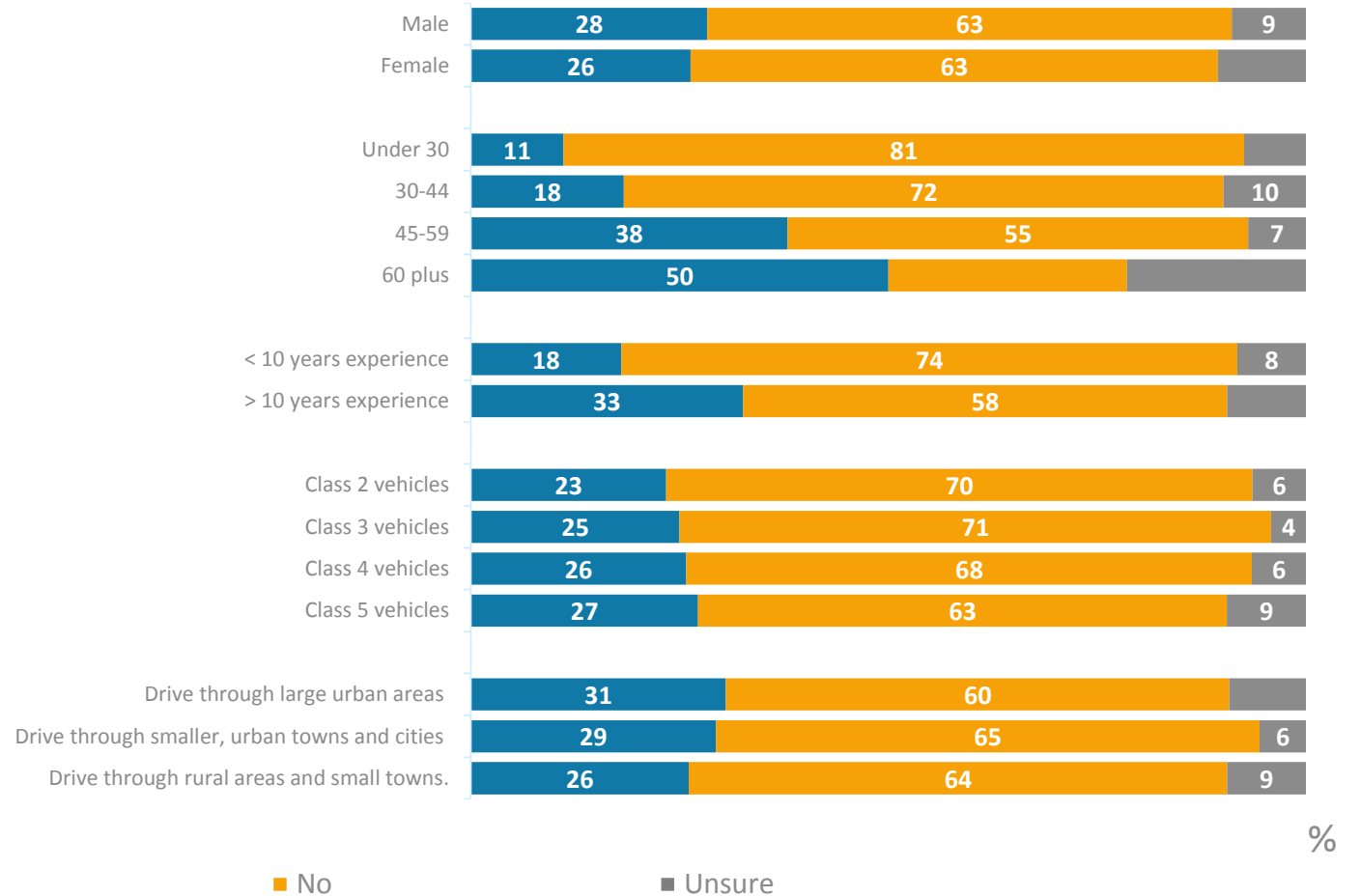
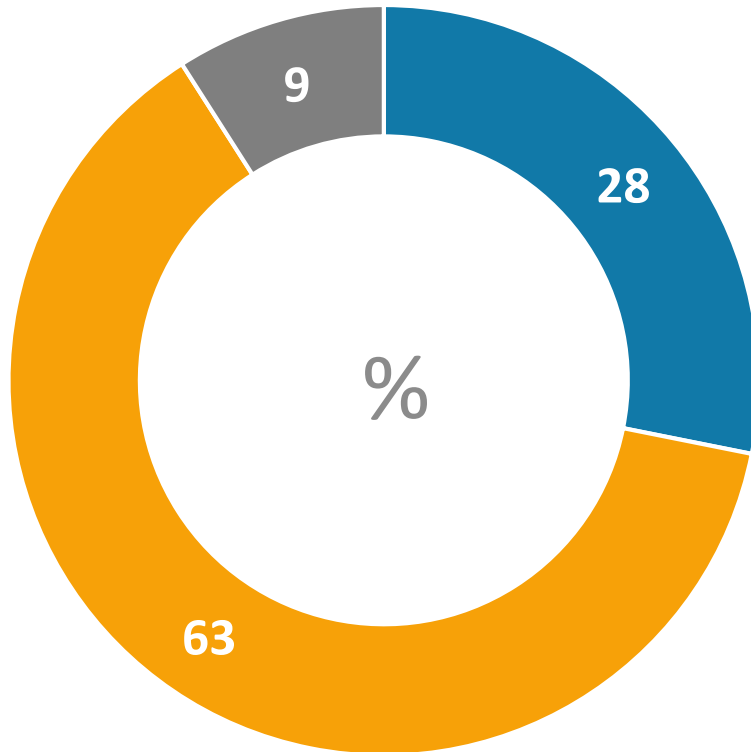
Key findings

- Below a third (28%) were aware/recalled any safety messages or advertising with two thirds (63%) declaring they were not aware and 9% were unsure.
 - Those with more experience (>10 years) were more likely to recall these messages or advertising (33%).
 - Those with less than 10 years experience were less likely (18%).
- Those who recalled safety messages or advertising generally recalled these on roadside billboards or signs near the railway lines or crossings.
 - Campaigns included:
 - Expect trains at any time, anywhere
 - Watch for trains/expect trains/be aware of trains
 - Make sure there is enough room
- Some recalled the messages and or advertising on television and online.
- Several recalled messages or advertising but could not recall where they had seen them.
- Respondents also mentioned that some campaigns were generic and they were not specifically targeted at heavy vehicle drivers.
- All respondents were asked to express their view on the best methods to get safety messages through to heavy vehicle drivers.
- Most frequently suggested approach was to educate and train both while they are achieving their license and later on in their careers.
- Participants declared a multi media approach to get messages through. These included:
 - TV and radio advertising
 - Print advertising (including roadside billboards, on trucks themselves etc.)
 - Online, websites, social media
 - Text messaging/apps/GPS systems
 - Reward systems
- Ideas around potential messaging were also mentioned:
 - Graphics images of past near misses or incidents
 - Reminders of loved ones waiting at home
 - Continuation of current messaging.
- Respondents also felt that car drivers also needed to be educated and reminders as well as more infrastructural improvements (e.g. more signage/warnings).

Recall of rail safety message and advertising



Can you recall any rail safety messages or advertising aimed at heavy vehicle drivers that you have seen, read or heard?



■ Yes

■ No

■ Unsure

%

Base n=199 (all respondents)

Recall of rail safety messaging and advertising (open ended)

Participants who recalled rail safety messages or advertising aimed at heavy vehicle drivers they had seen, read or heard (28%) were asked to describe what the messaging was about and where they had seen it.

Overall, participants recalled a variety of campaigns in various media, though some campaigns were generic - aimed at the general public, rather than at heavy vehicle drivers specifically. Also, it is possible that participants might not have always recall messaging and advertising accurately or in the right medium. They are included here to show what people remember and where and which channels which may be potentially valuable for future campaigns.

The most mentioned (n=53) rail safety messaging recalled was on **roadside billboards or signs**, near the railway lines or crossings. Some participants recalled seeing billboards with visuals of trains, but could not recall specific messaging, but others described specific campaigns (or notices):

Campaigns included: expect trains any time, anywhere (n=6), watch for trains/ expect trains / be aware of trains (n=5) make sure there is enough room (n=2)

Signage or warnings included: 9 meters to the road intersections, warning that trains do not stop at railway level crossings and that trains can't stop quickly and warnings about overhead lines and bridges (Tauranga), railway crossing ahead (n=3) and when the Auckland line was electrified.

Five participants thought they remembered seeing something on **television**, including an ad showing vehicles ignoring bells and alarms and reminders of stoppings distances and blind spots. A couple mentioned seeing publicity which always follows a train (and any vehicle or person) incident, while others described generic NZ rail campaigns.

Six participants recalled seeing items **online**, including on the TrackSafe FaceBook page and website and YouTube videos of accidents and cars racing to beat trains, trucks trapped on railway lines, a trailer across the tracks cut in half and information about stopping distances and blind spots.

One respondent recalled seeing a **video** about life as a train engineer.

A couple had seen advertising / items in **Trucking / Roading magazines** (publications) and, others, notices / information at their **place of work**.

Several recalled messages and campaigns, but could not remember where they had seen them. These included generic messages about heavy vehicles and rail crossings / being aware of rail crossings / checking twice / checking both ways.

Three knew they had seen something, but had no recall of media or message.

Two participant recalled messaging which said "I can't stop for you, but you can stop me for me", while two others described messaging around 'conscious crossing'.

One participant mentioned the Chris Cairns campaign (as a generic rail safety message campaign).

While not directly relevant, footage in print or visual media, following an accident or near miss, was memorable and 'real'.

Recall of rail safety messaging and advertising (verbatim)

A large notice board of a DL locomotive saying expect trains anywhere anytime.

A tv advert showing vehicles ignoring bells/arms etc. A HiAce van contractor vehicle comes to mind from a few years ago.

It was due to the recent truck car accidents in news involving trains plus I've lost friend who got sucked under being too close to the tracks when shunter passed.

It was a while ago, and may not have even been in NZ, would have been on FB LOL. Sure, it was a truck heading across a level crossing as if it was a car racing to beat the train.

Message was about overhead lines and bridges and was on a sign near Tauranga.

Slogan says. I can't stop for you, but you can stop for me.

Roadside signs, "Expect trains" prior to rail crossings. South Island between Christchurch & Picton.

Yes, I've seen a bit on social media fb TrackSafe page Look for Trains.

There was a photo of a truck on a billboard reminding drivers not to cross if there was insufficient space on other side of rail crossing.

The conscious crossing one for pedestrians was a good one too.

Unsure if it was directed at heavy vehicle drivers but was something about anywhere at any time and to expect trains at all level crossings

Was on YouTube, a truck had gone onto the tracks without allowing traffic in front to give him room to clear tracks train cut his unit in half.

The maximum distance allowed on the Kirk Road intersection regarding safely stopping on other side of rail crossing.

Signs saying be aware of trains. Watch for trains.

Train billboard the same size of the train on the level crossing with just stop signs.

I can't remember but I have seen them

Chris Cairns on a bill board at crossing at Tangiwai.

Ensuring that we have enough room on the other side when crossing railways.

The "expect more trains" campaign on billboards

Communicating railway level crossing safety messages to HVG drivers (open ended)

All participants were then asked what, in their view, is the best way of getting safety messages to heavy vehicle drivers. Participants had numerous suggestions, though the most frequently mentioned was education and training to change the mindset and behaviours of heavy vehicle drivers, both when working towards achieving their HGV license and top up or reminders later on.

While it is expected that national (representative) bodies (e.g. Trucking Association and NR) and training organisations will oversee training and education, workplaces and truck stops can help to support messaging and reinforce safe and defensive driving practices.

Ideally, participants would like a multi-media approach, with potential communication channels including”

- TV and radio advertising;
- Print advertising e.g. in trade publications and on the front pages of log books;
- On trucks themselves; rear of trailers and mud-flaps;
- Online; websites, social media; truckie Facebook groups;
- Roadside billboards and signage, including messaging around clearance space / distances between intersections and tracks.
- Text messaging / Apps / GPS systems with warning messages and alternative routes etc.
- Rewards system; recognising positive and safe driving.

Potential messaging might include:

- Graphic images of past near misses or incidents between trains and trucks and news coverage which reminds people it can happen to anyone.
- Reminders of loved ones waiting at home.
- Continuation of current messaging, for example, train stopping distances and that they cannot always stop.

One point of view was that it was not the truck drivers who were generally at fault or who were the problem, and that car drivers needed to be reminded of traffic rules and warned against idiotic driving. Also important is educating car drivers about why trucks have to do certain things (e.g. stop behind the tracks and not at the intersection or that they may sometimes be forced to force their way into traffic.)

Another view was that education and communication can only go so far and that some of the responsibility lay with improving roading infrastructure. For example, more signage/ warnings, better visibility (cutting back of vegetation which obstructs viewpoints) and installation of more bells, lights and barriers and improved technology (display boards with train arrival times and advance warning to train drivers that there is something on the track.)

Communicating railway level crossing safety messages to HVG drivers (verbatim)

A 4 x 2 plank... but for the smarter ones the involvement of Representative Bodies like Trucking Assn and NRC, signage on the rear of Trailer Units, roadside signs in areas with "suspect" crossings.

Advertising, routine education sessions through their employer, driver training and reassessment at least every 2 years would be a good standard.

Billboards near railways are good. The front cover of logbooks would be a good place too. Signs on the backs of trucks. How about a website where you upload photos of the wife and kids onto a picture of a crossing and get a free laminated photo posted to the cab showing your family reminding you to be safe near crossings..

Facebook truck groups, workplace notice boards and emailed to shift supervisors to bring up at pre-shift meetings.

Appeal to the "professional" "master" "responsible" operator and the "common sense" of it versus the "she'll be alright" and the "I am never the one to blame" and "the word is against me" BS that some carry around.

In my case I am often directed onto unfamiliar roads where I don't know if I am approaching a crossing till I get there. Then it is deciding if I have enough clearance. Maybe extra signage on those crossings where it is known to be lacking in clearance

Possibly more questions in licence testing when doing class 2-5 and more training around not just crossing when bells aren't going as sometimes bells will start ringing just as you enter the crossing and barrier arms can come down onto the trucks and especially the trailers as you and still moving over the crossing.

I wouldn't have thought THEY were the issue to be honest, thought the drivers would be very aware of dangers of a big heavy vehicle with no steering to boot coming at them! Put it on their Employers to enforce... ring companies of trucks involved and target them individually... it'll spread.

Graphic images of accidents I witnessed a train hit my uncles truck and trailer 20 years ago and I still have flash backs today of that crash when around level crossings. It's a sad reminder every time. But it's always a wake up call. If that's what it takes, then that what it takes.

Some sentences regarding "your loved ones want to see back home tonight not to hospital"

News coverage to truck accidents with the message that it can happen to anyone, even to the best professionals when they have a distraction or became complacent.

Huge signs everywhere gently reminding drivers of dangers and offering solutions..

I wouldn't have thought THEY were the issue to be honest, thought the drivers would be very aware of dangers of a big heavy vehicle with no steering to boot coming at them! Put it on their Employers to enforce... ring companies of trucks involved and target them individually... it'll spread.

Initially it should be part of obtaining their heavy vehicle licence. Other than that, I guess a hard-punching advertising program on all forms of media.

Personally, I think most heavy vehicle drivers do as much as we can safety wise around railway crossings.

Wall posters at truck stops and parks.

You have asked one of the hardest questions and as a truck driver: driver instructor for cars and trucks and as a first responder with St John. I don't know. I would like to think if people could (discipline themselves to be patient) what a wonderful world we would have... but the only way you will get people to change their driver behaviour is (fines.)

Statement testing

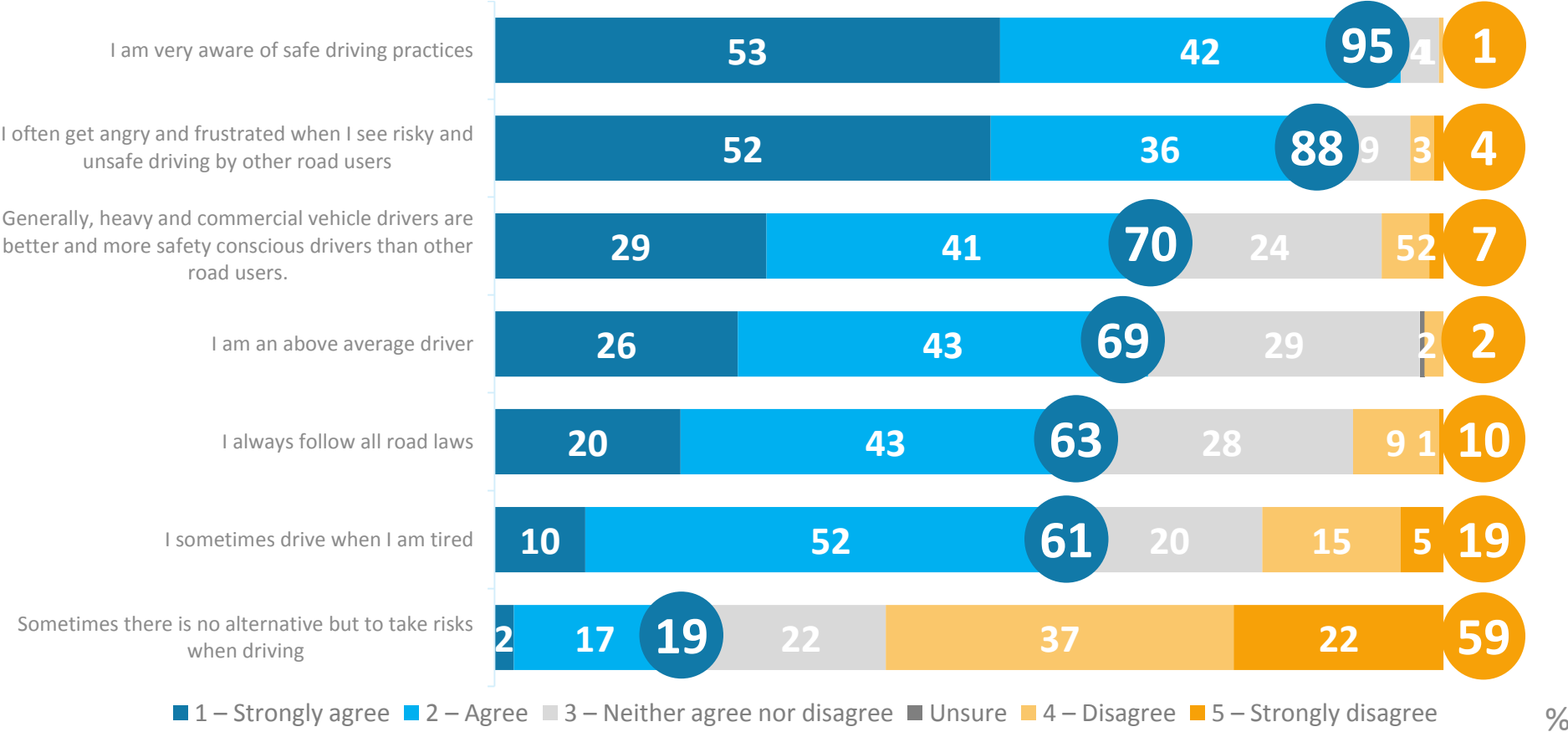


Key findings

- Seven statements around driving habits were tested among all respondents and almost all (95%) agreed that they are very aware of safe driving practices.
- The least agreed statement was, 'sometimes there is no alternative but to take risks when driving', with only 19% agreeing with this statement.
- A clear majority agreed with all other statements:
 - A clear majority (88%) agreed that they often get angry and frustrated when they see risky and unsafe driving by other road users.
 - 70% agreed that heavy and commercial vehicle drivers are generally better and more safety conscious than other road users.
 - 69% agreed that they are an above average driver.
 - Around two thirds (63%) agreed they follow all road laws and 61% agreed that they sometimes drive when they are tired.

Statement testing – driving habits

Using a 1 to 5 scale where 1 means ‘strongly agree’ and 5 means ‘strongly disagree’, how much do you agree or disagree with the following statements about your own driving



Base n=199 (all respondents)



Demographics



Demographics

Gender

	(%)
Male	90
Female	10

Age

	(%)
Under 30	14
30-44	36
45-59	44
60 plus	7

Experience*

	(%)
Less than a year	1
1-2 years	2
2-5 years	11
5-10 years	17
More than 10 years	69

Types of vehicles driven*

	(%)
2 – medium rigid vehicles	24
3 – medium combination vehicles	12
4 – heavy rigid vehicles	31
5 – heavy combination vehicles.	85

Areas regularly driven*

	(%)
Large urban areas e.g. Auckland, Hamilton, Tauranga, Wellington, Christchurch, Dunedin	66
Smaller, urban towns and cities e.g. New Plymouth, Napier/Hastings, Blenheim, Timaru, Invercargill	63
Rural areas and small towns.	69

Availability for focus groups

	(%)
Yes	80
No	20

*Multi response questions, thus total may not add up to 100%