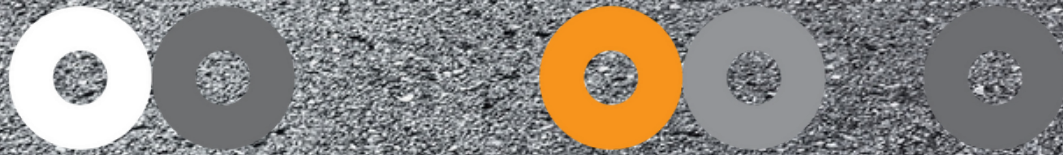




TRANSAFEWA

TRANSPORT.SAFETY.COMPLIANCE



A SAFETY TRUCK RESOURCE
SERVICING WA

Final Report

5th July 2023

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Thank you

Introduction

TRANSafe WA is committed to a safe, professional and sustainable road transport industry that protects its employees and the broader community.

TRANSafe WA is a not-for-profit industry initiative with the vision of aiding the delivery of safer transport industry workplaces and roads by fostering and promoting safer practices.

Operational since November 2012, TRANSafe WA has built a significant membership and subscriber base of road transport industry stakeholders and has delivered events and projects for both the road transport industry and the general public focused on safe heavy vehicle operations and interactions.

TRANSafe WA has held Road Transport Industry Safety Forums in Perth, Geraldton, Albany, Bunbury, Kalgoorlie, Karratha, Port Hedland and Esperance.

TRANSafe WA has a clear strategy, solid leadership and a strong evidence base to deliver measurable and positive road safety outcomes.



Project Objective

TRANSafe WA aimed to build a Safety Truck resource comprising a prime mover and customised trailer/mobile classroom. This safety education beacon will be on-road continually travelling to schools and community events across WA educating current and future road users how to share the road safely with heavy vehicles.

iNSTRUCKTA!



Project Background

TRANSafe WA was funded by the National Heavy Vehicle Regulator's (NHVR) Heavy Vehicle Safety Initiative (HVSII), supported by the Australian Government to deliver a dedicated safety truck that would help to educate current and future road users on how to safely interact with heavy vehicles.

Following two years of research and consultation with 22+ agencies and industry stakeholders, TRANSafe WA's gap analysis showed that no other road safety organisation in the region delivered consistent safety messaging into schools and the community focused on safe interaction with heavy vehicles.

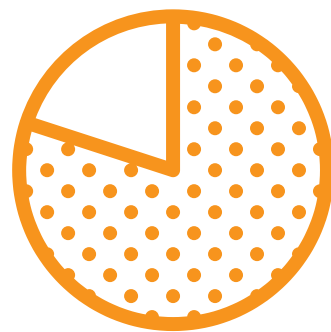
As the Australian freight task triples by 2050 matching population growth (a predicted 34million by 2040[1]), it is imperative this education is delivered in order to ensure related fatalities and serious injuries trend downwards rather than up.



We have a growing freight task in Western Australia, and a cohort of current and future road users who are not confident sharing the road with heavy vehicles.



The volume of heavy vehicles on our roads is steadily increasing with projections that the number of trucks will double in the next 9 years, and treble by 2050.



78.3 percent of fatal accidents involving cars and trucks in Australia are deemed to be the fault of the car driver, not the heavy vehicle driver (NTARC, 2021).

[1] Australian Bureau of Statistics, 2018

The Problem

When you sit your driver's licence test, there are zero questions that relate to trucks – their size and capacity at certain speeds, momentum and blind spots.

Some of the world's largest truck combinations share the same environment with our vulnerable road users. Triple and quad trailer road-trains haul vast quantities of raw materials and livestock on roads that also lead tourists to drawcard destinations in WA.

Nineteen people died on WA roads in 2018 as a result of truck and light vehicle crashes. The proportion of not-at-fault fatal truck and car crashes has been a widely quoted statistic from the National Truck Accident Research Centre (NTARC) report. In 2022 this proportion decreased to trucks being not at fault in 70% of fatal truck and car crashes. This is the lowest in the history of recording this statistic however it still reflects that in the significant majority of these crashes, the truck is **not at fault**.^[1]

"The biggest issue is people don't understand how trucks work... A 17 year old kid gets their licence, they've got no education at all on trucks or why they just can't stop when you pull in front of them, so they do the wrong thing, get killed, and it's the truckie who cops the blame... who sees it in his nightmares for the rest of his life."
Road Safety Advocate and Truck Driver Rod Hannifey, RV Daily, 2020

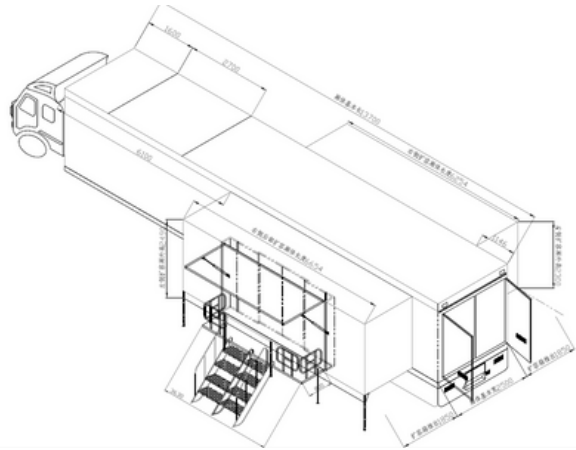


[1] NTARC, 2022 Major Accident Investigation Report

Design and Build

Trailer Build

The order for the custom-built double expanding exhibition trailer was placed in April 2021 and was delivered in June 2022. Further work was then undertaken to meet Australian Design Rules (ADR) and licensing was achieved in September 2022. Phase two of the build which included the interior education space fit out and drivers' accommodation area was completed in November 2022. The purple paint was applied in December and the application of the graphics and technology install was completed in January 2023.



Design and Build

Educational Content

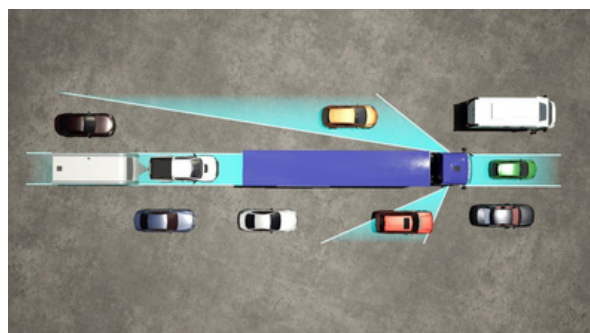
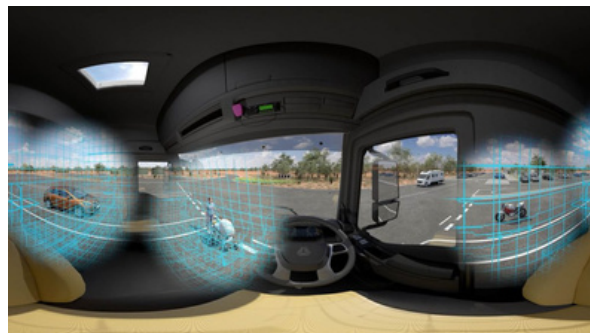
The virtual reality, touch screen quiz and projector screen content development started in May 2022 and was delivered in January 2023.

The specification from the start was defined and clear. For the VR experience, one part of the challenge was to create realistic road scenes that were true to the Western Australian landscape and roads. Modelling the background environment with realistic road surfaces and landmarks was important.

The next step was to re-create the truck, other road users and vehicles in VR. The interior of the truck was modelled to be as close as possible to the actual truck that was going to be touring around the state. Once the bulk of the modelling was done the development team started creating the required interactions in the animation, taking into account the physics around speeds and braking distances.

The final part of the puzzle was then to build a centralised server set up that would allow us to start the animations playing across all the VR headsets simultaneously. The caveat with that was it also all had to work offline as at some locations there would be very poor or no internet coverage.

Alongside the VR application and server set up, a browser-based quiz was created that would be played on multiple tablets in the trailer whilst other participants were using the VR. The multi-choice quiz was designed to provide information and present it in a fun quiz format where the key take-aways would be remembered.



Launch

On the 25th of January 2023, TRANSAFE WA held a Gala event to celebrate the launch of iNSTRUCKTA! The event was held on the banks of the Swan River at Burswood On Swan and was attended by 170 guests who were the first to experience the virtual reality learnings, touch screen quizzes and the projection wall learning experiences.



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Events

3,600

iNSTRUCKTA! has already attended 12 events to date with over 3,600 participants experiencing the resource so far.

Project Reach

iNSTRUCKTA! has already started touring to community, education and industry events to help educate current and future road users on how to safely interact with heavy vehicles.

iNSTRUCKTA!'s event calendar is almost full for 2023 and bookings are already being taken for 2024.

Since launching in late January 2023, iNSTRUCKTA! has attended the following events:

- Eaton Foreshore Festival
- Kalgoorlie-Boulder Community Fair
- Merredin Agricultural Show
- Donnybrook Apple Festival
- Bunbury Agricultural Society Show
- Harvey Agricultural Show
- Serpentine-Jarrahdale Food and Farm Alliance Show
- 'Road Safety Starts with Me' Youth Summit
- TRANSAFE WA Fatality Free Friday Event
- Mullewa Muster and Rodeo
- Coca Cola Family Day
- Bruce Rock S.O.C.K Week Event



Lessons Learned

INSTRUCKTA! has now been operational for a period of 5 months and during this time we have been able to assess most aspects of the project.

What worked well

- Concept and initial scope of work
- Industry consultation
- Curiosity evoking branding and style guide
- Engagement of suitably experienced vendors
- Overall design of the custom built double expanding trailer
- Engagement of expert local trailer certification and repairer
- Engagement of expert trailer interior outfitter
- Support of in-kind products and services provided
- Educational content developed by subject matter expert
- Electronic hardware choices for education delivery
- Sponsorship of prime mover
- Use of existing educational content from road safety partners
- Scope for additional message delivery on unused wall space
- Efficiency of trailer setup and pack down

What didn't work as well

- Building a trailer offshore during the Covid-19 pandemic and not being able to conduct site visits
- Language barrier with manufacturer
- Shipping delays and additional costs
- Methodology for measuring efficiency of learnings
- Uptake of Pledge screen use
- Initial use of VR headsets until kiosk mode was accessed
- Recruiting of a full-time Driver/Educator in a climate of driver shortages
- Demand of predominantly weekend event bookings

Outcomes

TRANSafe WA's objective was to build a dedicated safety truck resource that will travel to schools and community events across WA, educating current and future road users how to share the road safely with heavy vehicles.

We have been able to 100% fulfill this objective with the successful delivery of the safety truck iNSTRUCKTA!

iNSTRUCKTA! has already attended numerous events with bookings already into 2024.

At this point it is too early to measure if we have been able to reduce the number of unsafe interactions between light vehicle and heavy vehicles, but the verbal feedback from those who have participated in the iNSTRUCKTA! experience has been 100% positive to date. The online feedback from the general public and heavy vehicle drivers has also been 100% positive.

Kim - Should be shown to everyone getting their licence.

Shane - Congratulations Transafe WA, it's a great initiative.

John - It should be done before anyone gets a driver's license.

Jen - It was fantastic!! Glad I dropped in.

Kimwel - Wow! That's awesome!

Heather - Was very good! Thanks!

Coleen - This is a brilliant initiative to start the learning process for LVs. It would be great if this became part of the licensing process with a test before getting P plates.

In addition to the delivery of education on safer interaction with heavy vehicles, we are also helping to address the current heavy vehicle driver shortage. We are urging our current and future drivers to consider a career in the road transport industry.



Appendix

Media Coverage and links

7NEWS Perth: <https://www.facebook.com/watch/?v=1488568054825985&ref=sharing>
Logistics & Defence Skills Council: <https://www.ldsc.asn.au/latest-news/instruckta-was-critical-need-for-increased-truck-safety-education>
WA Transport Magazine: https://issuu.com/angrychicken/docs/wa_transport_mag_july_2021/1
WA Transport Magazine: https://issuu.com/angrychicken/docs/watransmag_april2023
Trailer Magazine: <https://www.trailermag.com.au/jost-donates-fifth-wheel-to-safety-initiative/>
Trailer Magazine: <https://www.trailermag.com.au/qube-partners-with-transafe-wa/>
Trailer Magazine: <https://www.trailermag.com.au/innovative-road-safety-truck-to-roll-out-in-wa-later-this-year/>
3D Walkabout: <https://3dwalkabout.com.au/project/vr-road-safety-instruckta/>
ATN: <https://www.fullyloaded.com.au/industry-news/2105/wa-bringing-instruckta-to-bear-on-motorists-truck-safety>
Centrewest: <https://www.centrewest.com.au/centrewest-sponsors-launch-of-new-safety-truck-initiative/>
National Road Safety Partnership Program: <https://www.nrspp.org.au/2021/06/07/educational-truck-to-hit-wa-roads-from-november/>
Owner Driver: <https://www.ownerdriver.com.au/industry-news/2302/transafe-wa-launches-road-transport-industry-safety-truck-instruckta!>
CBH Group: https://www.cbh.com.au/media-releases/2022/12/20221202_cbh_instruckta_partnership_announcement
Prime Mover Magazine: <https://primemovermag.com.au/instruckta-safety-project-launches-in-wa/>
Prime Mover Magazine: <https://primemovermag.com.au/major-agriculture-cooperative-partners-with-instruckta-safety-project/>
RV Solutions: <https://rvsolutionswa.com.au/blog/our-biggest-build-yet-instruckta/>
Trade Trucks: <https://www.tradetrucks.com.au/industry-news/2302/instruckta-safety-truck-hits-the-road-for-transafe-in-western-australia>
ABC News: <https://www.abc.net.au/news/2023-05-16/truck-drivers-fear-for-their-safety-on-the-road/102348192>
Alcolizer: <https://www.alcolizer.com/transafe-wa-instruckta-visits-alcolizer-technology/>

TRANSafe WA Website: <https://transafewa.com.au/>
iNSTRUCKTA! Website: <https://www.instruckta.com/>
iNSTRUCKTA! Facebook: <https://www.facebook.com/instruckta/>
TRANSafe WA Facebook: <https://www.facebook.com/TransafeWA>
TRANSafe WA LinkedIn: <https://www.linkedin.com/company/transafe-wa/?originalSubdomain=au>
YouTube: <https://www.youtube.com/channel/UCHB9-c8osVNJRQmS-gVaPrw?app=desktop>
iNSTRUCKTA! Virtual Tour: <https://matterport.com/discover/space/iN9yW1HhxJZ>

Thank you

We thank the National Heavy Vehicle Regulator for the grant funding accessed via the Heavy Vehicle Safety Initiative (Rounds 3 and 5) and we thank all of our TRANSafe WA Safety Partners for their ongoing support of TRANSafe WA.

Valued Safety Partners provide the ongoing funding to enable TRANSafe WA to operate and continue to deliver great road transport industry safety initiatives like iNSTRUCKTA!, Road Transport Industry Safety Forums and the 'GIVE A TRU*K' campaign.



Acknowledgements

The Safety Truck project would not have been possible without the contributions of the Founding TRANSafe WA Chairperson, the late Steve Post, current Chairperson Niomi Hurley, TRANSafe WA Committee of Management past and present, Executive Officer's Ana Stachewicz and Rob Sharpe, Project Officer Lara Churton-Hughes, Administration Officers Clarice Cartledge and Sheridan Cooper.

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