PETER HART

Are you getting the most from your trailers?

IN DEPTH: ROLL OVER WHILE TIPPING

NTARC 2019 data.

ROLLOVER WHILE TIPPING

Roll overs which occur while unloading tippers have consistently represented around one in every twenty large losses.

It is important to highlight that tipping losses which occurred as the result of another identifiable cause, such as where a structural failure triggers (rather than results from) a roll-over, are categorised as such. As such, these 5% of losses only capture where there was no identifiable driver behaviour or other factors contributing to the incident and, as such, the event took place:

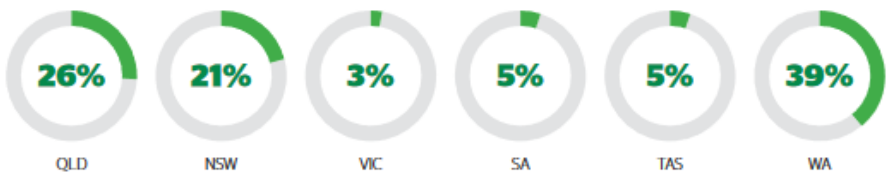
- On substantially flat, firm and level ground;
- In the absence of excessively high wind; and
- Without any driver error, such as backing over already tipped material.

It is not often that the data supports focussing in on an issue down to a specific task in a specific region, however in examining rolled while tipping losses a particular issue rapidly became apparent. 40% of these losses occurred in Western Australia and the vast majority of these occurred in a radius of between 50 and 350km around Perth.

These losses all involved multi-combination tippers carrying fertilisers/soil conditioners for agricultural use, predominantly lime sand. Lime sand is used to increase the pH of soil, particularly in wheat growing areas.

The combination of a dense, 'sticky' load, the length of tipping bodies on semi-trailer tippers, and the lack of torsional coupling between units due to the 50mm pin type coupling on dollies, resulted in somewhat of a perfect storm for tipping losses.

ROLLED WHILE TIPPING LOSSES BY STATE



I was recently looking at the NTARC (NTI) safety report for 2021. I often look at the NTARC series of reports to educate myself about Australia's heavy-vehicle safety in Australia. One statistic knocked me over. The proportion of large loss claims involving "roll over while tipping" is about 5 per cent.

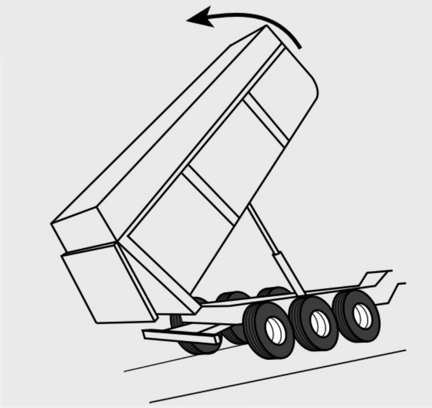
As shown in the report extract below, this category does not capture rollover incidents caused by driver error. The actual number of rollovers is greater than 7 per cent of NTI's large loss claims!

The report estimates that about 1 in 400 trucks will be involved in a large-loss insurance claim in any one year. So the rate for 'roll over while tipping' is 5 per cent of 400, which is 1 in 8000 insured vehicles. Just how many tip-trucks and tip trailers are there operating in Australia? A few years ago, ARTSA-i Data analysed the bodies on trucks and trailers that were registered in the NEVDIS database. The results showed about 7.5 per cent of trailers have the term 'tip' in the description. For rigid trucks the percentage was about 16 per cent. In total about 5 per cent of the registered vehicle fleet has a tipping function.

So, I conclude that each year, about 1 in 400 insured trucks with a tipping function will be involved in a large-loss insurance claim involving roll over whilst discharging the load of either the truck or connected trailer.

The NTARC safety report also identifies the jurisdictions where the 'roll over while tipping' events occurred. An estimated 39 per cent of the incidents occurred in Western Australia and most occurred within a 50km to 350km radius around Perth, WA. Wow! A quick Google search shows that only about 10 per cent of active mines in WA are within 350km of Perth, so this is not a mining industry problem. NTARC identified the contributing factors as:

- dense (ie heavy) and sticky loads;
- the length of tipping bodies on semi-trailers; and
- lack of torsional coupling between units due to the 50mm pin coupling on semi-trailer dolly trailers. I think this means the semi-trailer separated from the dolly trailer during the roll over event. Note that a dolly trailer is not roll coupled to the towing vehicle so the torsional loads cannot be passed forward.



Long tip trailers are vulnerable.

Add to that: long bodies (4-, 5- or 6-axle dog trailers or 14.6m semi-trailers); cross slope exceeding 5 degrees; over-zealous lifting of the body; moving of the vehicle with the body raised; sticky load, soft and uneven surface and high wind. There are no stabiliser legs for tip-trailer -they are dangerous machines.

Clearly the NTARC is concerned about the length and weight of loads on semi-trailer tippers. If a dolly trailer is involved, then the incident must have occurred on a combination vehicle. Indeed, NTARC is very clear about this. Around Perth, "these losses all involved multi-combination tippers carrying fertiliser/soil conditioners for agricultural use, predominantly lime sand." This safety problem seems mainly to exist in the agricultural sector. It may not be surprising to lean that many areas within a radius of 350km of Perth are recognised as poor because of soil acidification. But there are other regions in Australia with acidic soils. Many are in NSW and Victoria, also. Lime sand sticks so the load can be very high during tipping.

I started thinking about how the trailer EBS (TEBS) system on tipping trailers might be able help a driver to assess whether it is safe to tip. Since 2019 most new heavy trailers had to have a Vehicle Stability Control (VSC). This is an ABS with a roll stability program (as a minimum). The roll stability program protects against roll over during cornering, not tipping. The main trailer TEBS (another name for ABS + VSC+ intelligent brake control) suppliers can now provide enhancements that help the driver avoid 'tipping-rollover'. For example, the TEBS contains a lateral accelerometer. An electrical output can be programmed that is true when the cross slope exceeds a pre-set value. This can be used to halt the PTO operation. A separate output feature can be programmed to come on if the trailer is driven off with the body raised. TEBS unit may be able to control the air suspension (if fitted) and lower the bag height in preparation for tipping. Occupational Health and Safety regulations require that the rollover risk while tipping be controlled. Every tip-trailer with TEBS should have these interlocks installed.

The safety features are there for the asking. It would be difficult in court to argue that you forgot to ask!

More generally, the TEBS unit can be interrogated via a trailer mounted Information Module to report the history of roll stability interventions. For example, the Knorr Bremse Trailer Information Module (TIM) is shown below. Comparable units can be obtained from the other major suppliers Wabco and Haldex. The TEBS information can also be downloaded to the service workshop computer via a cable connection. The TIM information screen can also show the trailer mass via a calibration involving the air suspension bag pressures. It can also report wheel temperatures and tyre pressures on sensed wheels. I wonder how many operators are learning from their trailer EBS modules? I suspect it is only 10 per cent.

Dr Peter Hart,
ARTSA-I Life Member

Intervention and fault event readers are available for all Trailer EBS systems.

Key Points:

- ADR 38/05 has required a Vehicle Stability Control feature with an ABS on new trailers ("TEBS") since 1 July 2019.
- The TEBS has programmable features that help tip-trailer owners from rollover during tipping.
- In a court, it would be hard to defend not applying these safety interlock features.
- The TEBS can report a lot about the road performance of the trailer. The information is available virtually free of charge.

TONY MCMULLAN

The European ICE ban just melted

The recent back-flip by the European Union (EU) of its proposed banning of sales of new ICE (Internal Combustion Engine) vehicles by 2035 is a prime case why governments and regulators, should not attempt to pick winners when it comes to technology and technological solutions for industry.

The EU made its original decision to ban sales of new ICE vehicles by 2035, presumably based on social pressure and/or ill-informed advice.

The automotive industry's voice was largely ignored, well at least initially. As the legislation to ban ICE vehicle sales was being developed, one prominent EU country, Germany, realised that the impromptu ban would scuttle several promising zero emission vehicle technologies. Germany, followed by a number of other EU countries, including Italy, Poland, Bulgaria and the Czech Republic, objected to the proposed ICE ban. Together, these countries forced significant changes to proposed legislation, that saw the original ICE ban melt away. However, the carbon abatement outcome of the original plan has been retained.

So how did such an ill-conceived plan eventuate in the first place, why did the plan unravel and what is the EUs new position on ICE-powered vehicles?

The original European plan to ban the sale of new ICE engine vehicles by 2035 was developed in June 2022 by the European Commission and had initial support from all EU parliaments. The proposed new rules would not mean that all cars on the road have to produce zero CO_2 emissions by 2035. The draft plan did not affect existing cars. If a consumer purchased a new ICE vehicle prior to 2035 they would be able to drive it until the end of its lifespan. But, because the typical life span of a motor vehicle in Europe is 15 years, there was a need to start the exclusive sale of new zero emission vehicles in 2035 in an aim for all cars to be CO_2 neutral by 2050. However, the plan limited new vehicle sales from 2035 onward to be only battery, or hydrogen, electric.

Vehicle manufacturers objected to this, arguing that other technologies could also provide a carbon neutral transport solution. In particular, ICE engines powered by green hydrogen and renewal fuels. Further, vehicle OEMs pointed out that the EUs grand plan was most likely unachievable, with the pathway to mining enough raw materials to manufacture only battery, or hydrogen, electric vehicles by 2035, as yet unknown. While plans for the electrical power generation and the transmission grid expansion that would be required across Europe to support the peak demand for recharging the number of battery electric vehicles that the original 2035 zero emission plan would spawn was also unidentified by European governments.

The German Government saw that the issues raised by industry were valid and that the original proposal was technology limiting and Germany, along with some other concerned EU countries argued for an alternate plan. A plan that would be driven by outcomes and not by specific technologies.

The new plan that was agreed to by the 27-nation European bloc in late March 2023 now acknowledges the broader benefits that renewable fuels can provide, both across the existing vehicle fleet as well as new ICE powered vehicles, with the potential of significantly reducing road transport sector CO_2 emissions. The final plan ended weeks of discussions following the pushback by Germany and some other EU countries, who rightly pointed out that the original proposal was technology limiting. The key element of the bloc's new climate plans is that 2035 will mark the start of sales for 100 percent zero emission vehicles and new fossil fuel vehicle sales will be banned.

This means that battery electric, or hydrogen fuel cell vehicles will need to be sold beyond 2035. However, the changes to the original plan will now also allow the sale of new ICE powered vehicles that run on carbon-neutral fuels, or ICE engines that even run on green hydrogen. The plan is now about the emission result and not the specific technology required to achieve a zero-emission outcome.

Let this EU about-face be a lesson to governments across Australia, not to attempt to pick winning technologies, but rather set the policy outcomes that they require and let industry come up with a range of technical solutions to achieve those targets.

Tony McMullan
CEO, Truck Industry Council

PETER ANDERSON

Unlikely allies galvanise for transport reform

Like many of the state-based road transport associations, the VTA is a proud supporter of the Australian Road Transport Industrial Organisation (ARTIO), a national industrial body that represents the transport industry and its members before the Fair Work Commission.

ARTIO is the only registered employer organisation assigned solely with the representation of employers and prime contractors in the road transport industry, and for over 30 years ARTIO, in conjunction with its state branches, has represented thousands of members in major federal and state industrial cases.

As National Secretary of ARTIO, I was pleased to join a 15-strong delegation of industry representatives in Canberra recently as part of a concerted effort to urge legislators and regulators to enact much-needed transport industry reform.

Our delegation brought together unions, employer representatives, operators, and workers, who are united in our common advocacy and passion for reform, and to establish minimum standards of operation, cost, and people management within the road transport industry.

Reform is an issue you will hear the VTA and other like-minded industry groups talking about often this year, not least because it is so desperately needed, but because with the same political party now in government in every federal, state, and territory jurisdiction everywhere except Tasmania, there is a unique opportunity for consensus that will deliver the reforms we have been advocating for years.

Our Canberra delegation presented to over 40 ministers and members of parliament of every political persuasion to endorse proposed industry reforms that will improve safety and productivity for operators and transport workers. Much of this was borne out of the excellent work by Western Australia Senator Glenn Sterle, whose 2021 Without Trucks Australia Stops parliamentary report presented ten recommendations upon which unlikely allies like employer and employee representative groups have galvanized, in the interests of making our industry more viable, safe, sustainable, and efficient.

Of the recommendations in the Sterle Report, the VTA particularly welcomed the development of a national apprenticeship scheme to help attract workers to the sector, an expansion to ATSB powers to investigate commercial heavy vehicle road accidents, and the creation of an independent regulator to set minimum commercial vehicle costs.

We also welcomed the report's recommendation for creating an independent body for setting standards, resolving disputes, and establishing binding payment terms, which our delegation rallied behind in Canberra. Such a body would go a long way towards ending the rapid degradation and break down of values and working standards that gig economy 'employers' have created through their deployment of technology.

While convenient for some, it is undeniable that gig economy platforms and aggregators over time have reduced payment standards, entitlements and allowances for operators and transport workers. Any flexibility benefits espoused by their aggregators of working for these platforms are more than offset by low rates, absence of enshrined leave or superannuation benefits, or any collective representation.

Indeed, our Canberra delegation included gig economy workers and their families, who told stories of genuine hardship and even loss to ministers and parliamentarians, as part of our combined effort to enact reform when legislation is presented later this year.

These platforms represent a genuine risk to legitimate transport operators that have done the right thing by their customers, suppliers, and staff, only to be threatened by a largely faceless aggregator whose algorithms have no respect for the traditions and conventions upon which our industry was built. And while there may be a place for such businesses in the modern economy, it must not be to the detriment of transport operators and workers, and the minimum standards for safety, productivity, and efficiency they aspire to and deserve.

Now, more than ever, transport customers, operators, workers, representative groups, and even some of the more responsible gig companies are calling for the security of enforceable minimum industry standards.

Our Canberra delegation was united in our efforts to convince parliamentarians to vote in support of legislation later this year that would enshrine this into law. And while this delegation may not aways see eye-to-eye or agree on every issue, our unity in Canberra and on this critical issue going forward demonstrates how important it is for the legislators and the Federal Government to act.

Peter Anderson
CEO, VTA

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FRANK SANDY

Super women in transport

Our membership and industry statistics show more women are moving into transport, taking on jobs in logistics and management, as well as frontline roles such as driving. And it's easy to see the attraction. It's a growing industry with good jobs, solid benefits, and opportunities Australia-wide. However, there are particular retirement challenges for women.

On average, women retire with 24 per cent less super than their male counterparts. There are number of reasons why, but in general women often take extended time off work to raise children or care for family and friends. This means they are more likely to be employed in lower-paying jobs, or in casual or part-time roles.

Research conducted by TWUSUPER shows a high proportion of women in transport have low levels of savings and high levels of renting in later years. These factors can have a big impact on retirement income, and at worst it can leave women vulnerable, especially in the case of family breakdowns, illness or job loss.

To make matters worse, women often have to survive on their smaller super balances for longer, with most living four years more on average than men. These factors are perhaps why 34 per cent of single Australian women over 60 live in income poverty and make up a large chunk of the nation's homeless.

Apart from changing policy settings, there are things that can be done. Women can employ strategies to overcome some of the hurdles mentioned to build their super balances, which I will cover briefly.

- Voluntary contributions – even small ones – will top up super and make a huge difference later, thanks to compounding interest. And it won't cost as much as you think, as super is treated very well when it comes to tax. And paying it in as a "salary sacrifice" will even reduce income tax each year up to the annual cap of $27,500.
- There's also a lesser-known benefit, for partners to make a voluntary after-tax contribution into the super of a lower-income earning spouse or de facto partner. The person making the payment may benefit from a tax offset (reduction) of up to 18 per cent for contributions up to $3,000 per year. Payments above this are allowed, but tax concessions stop at that limit. The income threshold of the lower income partner is $40,000 with benefits tapping from $37,000 where there is a maximum tax offset of $540.
- Money in super is also taxed favourably when it comes to Centrelink asset tests for the Age Pension, so it makes sense for families to maximise the super in both partners' accounts.

Finally, something I've been banging on about is insurance in super – and it's a topic that impacts many people, and especially women. Insurance included with super as a default, such as death cover and permanent disablement cover (including illness) is designed to protect individuals and families.

Sadly, too often I see claims for families – and particularly women – left caring for children alone after a tragedy. It's awful – and perhaps the only small saving grace is that we can help with an insurance claim that can reduce financial stress at a terrible time. Most importantly, not all super funds cover transport jobs considered 'hazardous'. Those left uncovered include drivers, forklift operators, and mechanics. This means, when a claim is made, it is likely to be knocked back. TWUSUPER's insurance covers all transport jobs — so it is fit for purpose. You may want to have a workplace toolbox meeting for your valued staff for which we would be more than happy to help with. If you are in another super fund, talk to them, and you may want to check your insurance cover.

If you are a member of TWUSUPER, we can provide further guidance or advice based on your own unique circumstances. Please give us a call on 1800 222 071.

Frank Sandy
CEO, TWUSUPER