

# LONG TERM

**With another seven years to run, the longer semi-trailer trial continues to show up the benefits of extending trailers by two metres. In fact, the results are almost too good, reports Will Dalrymple**

**E**ight years after the scheme launched, and 18 months after it was augmented, the effect of the 2.05m extra length allowed – enough for four more UK pallets or six more cages on a single deck – is almost entirely positive, according to the latest report published in March 2020 ([www.is.gd/uporak](http://www.is.gd/uporak)).

Some 200 operators running 2,194 longer semi-trailers (LSTs) were participating in the trial as of report data cut-off of 31 December 2018. To have entered, operators must have acquired vehicle special orders for each trailer used, and every four months must submit usage data. Study units had, in total, travelled some 587 million km, over a total 4.7m journey legs. The trial is scheduled to end in 2022.

Though longer, and may suffer from greater swing-out on turns, the semi-trailers have been found to generally have as good or even better safety record than non-LSTs. LSTs were operated with a significantly lower rate of injury incidents per vehicle distance in public locations than the average for GB articulated HGVs on urban, A-roads and minor roads, the report states, and are at least as safe as HGVs on motorways. The number of damage incidents is more than seven times less that of non-LSTs.

As they point out, “there is no reason why LSTs should be safer” than regular-length trailers. The data patterns seen are explained as trialists treating LSTs differently to the rest of the fleet. The authors speculate that this is because the conditions imposed on them to participate in the trial, such as extra

training for drivers, extra administration, the additional cost of the units, which are borne by the operators.

In any case, since each trailer carries a larger load, fewer overall journeys are required to transport a given quantity of goods. That physical fact could be applied by decreasing fleet movements, or by packing in additional goods in the extra space, in so doing raising profits. Either benefit depends on the trailers being completely filled most of the time. The authors point out that participating fleets make sure to use that extra capacity by assigning them to high-utilisation routes, to help pay off the cost premium involved in buying them in the first place.

In any case, average savings in journeys has been 7.5%. More than half of operators reported between 10-14% savings; this group is dominated by bulk hauliers, according to the report. Those achieving middling savings of 6-9% improvements were 31% of operators; those in the lowest savings group of less than 5% were 16% of operators. The authors suggest that some of the operators in this group might have complex operational requirements that aren't picked up properly by the data collection regime, or have not been able to use the trailers efficiently perhaps because of losing a job.

In the latest report, the authors investigated the weight premium imposed by the extra LST equipment. That figure combines two different structures. First is the incremental penalty of adding two more metres of deck, curtains or box to carry and



surround the load. Second is the weight of additional rear steering technologies. It is a condition of the trial that trailers must follow the same turning circle as a 13.6m trailer. As turning circles depend on wheelbase, it would be impossible for a longer trailer to replicate the performance of a shorter vehicle without help, using two types of steerable rear axle (self-steer or command-steer).

And this year, indeed, a sample of longer semi-trailers from seven manufacturers – Cartwright, Don Bur, Gray & Adams, Lawrence David, Montracon, SDC, Tiger – was assessed. And for the most part, they proved heavier than initial pre-trial estimates (themselves heavier than 13.6m trailers), although the premium depended on the trailer and steering types. It turns out that most of the original figures were estimated. The disparity is particularly significant in the case of refrigerated units – for example, four Gray & Adams trailers supplied on seven-year contract hire by Asset Alliance in 2018 (pictured) – whose chiller units may need to be up-specified to perform as required for a larger volume. Still, a 2t premium is small in the context of a 44t combination. [IE](#)



## OPINION: WHAT IS BEING MEASURED?

Having set out to find the safety penalty of LSTs for the general road-going public, the researchers have discovered that not only is there none, but in fact LSTs are more safe than regular trailers. There is no reason why they should be. That means what the study has actually measured is the human choices at work in operating such specialised equipment. Therefore, some of the gains experienced by participants might well be achievable to fleets running shorter trailers, given sufficient motivation. If they are free to deploy them to maximise utilisation, that is.

*-Will Dalrymple*



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