

COST BENEFITS

When specifying vehicles, there is a balance to be struck between fitness for purpose, maximising efficiency and minimising upfront and lifetime costs. Brian Tinham reports from the 'total cost of ownership' session

Although there are certain obvious considerations, there is no one 'right' way to specify commercial vehicles, or to determine when to retire them. Priorities are bound to vary depending on the detail and diversity of the operation itself. However, there are plenty of wrong ways – notably those that focus only on purchase price and maybe residuals, to the exclusion of all else. So the IRTE Conference session exploring total cost of ownership, with its expert panel spanning Wincanton, Lancashire County Council, Lafarge Tarmac and Carlsberg was always going to be useful.

For Wincanton technical services director David Rowlands, getting the best out of commercial vehicle investments is about making sure you cover off 10 key points in the specification process, carefully balancing cost and value throughout. His number one, unsurprisingly for fleet engineers everywhere, was to focus on getting vehicles that are fit for purpose. "For example, on milk operations with some off-road, we go for construction vehicle specifications, because that delivers a good balance between maintenance and overall cost of operation," he explained.

Second, however, was determining useful life, which Wincanton sees as the time of greatest reliability before vehicles should be passed on. "In our operation, that's five years for tractors and typically eight for rigids – although we can squeeze 10 and others might go for more." When it comes

to tanker trailers, however, some of Wincanton's are kept for 35–40 years. In the end, it's simple: "You need to fix on a useful life that ensures your TCO is minimised," advised Rowlands.

Next was R&M. "Whether you go for dealer R&M, pay-as-you-go or whatever, this is a significant part of your TCO," he argued – so tread carefully. And much the same goes for his fourth point: service frequency. "I get castigated by my colleagues in Pullman Fleet Services for extending maintenance to 12 weeks in some cases. But it's all about cost versus reliability. Some of our vehicles are on three-week frequency. You need to fix on a period that's appropriate to the vehicles and the operation."

Get what you pay for

Rowlands' fifth point concerned labour costs, and for him the key point is "you get what you pay for". We can all get cheaper rates for maintenance and repair, he agreed, but there are few short cuts. Sixth, and related to that, was to review ways to cut costs, for example, with mobile maintenance. "That might work for skeletal trailers, but not sophisticated Euro 6 tractor units. Again, you've got to balance cost with engineering integrity and safety. In the main, we use workshop provision."

Next up was parts – again a price versus value consideration, with quality, longevity and safety being Rowlands' watchwords. He made the point that you can buy cheap air suzies, but then you'll probably have to replace them more frequently and incur downtime and fitting costs as well.



“I get castigated by some of my colleagues in Pullman Fleet Services for extending maintenance to 12 weeks in some cases. But it’s all about cost versus reliability”
David Rowlands

“People say we over-specify vehicles, but we have to be absolutely sure they’re able to do the things we want them to do and that they will start when they’re needed”
Chris Grime

“Ground-level coupling has not only eliminated drivers’ falls from height, but removed an expensive catwalk weighing 750kg – meaning greater payload potential”
Andrew Brodley

“We did it by designing a 19mm slimline neck on the trailer, adding low profile tyres and modifying the chassis in terms of lead-up ramps”
Andrew Davis

So far, so good. His number eight consideration, though, was operational impact. What did he mean? “We operate over a wide geography, which means we may not be able to get support from dealers or other specialists in certain regions. So in our cost calculations we would include delivery and collection of vehicles for maintenance and support services nearby.”

Another thought provoker: Rowlands ninth point was check the credibility of your suppliers. “Maintenance, truck and even finance suppliers make a difference – so you can renegotiate excess mileages, etc, for example. It’s all part of the TCO and value sum.” And that includes likely residuals.

Finally, if you’re outsourcing maintenance, Rowlands’ advice was to look for contractors that have irtec-licensed technicians and are IRTE workshop accredited. “That one is about balancing cost with peace of mind and, for me, it’s shorthand for ensuring compliance.” And the link to TCO there is clear, too, given VOSA’s OCSR (operator compliance risk score) targeting mechanism and your ‘O’ licence obligations, not to mention the cost implications of failure.

Fit for purpose first

Few would disagree with that, but next up was Chris Grime, of Lancashire County Council – and former president of the SOE (Society of Operations Engineers) – giving a slightly different perspective. With a fleet ranging from a six-axle artic running at 50 tonnes, for weighbridge checking, to the full spectrum of municipal vehicles – tippers, gully emptiers, gritters, minibuses, etc – right down to Stihl chainsaws, this local authority’s primary concerns are specifying chassis and equipment that are up to the job, and ensuring robust maintenance.

“People say we over-specify vehicles, but we have to be absolutely sure they’re able to do the things we want them to do and that they will start when they’re needed,” explained Grime. He agreed that whole life costs, including purchase price, residuals and running costs – “R&M, fuel, road fund licence, etc, that we all measure” – are important, particularly given that all authorities are under cost pressures. But, for him, reliability and availability remain critical. “To carry out our statutory duties, we have to be able to respond,” he insisted.

And he added that, with the area’s fire and rescue fleet also part of his responsibility, maintenance is key to both costs and availability. Hence Lancashire’s five dedicated workshops with 56 technicians covering everything from mechanical to electrical, diagnostics, bodyshop and fabrication. “They’re all staffed with the right people, with the right expertise, familiar with the complexities of our diverse fleet,” he said. And it is they – combined with specifying vehicles that are man enough, and

systems and services capable of ensuring efficient operations – that matter most here.

So what else might fleet engineers consider? Andrew Brodley, transport manager at Lafarge Tarmac, provided more food for thought. He told delegates that designing and implementing a ground-level Suzie coupling device, an automatic tyre inflation system and in-cab communications that are eliminating mobile phone usage have together seriously improved safety while also cutting costs.

How? Brodley told delegates that ground-level coupling has not only eliminated drivers’ occasional falls from height, but removed an expensive catwalk weighing 750kg from its tractors – meaning greater payload potential. Meanwhile, the trailer tyre inflation system (which works by harvesting surplus air and delivering it to the tyres via a control box, pressure regulator and flexible hoses) has obviated blowouts and hard shoulder repair costs, while also improving tyre life and mpg – and enabling drivers to keep rigs doing deliveries where safe to do so.

What about the in-cab system? “We wanted to manage-out drivers using mobile phones, but still needed to communicate with them. So our system uses existing cab phone technology, but disables it, only re-activating it when the driver is parked with the ignition off. If the shipping office needs to contact him, he sees an alarm and acknowledges it, so that he can talk when it’s safe to do so.”

Simple, but effective – and Brodley told delegates that taking a proactive stance and specifying equipment ranging from telematics to Alcolock in-cab devices and intarders also pays for itself, certainly in terms of whole life costs.

It’s all about thinking outside the box – something dear to Andrew Davis, national fleet engineer for Carlsberg, who told delegates that application engineering is key to optimising operational costs. He gave the example of modifying one vehicle to do the work of two – a panel van and a conventional 7.5 tonner – with obvious savings. But he also spoke of Carlsberg’s work in getting the platform height of its 26-tonne pallet liners down to 1,100mm normal ride height – and a similar accomplishment for its 44-tonne urban tractor fleet.

“We were told by suppliers that it couldn’t be done. They could lower the fifth wheel, but not while keeping the articulation we need. We did it by designing a 19mm slimline neck on the trailer, adding low profile tyres and modifying the chassis in terms of lead-up ramps and profile. It’s all about engineers and bodybuilders working together.”

And he said that his team is currently working on urban tractors, in a bid to retain their legendary turning circle now that Euro 6 is here. Good old-fashioned application engineering can absolutely deliver good cost savings, he insisted. **TE**