BORN AND BRED

Although having bus industry experience going back 38 years, First Bus North & West Yorkshire's engineering director now focuses most of his attention on the future, as he tells Will Dalrymple

Simon Carlisle, First Bus North & West Yorkshire engineering director named engineer of the year in the 2022 routeone awards, reports that the distinction gives him "immense pride". Not that it's all about him, adds the modest senior corporate leader. "It's more a recognition of the team – and we have 200 engineers now – but this rewards our collective hard work."

To be precise, Carlisle's award category was for large operator – over 150 vehicles (small/medium operator engineer of the year was awarded to Ian Scott of Stanley Travel).

Large is certainly appropriate for First Bus North & West Yorkshire, with operations in Halifax, Huddersfield, Bradford, Leeds and York, not to speak of other operations in South Yorkshire, plus 14 more stretching from Aberdeen to Cornwall, including Greater Manchester, Glasgow, Bristol, Leicester and Portsmouth.

Reflecting on that scale, Carlisle says: "It's a big team, and the size of it is a strength and a weakness, actually. You've got an awfully big area and a lot of responsibility within it, but you've equally got that scalability. Now with six depots, there are six engineering managers and six workshop managers. They all help each other, so that's where the strength of the team comes together."

Carlisle is a fan of fully implementing standard operating procedures across the depots to help keep a level playing field.

A far bigger issue for the business is the degree of technological change – and the pace of change – that is coming to all of its depots, in particular electric buses. "I wouldn't have thought, three or four years ago, that we would be running electric buses. The situation is evolving so quickly, and we need to move to adapt to it just as fast."

He adds: "In our fleet, e-buses have only been around for 18 months to two years, and a little longer in York. It's a new journey. EVs seem to be more reliable, with drive motors instead of an engine; they are plug-and-play.

"The transition to electric is not a problem yet; it's the unknown. It's been really good so far. [But] nobody knows in five, six or seven years' time what problems that is going to bring. Hence why we are getting in front of it and training our people." That includes using manufacturers' training programmes, working on IRTE inspection technician accreditation and adapting the IMI electric qualification.

"We'll be in a position to react positively to any challenges we face. I have 30-odd years of diesel [experience], and it is new to me, but it's nothing to be afraid of; it's something that we should embrace and look forward. Things constantly evolve, and we've got to be part of that as the engineering community."

Carlisle observes: "Learners are the future of the industry, and of First Bus. If you attract the right people, and give them the right training, hopefully that will help with the retention of staff. We put a lot into our apprentices. The transport industry is so devoid of talent; everyone is after engineers. The single biggest challenge is the supply chain of engineers; we cannot get them."

NEW AGE

Five or six years ago, a quarter of the 160 engineers that First Bus employed were over 55, a situation he described as a "ticking time bomb". So, with the

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support of the managing director, it reinvigorated the company's apprenticeship programme.

First Bus worked with Reaseheath College in Cheshire to develop a bus and coach engineering academy – its first – to train up bus technician apprentices (20-25 in West Yorkshire alone). The centre opened in September 2021. About it, Carlisle comments: "We want to replicate the working environment, and thanks to Reaseheath [which] bought into that. We've got all of our performance boards and supervisor's podium and the same air tools. We provide vehicles from the division that are modern, not antiquated old kit, that trainees will relate to when they go back to the workshop."

Carlisle's own apprenticeship and early career was served in several Leeds depots under Metro, formerly the West Yorkshire Passenger Transport Executive. He specialised in component repair, an activity that he feels has been sidelined: "Back in those days, I always felt that, as an engineer, I was there to fix things, and we still are. In those days, I worked overhauling engines, gearboxes, axles, air equipment and fuel equipment. We took components off a vehicle – if it was an engine, for example, that would go internally to a workshop, and you would overhaul the engine and test it. Nowadays, it all seems to be very 'buy new'. That's the element that's changing.

"As we progress now, the job is changing again, and diagnostics skills and capabilities is the thing that is changing now. We quickly have moved from hybrid to electrical vehicles, and the skillset needed, which is what we are addressing now with manufacturers' training, to get people thinking differently. It's no longer an engine with oil in it, to be basic. Now it's drive motors and electrical components, and we have to develop a new skillset." The focus now is a multiskilled technician capable of tacking mechanical and electrical issues.

PROMOTION

Having initially worked in Leeds, a big change came in 2011, when he was asked by a regional MD to take part in an engineering effectiveness programme that came out of a depot transformation initiative. That led to nearly four years of work across 17 depots across the north of the country, implementing a 73-line plan covering the entire function from work planning, training, workshop management, fault diagnosis, communication and IT. He was the lead for the north of England.

The project proved transformational.

"As a team, we developed the programme and it left no stone unturned. I learned a lot of business techniques at the time like process mapping and problem solving. What we found was that there were a lot of similar problems in a lot of the depots.

"I ended up having three people working for me to deliver that programme across the north because it was so wide-reaching. We worked damn hard on that, changing culture, bringing people up to speed. We had a programme to assess workshop managers and supervisors, and put in development action plans on the back of those. It was very wide-reaching from people to technology and standards to logistics and stores."

Carlisle compares passenger transport workshop management to baking a cake. "You need the bus there, on a facility, be it a pit or a ramp; you need the person to fix it and then you need the part. There are four elements of it, and you shouldn't make it any more difficult than that. But when you start unpicking all of those elements, there's so much involved in each: training, for example, making sure people get the right sort of training on the right product with the right equipment. Making sure from a lean engineering perspective we are as efficient as possible, through 5S, the Japanese methodology. We ended up improving lost mileage and breakdowns significantly." TE