



transportation professional



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CIHT transportation consultants directory 2021

Supplement to Transportation Professional, June 2021

CIHT's **Transportation Consultants Directory** is the only source of information devoted exclusively to transportation specialists in the UK. Building on the formula which has established the directory as the definitive source of information on firms, their transportation skills and their specialisms, the 2021 directory will include:

- > **A comprehensive listing of UK firms**
- > **A detailed breakdown of each firm's areas of expertise**
- > **In depth analysis of the economic prospects for the sector**
- > **What transportation consultants think in our business trends survey**

Published on 14 June with the June 2021 issue of Transportation Professional, the directory will be delivered to every CIHT member plus key transport clients.

Questionnaires have been sent out. If you wish to secure an entry, please make sure you complete and return your forms by Friday 26 March.

If your firm was not listed in 2020 and you want to be in the 2021 directory, call 01892 524468 or email kirsty@transportation-mag.com

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This issue's cover: Officials from Coventry visit a factory to see progress with building the city's first ever 'very light rail' vehicle (see page 12).

COVER IMAGE: MARK RADFORD

Welcome to our seventh digital issue:

Once again, Transportation Professional is provided as both an electronic version and as a printed magazine. Readers who receive a copy in the post may also like to browse this digital version to gain access to additional content, such as videos.

Look out for the hand icon against some of the photographs in this issue which will direct you to further content. Certain articles also contain interactive links highlighted in blue which will take you to documents providing extra detail.

We welcome any feedback or suggestions you may have about this current digital format.

Mike Walter, Editor

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Strong case offered for more rail spend

Britain's railways could soon see a "very substantial bounceback" in passenger numbers, assuming the Covid vaccination programme continues to be rolled out at pace, according to National Infrastructure Commission chair Sir John Armitt.

Speaking to an All Party Parliamentary Rail Group meeting the other week Sir John added he did not believe that long term changes in passenger behaviour will be significant enough to undermine the case for more investment in greater rail capacity.

He also said it would be "foolish to bet against the historic resilience of larger towns and cities" in recovering from the pandemic.



↑ Sir John Armitt Sir John spoke of the continuing "strong case" for rail investment in the Midlands and the north of England and commented that the health crisis and economic downturn give "ever more reason for work to go ahead and for a core set of recommendations to be set and stuck to".

He also revealed that the National Infrastructure Commission is about to start a study into behavioural change arising from Covid, which will feed into its next long term infrastructure needs assessment.

"I do believe the bulk of commuting will return, likewise long distance in the main," Sir John explained, "but of course there will be reflection as a consequence of recent experiences". However he reiterated: "Today,



← Passenger numbers may bounce back
A LLOYD

I do not believe there is evidence to stop major rail investments."

Later in the session, economic advisor Oxaera's partner Andrew Meaney gave his thoughts on the future of rail travel post Covid. It would seem "fanciful" to consider a return to people pressed up against each other on the Tube any time soon, he said, adding that while recession and lockdown will end one day, reversing new trends like the use of video conferencing may be hard.

"Let's imagine new habits do actually last," he suggested. "It will probably mean business trips you do take are the ones that are really important, and commuting will be less of a habit and more of a choice."

At a second online event recently, Network Rail's lead strategic planner Steven Hart said a number of long term forecasts are under way to determine the likely demand from passengers in the coming years.

He predicted that passenger volumes will likely return within the next three to four years, but added that the customer market is likely to be different with more long distance leisure journeys.

"I am almost certain there will need to be some sort of incentivisation to encourage people back onto rail and public transport," he added, "something akin to 'Eat Out to Help Out'."

And at a [Transport Select Committee session](#) in early February, Transport Secretary Grant Shapps predicted that rail "has a very bright future" in the long term, adding: "there may be pent up demand to see loved ones or, frankly, to get out of the house".

He observed that attending virtual meetings "just isn't the same as being together". **MW** See *Just One More Thing*, page 9.



↑ Andrew Meaney

Counter view heard over Welsh funding

Complaints that Wales does not get its 'fair share' of rail investment have been branded "childish and depressing" by a former senior civil servant.

Julian Glover, a special advisor to the Department for Transport until 2016, told the Welsh Affairs Committee of the House of Commons that focusing on what is 'fair' and whether the 'cake' has been 'cut in the right way' may not lead to the preferred outcome of

improving train services in Wales.

"We need to step back and ask what the Welsh rail network should be doing on decarbonisation and supporting changes in society, and then (looking at how) to achieve that," he said.

"Let's not just chase the money and say 'if we can get enough cash good things will happen'. We have to know what the good things are we want."

Julian went on to say that English commuters heading into London Waterloo might prefer cheaper fares rather than subsidising "railways in the centre of Wales which carry few people and are expensive to run".

"I'm in favour of running those railways (in Wales), I think they are great and I want them to grow and be invested in, but fairness cuts both ways," he continued.

Julian Glover made his remarks after hearing that Welsh railways have suffered from a "history

of chronic under investment" and that funding has not kept up with that seen in England.

The session also heard the case for further rail devolution in Wales, but Julian Glover warned: "Be careful what you wish for.

"If you have a fixed budget and are a smaller infrastructure operation, big things that hit you from outside can be painful" such as the impact of flooding or dealing with falling passenger numbers due to Covid. "A bigger operator can sometimes take the burden of things that were not expected."

He also remarked that focusing on the 'benefit / cost ratio' of projects was an unsatisfactory measure of assessing the need for rail investment. "It can drive money into places that have good things already; BCR is a false reassurance.

"Sometimes things are just obvious," he continued. "It is obvious the north Wales main line should run faster, with more frequent services and probably should run HS2 services to Bangor. You don't need a BCR to prove that."



↑ A rural rail service in south Wales



↑ Werrington's new rail tunnel NETWORK RAIL

Peterborough push

Delays to passenger trains near Peterborough caused by slower moving freight traffic should ease by the end of the year when a new 'dive under' opens beneath the East Coast Mainline.

A 155m long curved concrete box tunnel was slowly pushed beneath railway tracks at a junction near Werrington over nine days in January using four hydraulic jacks. Work was carried out by Morgan Sindall Infrastructure.

The grade separation will allow slower freight trains serving a line to Spalding to cross the main East Coast route without disrupting services, and forms part of a wider £1.2Bn upgrade to the line.

Network Rail's principal programme sponsor Ed Akers described the current East Coast programme as "the biggest investment on the route in a generation", delivering a 38% increase in seating capacity on long distance trains.

Asked if he is concerned that the extra capacity may not be needed with more people working from home, he replied: "The programme is built around long distance travel, not the commuter type railway, so I don't think we will regret doing the investment, even if it takes a bit longer to build back up to the level of demand we had."

He added that Covid is causing Network Rail to think more about affordability of projects and doing things differently or in an innovative manner to reduce costs.

East West boost

Government has committed £760M to support East West Rail to help deliver the next stage in restoring the former Varsity line between Oxford and Cambridge.

The money will be used towards reinstating services between Bicester and Bletchley and construction of a new station at Winslow. The aim is to see trains run between Oxford and Milton Keynes by 2025.

"We welcome the Government's continued commitment," said East West Rail Consortium chair Sue Clark. But she added that the route's "transformation potential will only be realised if it is delivered in full."

The Government also promised £34M to progress plans to reopen the Northumberland Line between Newcastle and Ashington.

Fears for public transport as car use spike expected



↑ Public transport use has been hit hard by the pandemic, including on Manchester's Metrolink

Transportation professionals face a major challenge to ensure the eventual easing of Covid restrictions does not signal an explosion in car traffic following behavioural shifts seen since the start of the pandemic, a webinar has heard.

Transport for Greater Manchester's head of strategic planning Nicola Kane told the Act TravelWise conference last



↑ Nicola Kane

month that public transport has been hit "extremely hard" while general traffic has continued to grow since an initial drop last March. "We have a real concern about people's willingness to come back to public transport," she said.

It is now "critical", she added, for transport planners to engage with the public to understand how their travel priorities have changed in light of Covid. "We are going to have to work really hard to show that there are a range of alternatives to the private car and that they are safe to use."

Sustainable modes including public transport must be "marketed in the right way with the right pricing and flexible ticketing", she said, noting that the move to more home working will mean people are less willing to invest in season tickets.

Nicola suggested that car clubs and the introduction of rental electric scooters could provide additional alternatives to public transport, walking and cycling.

The conference also heard from Scottish transport authority for the Highlands and Islands region HITRANS' partnership director Randal Robertson. He too expressed concern about a spike in car use. "We need to try and build the alternatives to the private car and recognise we are potentially on a cliff edge here," he said.

Transport for West Midlands' head of demand management Deborah Fox encouraged transport operators to come together – regardless of mode – in a campaign to help 'lock in' positive behaviours around walking and cycling and ensure that people feel safe returning to public transport. **SD**

Summer launch for rural mobility app

Public transport options ranging from rail to ferry to car clubs will be brought together under a new Mobility as a Service platform launching in the Highlands and Islands this June. The 'Go-Hi' multi modal journey planning system will use real time data to inform travel choices with payments made through an app.

Ross Basnett, a director of technology firm Mobbileo, which will operate the app, told the Act TravelWise conference: "Given the geography of the Highlands, we know it will be a challenge to get people out of their cars and into more sustainable modes."

Regional transport authority HITRANS' partnership director Randal Robertson said the platform – to be piloted for an initial 12 months – will offer users "real choice and much greater flexibility" over their journeys, and will also promote walking and cycling.



↑ MaaS is coming to the Highlands



↑ Beams for a new viaduct were installed over a railway line in Lancashire

Lifting milestone reached on Preston distributor

Work is progressing to construct a new 250m long viaduct spanning a railway line and canal to the west of Preston where a new distributor road is being built to accommodate local housing growth.

A major lifting operation over Christmas

saw a 600t crawler crane used to place five pairs of bridge beams over the Blackpool to Preston railway during a 54 hour possession of the line.

This marked an important milestone in the construction of the Lea Viaduct

which forms a key element of the £200M Preston Western Distributor project, says Lancashire County Council's project manager Phill Wilson.

"A big concern for us was that we couldn't lift in windy conditions. But fortunately the wind was with us until we had completed," he said. Lifting of another 20 pairs of beams across four further spans of the viaduct is set to be completed shortly by main contractor Costain. "That then takes us onto casting the deck," says Phill.

The new distributor road connects the M55 motorway with the A583, 4.3km further south. Two link roads are also being created to connect areas of housing growth to the new distributor; avoiding already congested local routes.

In addition to the Lea Viaduct, further structures being delivered on the project include a crossing of a navigable watercourse known as the Millennium Link – where "testing" ground conditions have been encountered during piling work – and a bridge spanning the M55 for a major new junction. Phill adds that earthworks are progressing to schedule across the site.

The road is due to open in spring 2023.



Connecting ports and industry: Construction of a new link road to better connect two of the Humber region's major ports and unlock land for industrial development is set to complete at the end of February.

The 2.5km Humber Bank Link Road is being delivered by a Colas / SIAC joint venture for North East Lincolnshire Council. The new route will provide faster links between the ports of Immingham and Grimsby and relieve traffic pressures on the A180.

It replaces a former road not considered fit for purpose and has been delivered in three phases to ensure continued access for existing businesses, explained the contractor's project director Alan Hicks.

"Our works were suspended for two to three months last year due to Covid and we had some exceptionally adverse weather at the end of 2019 which caused us some concern."

However following the resumption of works, two phases are now complete and the third is due to finish at the end of this month. This final phase has involved construction of a culvert (pictured) to take the road over a waterway, with the focus now on surfacing and landscaping activity.

Contracts

AECOM and **Atkins** will provide design and project management services on a programme to repair or replace concrete surfaces across the strategic road network.

High Speed 2 has shortlisted bidders to deliver almost £2Bn worth of 'track systems' design, logistics and installation between London, Birmingham and Crewe.

Kier Highways has won an eight year contract worth £200M to maintain and manage Transport for London's portfolio of 10 road tunnels. **Skanska** will demolish and replace a bridge on the Stechford to Aston rail line to pave the way for High Speed 2's approach into Birmingham. **Sopra Steria** will run Highways England's National Traffic Information Service – which gives motorists real time journey data – after winning a £42M, five year contract.

CIHT 100

Could electric scooters be a realistic mode of transport for most people taking short trips in urban areas within five years?

YES 64%

Electric scooters have the potential to add another sustainable travel choice in cities and are a good low carbon alternative to cars.

NO 36%

There are major safety issues associated with mixing scooters and motor vehicles and they could discourage people from walking and cycling.

To join the CIHT 100 panel please email mike@transportation-mag.com. This question can be responded to at ciht.org.uk. Also, see page 8.

Call to follow overseas approaches to winter and streamline communications



↑ International experiences of dealing with snow (above left) may help the UK to better prepare for heavy weather (right)



Britain should follow Canada's approach to managing communications during heavy snowfall and create a single point of contact for people to report concerns, according to a UK highways network manager.



↑ Mark Corbin

Mark Corbin – who looks after key routes on behalf of Transport for West Midlands – visited six cities in three countries across North America and Scandinavia to investigate how winter resilience is handled elsewhere, and has now published his findings.

Mark writes that the UK has too many customer contact channels in transport, which creates a 'web of complexity' for users when there are issues to report. But in Canada one telephone number 311 is used for non emergency calls, which he describes as 'critical to the successful delivery of winter maintenance' in the cities he visited there.

He goes on to explain that in Winnipeg, the city's street maintenance division provides call centre staff with a street snow clearing

'script' to help them provide accurate information to callers.

Speaking to *TP* last month, Mark explained that he found 311 to be a good mechanism to receive issues, concerns and complaints as it is "designed around the needs of residents".

But in the UK, he added, there are many different stakeholders who could be contacted, which "feels like a system that is built instead around delivery partners rather than customers."

"It is important from a transport perspective that we start to simplify this web of complexity. We can and should do better."

Mark also calls for the UK to introduce annual media briefings for journalists to explain winter preparations and provide clarity on the approaches being taken. He says this approach works well in the city of Calgary, which also sets out seven day snow plans showing which roads, footways and cycle lanes will be cleared and when.

In Toronto, Mark noted that a new public awareness programme has been introduced to inform residents of winter service delivery, and points out that the city offers a web service allowing people to track the progress of snow clearing equipment in real time.

Mark also attended the Winter Road Congress in Tampere, Finland, where he heard about the use of a 'multi component' sodium chloride product in Russia, designed to have less of a damaging environmental effect on soils during run off. Use of such materials should be explored in the UK, he adds.

Another of his recommendations is to help strengthen people's levels of resilience and change their behaviours when faced with severe winter conditions. "We need to do more

nationally to help people to better prepare," he said.

"Campaigns in the 1980s around road safety were very successful and it feels to me that we need to rediscover some of those methods that worked and repackage them for a new generation to help people strengthen their resilience during winter."

Mark also noted that in Winnipeg cycle routes are treated as a priority for snow clearance and in Stockholm, Sweden, abandoned electric scooters can pose a problem for winter service delivery. He predicts that in the UK there will be a lot more focus on treating footways and cycleways in the coming years.

He also visited the Swedish city of Borlange to hear about development of an automated monitoring system showing in real time the state of a road's surface to allow better decisions to be made.

Mark's research project was supported by the Winston Churchill Fellowship and involved him conducting over 50 interviews with professionals delivering winter maintenance and members of the public. **MW**



↑ Mark with representatives from Russia



↑ Cycleways are treated as a priority in Canada

Could electric scooters be a realistic mode of transport for most people taking short trips in urban areas within five years?

Yes



Peter Miller
Visiting fellow
University of the West of
England Bristol

How cities function has always been greatly influenced by the dominant transport modes available to, and used by, their inhabitants.

Think of all the workers leaving factories in British cities in the early 1900s on their bicycles, or more recently trains bursting with commuters and streets jammed with cars.

For each city we can plot a

sequence of such dominant transport modes and each of these periods leaves its imprint on the city and dictates what can come next.

No doubt many professionals in transport were taken completely by surprise by the electric scooter phenomenon that emerged in recent years.

Many had predicted that electric vehicles would be the future, but not that a design based on a children's toy with two small inline wheels would prove to be so popular and influential.

And this popularity seems due to a set of unique benefits: being compact, they allow users to make good progress through congested streets; being powered, they reduce the likelihood of users from getting hot and sweaty; and being portable, they make safe

storage at the ends of people's journeys easy.

But that's not all: Being like a bike in use, most people can become confident users in a matter of minutes, and; being simple, cheap and robust, they can be offered for members of the public to rent spontaneously.

There are of course many stories about how electric scooters are a curse, a danger and bad for the environment.

However we are already seeing cities adapt to electric scooters and electric bikes at the expense of the private car, and a city with less private cars benefits in so many ways.

My prediction is that electric scooters are here to stay, will hasten the end of the car era and will thereby influence the form of many of our great cities in profound ways in the coming decades.

No



Dr Rachel Lee
Policy and research
manager
Living Streets

Last year I gave evidence to the House of Commons' Transport Select Committee outlining some of our concerns about the proposed trials of electric scooter rental schemes.

The use of privately owned electric scooters on public roads is still illegal. However, it is becoming a familiar sight.

Rental e-scooters are not permitted on the pavement, which is good. The problem is

that cycling infrastructure – where electric scooters would be more suited – is not up to the job.

The poor state of our roads, congestion and traffic speeds lead to people using electric scooters on the pavement because they are scared to use the carriageway.

The speed, acceleration and quietness of electric scooters can alarm pedestrians, especially those who are less able to hear their approach or move out of the way. The Transport Select Committee's report called for robust enforcement of the law.

But is this even possible, given the reductions in police road safety budgets and the huge constraints on police time? We should instead be discussing civil enforcement of penalties for scooting on the pavement.

Then there is the risk of electric scooters causing an obstruction. Many of our footways are already too narrow. This has long been a problem for people with wheelchairs, buggies and other mobility aids, but now it is also affecting everyone's ability to practise physical distancing. Scooter parking must be in the carriageway and docked to stop people littering the footway with electric scooters when they've finished their journey and taking space away from people walking.

Ultimately, we question the benefit of electric scooters for short journeys.

We should be encouraging everyone who can to walk or cycle their short trips to help tackle physical inactivity, which helps to reduce air pollution, as well as congestion and road danger.

Paul Tuohy



Job title – Chief executive, Campaign for Better Transport

Terms of reference – Leading and championing this national charity to protect and advance transport that is greener, affordable and efficient, encouraging fewer trips by car.

Suitability for the job – As chief executive of Cycling UK I instituted the 'Big Bike Revival' to encourage more people back to cycling. I also helped create the Walking & Cycling Alliance that convinced Government to commit over £2Bn towards infrastructure and education.

Where based – At home. The summer house is now the office.

Transport to work – I walk.

Top of in-tray – A black coffee. After that, working with the team on our submission to the Government's consultation on the March Budget. It's vital that emergency support for public transport continues and future investment is safeguarded – we are pressing for the Budget to confirm this.

Best aspect of job – Having a passionate and knowledgeable team to guide me.

Worst aspect – I took up my role at the end of last year, so due to the pandemic I've not yet met the team in person.

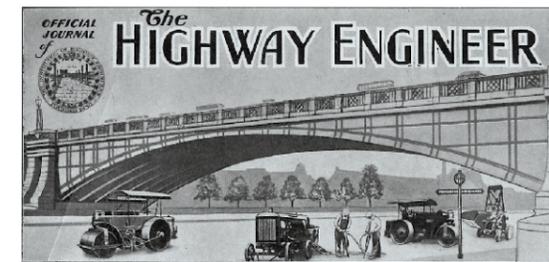
What is the most important transport issue today? Bringing people back to public transport post Covid. The bus and rail companies need them, and a healthy public transport network is crucial for society and the environment.

How do you relax? Running, swimming and cycling. I also tinker with my 1969 VW Beetle, 'Bungle', bought when I was 19 – yes, I like cars!

What advice would you give to your younger self? Slow down.

Ambition – A sub 20 minute Parkrun (pb 20.17) when they're back.

Photograph courtesy of Cycling UK



The Highway Engineer was the first journal of the Institution of Highway Engineers. It was followed by *Highways & Transportation* magazine and *Transportation Professional*. Here are extracts of stories from the past.

10 years ago

Highway teams face "a huge struggle" to keep up with repairing potholes following the coldest winter in a century, made worse by severe cuts to maintenance budgets, a council chief has said.

Peter Box of the Local Government Association said authorities will receive £165M less in capital funding from Government to fix roads compared to the previous year.

"The coldest December in 100 years will have taken a massive toll on our roads and this damage is coming at a time when councils are being made to scale back their highway maintenance budgets," he warned.

25 years ago

Major cuts to the UK's roads programme announced in the Budget will be compensated for to a large extent by the private finance initiative, said Transport Secretary Sir George Young when he faced tough questioning on roads spending from MPs.

"The private finance initiative is about strong efficiency savings from transferring the risk and management of roads to the private sector for 30 years," he told a committee. Sir George added that PFI would allow the UK to develop a wholly new roads management industry which can win orders abroad.

50 years ago

For centuries the pamphlet has been an effective political tool, wrote RH Pitts of Cornwall County Council. Its application to controversial traffic management schemes is a logical one and this method has been used to allay public disquiet in connection with a number of traffic measures in Cornwall.

Its advantage over a verbal exposition is that it can be carefully prepared so that it leaves no doubt as to its meaning. Furthermore it ensures that everyone concerned is presented with the full facts, which is something not always achieved at a meeting where there is a strong body of opposition.

75 years ago

Trains are run on rails for one purpose only – to reduce friction losses and therefore save fuel, wrote Lieutenant-Colonel Mervyn O'Gorman. But as cheaper fuel is used on roads, the merit of rail becomes ever less important.

If power could be obtained on both trains and motors for next to nothing – such as from atomic disintegration or a perfected diesel engine – it would become pointless to economise it by the 'cramping device' of rails, he said.

'Transportation would then revert with few exceptions to the more convenient roads', he wrote.



Rail debate rumbles on

"Humans will always want to be in touch with others" and despite the recent popularity of video conferencing, "it just isn't the same as being together". These aren't my words – although I agree with them wholeheartedly – but those of the Transport Secretary when asked to justify ongoing rail investment, most notably High Speed 2. Grant Shapps told the [Transport Select Committee](#) earlier this month that rail "has a very bright future" in the long term, adding that growth in passenger numbers may be triggered by a "pent up demand to see loved ones" or a need "frankly, to get out of the house".

Who doesn't crave an inter city train journey again, to see villages and fields flash by at top speed? But before one could get carried away with optimistic post lockdown thoughts, the session heard from Greg Smith, the MP for Buckingham and a staunch critic of the High Speed 2 project. Seizing on an earlier point that passenger numbers are well down on recent years, he asked: "Surely it is time to step back and do a proper review of what rail passenger demand could look like, before we spend in excess of £100Bn on High Speed 2."

The Transport Secretary replied: "Of course in the short term very few people are going to use the railways and it will take time to recover. But the West Coast Mainline was built in the 1830s and I hope we will be talking about journeys on the (new) line longer than we will be talking about Coronavirus." He also predicted that in 50 or 100 years the public "will be grateful" that the current Government pushed ahead with the scheme.

His comments came as protesters continued their fight against High Speed 2 in makeshift tunnels beneath Euston. Despite enabling works being well under way and the environmental benefits of train travel over road well documented, this is no maverick assembly of people fighting a lost cause.

Supporters of the protesters' actions include Baroness Jenny Jones who argues that the scheme is destructive, unnecessary and very costly. She also points out that societal changes as a result of the pandemic may see demand decrease for travel over the long term.

In time the site will be cleared and the project will proceed. But the protest serves as a reminder that what starts as a low hum of disquiet against major schemes can become very loud, especially in light of the climate emergency. Highways England should carefully take note of the public mood when progressing the A303 Stonehenge tunnel and the Lower Thames Crossing, and make sure their arguments, as well as security around sites, are robust.

The committee session also covered active travel, with Lilian Greenwood MP asking if a new transport decarbonisation plan will set a target for reducing car traffic. Grant Shapps spoke of his desire to see as many short trips made using active means as possible, but added that while he wants cars "to be green and not damage the environment, I am not against people getting in their cars".

He was later asked by committee member Karl McCartney if he would perform a U-turn on Smart Motorways and stop their further roll out, in light of safety concerns. Grant Shapps offered no such commitment, but did say he would not carry on with them in the manner in which they were introduced. He spoke of an 18 point plan being taken forward to improve safety and his desire to get rid of "confusing" and "insane" dynamic hard shoulders "that come and go".

He added that he didn't approve of the fact that emergency areas were spaced "way too far apart" and said he has instructed Highways England to put more in.

"Why these things were ever called Smart Motorways," he reflected, "when they seemed anything but".

Mike Walter, Editor



Transportation Professional welcomes letters from readers on all subjects raised by the magazine and about any other transportation issue. Please keep your letters brief and include your CIHT designation, if applicable. The Editor reserves the right to condense. Address your letters to: mike@transportation-mag.com or write to: The Editor, Transportation Professional, 7 Linden Close, Tunbridge Wells, Kent TN4 8HH or use Twitter: @CIHTUK



← Do we yearn for a return to flying?
HEATHROW AIRPORTS LTD

Airport expansion and Covid

Adam Tyndall is certainly right that the UK needs to be well connected to the rest of the world, both for the exchange of people as well as the exchange of goods (Debate, January). But does this really necessitate airport expansion?

If Covid has shown us something, it is that we can live and work very well while travelling much less than we were used to.

Yes it will be nice to have business meetings back, where we can all go out for dinner together in the evening. And yes, it will be nice to go again on foreign holidays.

But do we really need to fly across the world for every business meeting, when the last few months have shown us that you can discuss business on Zoom or Skype very well too?

And is it necessary that 20 young men fly to Kraków for a stag weekend instead of going somewhere nearby?

Plus with the internet available on every train, what excuse is there for private or business travellers to waste time in airport lounges, on planes and on the connection into the city centre for a flight from Edinburgh to London?

If we invested in more and better train infrastructure and thought twice before booking a flight, that would free plenty of airport capacity for any imaginable increase in foreign trade.

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Bridge maintenance and active travel

I very much enjoyed reading the article on Whorlton Bridge near Barnard Castle (TP Weekly News, 9 December).

It just goes to prove how much difficulty structural engineers and civil engineers are faced with when a listed structure shows signs of extreme fatigue.

Not only does the structure have to close instantly until it is deemed safe to reopen, in some cases a temporary structure needs to be operated temporarily while the damaged structure is being repaired.

However there is no reason that this cannot be used as an opportunity to encourage more sustainable modes of transport such as cycling and walking for visitors to nearby Whorlton Hall.

If motor vehicles could be kept separate



↑ Whorlton Bridge PETER MCDERMOTT – GEOGRAPH

from pedestrians in Whorlton village centre it would improve air quality, reduce traffic noise and enhance the general ambience for everyone who visits.

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Electric vehicles and the planet

If I may pick up a point from your top story in January (‘Immediate climate action is crucial warn top advisors’), the higher cost of electric compared to fossil fueled cars reflects former economist Adam Smith’s observation that “the real measure of exchangeable value... is the toil and trouble of acquiring it”.

Or a more succinct phrase I heard once in a lecture was that “energy is cash”.

If fuel gushes out of the ground, and its combustion products disappear into the atmosphere ‘out of sight and mind’ then it is hardly surprising that a litre of it costs the same as bottled water, and products that depend on it multiply to carpet the Earth.

Why should electric cars be cheaper? The exchange rate between cash and the harder to get energy to make and run electric cars may tend to become more favourable, but this will have consequences as much as the proliferation of oil wells and refineries before it, namely to displace more toil intensive or harder to grow things like active travel and forests.

Water and electricity (like petrol, it seems) always take the path of least resistance, but we ought to be able to proceed more intelligently.

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Cycle priority at junctions

I refer to the article ‘Cities to push cycle first system’ in the January edition and was concerned to note the comment on reassigning cycle priority at signalled junctions.

Because some cyclists go through red lights and get injured, the solution proposed would give approaching cyclists an automatic green light.

It seems strange to reward illegal and dangerous behaviour in this way. Has the promoter of this system considered the outcome if the same logic were to be taken up by vehicle drivers – jump the lights often enough and get signal priority?

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Taking a virtual tour of sign exhibition

Everyone is familiar with Margaret Calvert’s work, even though many may not realise it. The graphic designer is responsible for the typefaces and pictograms that appear on signs beside motorways and primary roads, as well as inside railway stations.

Millions of people have relied on her carefully crafted, legible fonts for over 50 years, pointing them in the right direction and giving instructions on how best to behave. Now a retrospective of her work is on display at the Design Museum in London.

Except it isn’t, not really, given the latest national lockdown. Instead the exhibition is being hosted virtually and is open to all, for free, from the comfort of their own home.

Visitors begin their tour in one corner of the exhibition, on the balcony gallery that wraps itself around the museum’s perimeter wall. Straight away I knew which way to proceed thanks to a series of blue and white arrowed road signs placed strategically at knee height.

Using my computer’s mouse to navigate, I approached a series of exhibits and clicked on red and white circles to read descriptions of what was displayed.

Sketches and anecdotes from Margaret’s early career are on show, including a quote from her former tutor and later employer Jock Kinneir who said she had “an exceptional talent for design and a particular sensitivity to lettering”.

The pair were commissioned by the Ministry of Transport in 1958 to replace the ‘haphazard and dangerous’ signage on the roads with signs that are ‘clear, logical and consistent’. The typeface, or letterform, chosen for road signs is known as ‘Transport’ and was, we learn, designed to be read from a distance and when travelling at speed.

It is also said that the pair’s road signs were the first to differentiate road categories by using colour or white as a background.

Photographs on show include Margaret at work



← Computer users can ‘visit’ Margaret Calvert’s show at the Design Museum



in her studio around 1970 and another of people taking part in a legibility test of signs in a field at the Road Research Laboratory.

But it is the words of Margaret placed next to a replica of her road sign ‘Children’ that are particularly revealing. She notes that the girl in the pictogram is based on herself as a child and explains of the design: “I wanted it to be caring, so I made the little girl lead the little boy”.

Turning a corner in the exhibition, we learn that ‘Calvert’ is the name of another of Margaret’s typefaces that was originally designed in the 1970s to create a ‘visual identity’ for a new town in France. But it was rejected as being ‘too English’ and ended up being used on the Tyne & Wear Metro instead.

Margaret says she thought the so called ‘slab serif’ form reflected Newcastle’s distinctive architecture and, 40 years on, it is still in use.

Visitors move on to a third of Margaret’s letterforms known as ‘Rail Alphabet’, designed to be read by slow moving pedestrians and introduced in the 1960s. Among the many exhibits are photographs of station signs using the style, and a scale model of an InterCity 125 train featuring the livery.

Also on display is a new version of the railway



↑ One of the rail exhibits at the exhibition



↑ Margaret Calvert’s studio

typeface that has been recently refreshed with Margaret’s help and is known as ‘Rail Alphabet 2’ – set to be introduced by Network Rail. Displays show a comparison between characters, with the new iteration slightly more rounded and condensed.

Margaret spent a year designing the new characters and explains in the exhibition that despite being a lengthy process, “drawing by hand was my way of injecting a personal touch”, adding that she was keen to “avoid any eccentric mannerisms that might easily date”.

Visitors also see several new pictograms that have been designed to reflect a changing society, with symbols depicting ‘vaping’ and Wi-Fi.

One display takes visitors into a ‘flythrough’ showing a 3D visualisation of Liverpool Street station featuring the new typeface. No crowds of people are shown hurrying around or staring in a puzzled fashion at indicator boards; just the soothing background hum of a busy station can be heard including the distinctive tones of a train announcer whose voice, I suddenly realise, I miss.

A further exhibit takes the visitor through to a video showing a pair of hands leafing through a copy of a new design guide for rail wayfinding, which pauses at several points to show some of the detail up close.

The final section of the exhibition is titled ‘Play’ where Margaret demonstrates her artistic side, with a series of posters of traffic signs that have been redesigned. ‘Woman at Work’ (above left) shows the famous roadworker sign doctored to represent a female holding the shovel and ‘Mouse Crossing’ is a redrawing of the Children sign using Disney characters to help teach young people about road safety.

Online tours will never replace the real thing, but given the current circumstances the museum has done well to recreate the experience. ‘Margaret Calvert: Woman at Work’ is available to view at designmuseum.org/exhibitions until 11 April. MW



↑ Passengers arriving at a rebuilt Coventry station may soon interchange with a very light rail vehicle serving the city centre and hospital COVENTRY CITY COUNCIL



↑ Christchurch Spire and the Whittle Arch will form part of the backdrop to City of Culture celebrations starting this summer COVENTRY CITY COUNCIL



Novel transit scheme gathers momentum in the West Midlands

Coventry will kick off its UK City of Culture celebrations this summer by showcasing a lightweight tram that could enter service in 2025, reports Mike Walter.

Costs associated with installing conventional light rail systems place tram schemes out of reach for many mid sized conurbations. But a cheaper alternative is being developed for Coventry that could significantly bring down the price of mass rapid transit vehicles and infrastructure.

The concept is called 'very light

rail' and involves lightweight – and possibly autonomous – battery electric vehicles running on a novel track form with a shallower foundation, that reduces excavations and eliminates the need to relocate buried utilities.

Coventry plans to introduce a 7km corridor between the city's railway station and University Hospital within five years, with a later



"People are more inclined to use trams. This project is about modal shift."
Jim O'Boyle

extension east towards the Ansty Park business district.

A comprehensive 'clover leaf' network serving the city's Arena (north), proposed High Speed 2 station near Tile Hill (west) and King's Hill (south) could follow.

Each vehicle will be a single 11m long, four door passenger car with capacity for around 50 people. Platforms will be long enough to accommodate two vehicles at once during peak times.

According to city councillor Jim O'Boyle the aim is to offer a 'turn up and get on' service to provide an attractive alternative to travelling by car.

"People are more inclined to use trams rather than buses," he says, but adds that the cost of conventional metro projects – in the order of £50M per kilometre – "did not add up for a city the size of ours".

Connecting the railway station and hospital with a tram makes good sense, he adds, because prior to Covid the station had seen one of the fastest rates of growth in use outside London and the medical facility lacks parking facilities.

"This project is about modal shift and improving both air quality and quality of life. I'm confident the first route will work extremely well."



"Other places are watching us closely as we deliver this scheme."
Nicola Small



↑ Assembly of a prototype vehicle took place recently MARK RADFORD



"Success will be when passengers stop noticing how novel the system is."
John Seddon

Jim says the scheme will be deemed a success if it proves to be well used, is affordable and leads to a "demonstrable reduction in car use" on routes served by very light rail.

He adds that the innovative vehicle is also an opportunity to secure jobs for the future, using technology and experience developed in the local automotive industries.

Coventry City Council's programme manager for very light rail Nicola Small MCIHT explains that the scheme has a target construction cost of around £10M a kilometre.

She adds that a concept design for a shallow track foundation is currently being taken forward to detailed design.

The slab will sit within the surface and binder layers of a road and be laid to a target depth of around 300mm,

rather than 600mm as seen on most other light rail schemes.

The project team is also designing a bogie to allow the vehicle to achieve a 15m radius – a significantly tighter curve than the typical 25m seen on other light rail schemes.

Batteries tested to provide power to the vehicles currently offer 20km of travel from a five minute rapid charge. Partners in the project include the Warwick Manufacturing Group, vehicle designer TDI, assembler NP Aerospace and track design specialist Ingerop.

"We feel this is a project required not just by Coventry and the wider region but the nation too," Nicola says. "There is significant momentum for what we are doing and other places are watching us closely as we deliver this scheme."

One key ambition for the scheme is autonomous operation, she adds. "That would be the icing on the cake. Once vehicles drive themselves it will reduce operation costs and allow us to deliver a high frequency service which will help achieve significant modal shift."

Local residents will get their chance to see a prototype of a very light rail vehicle this summer when Coventry provides a showcase of transport technology and innovations at the city's Transport Museum; part of a year long celebration marking its UK City of Culture status, whose start was postponed from January due to the pandemic.

Coventry City Council's head of transport and innovation John

Seddon says the vehicle design and novel track system will make it easier to run services through tight streetscapes in the historic centre as well as densely populated areas.

"When passengers stop noticing how novel the system is and it becomes normal to use will be the point at which we know the scheme has succeeded," he adds.

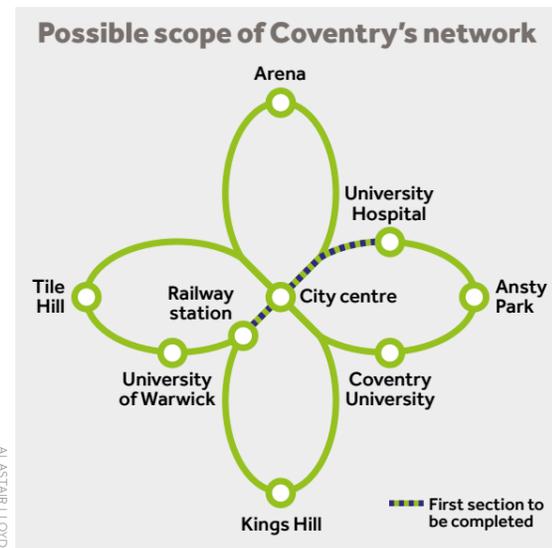
Coventry is set to develop a new transport strategy over the next year underpinned by technology including very light rail, autonomous vehicles and electric vehicle charge points. According to John the strategy will demonstrate the city's "willingness to give new ideas a go".

But allied to the focus on future technology is an emphasis in the city centre on making conditions more favourable for what is locally described as Shanks's Pony – or getting around on foot.

Public realm enhancements and improvements to walking routes are covered by a £44M investment and there is money going into two segregated cycle routes to suburbs to the north and east.

Coventry is also looking to address several pinch points on roads into the centre, including bringing a redundant railway arch into use for traffic to the west of the city to remove two way signalised control through an adjacent arch.

This follows work in recent years to upgrade signals on the A45 ring road to improve traffic flow and air quality.





↑ Dudley Council leader Patrick Harley (left) and Nick Mallinson of the innovation centre cut the first sods for the rail test facility DUDLEY COUNCIL



Dudley rail innovation centre breaks ground

Testing of Coventry's prototype very light rail vehicle begins this month at a new innovation centre under construction on an abandoned rail corridor in Dudley.

The site features a 2.2km long test track – including 850m through a tunnel – laid on part of the former South Staffordshire freight line.

Initial evaluation trials will be run on standard gauge track for eight weeks, followed by several months of endurance testing. A small workshop will provide maintenance and a rapid charger alongside the track will be used to recharge the battery powered rail vehicles.

Over the following 18 months a section of the novel track system set to be installed in Coventry will be laid too in order to evaluate its performance.

The three storey innovation centre – to be completed next spring – will feature a larger workshop served by two rail lines, a travelling crane and maintenance pit to allow work under the vehicles.

Laboratories on site will allow researchers and engineers to address rail related challenges and develop new materials, components and lightweight structures.

There will also be an auditorium and exhibition area to host events. The centre will be run by the Black Country Innovative Manufacturing Organisation which is working to develop very light rail technologies.

The innovation centre's chief executive Dr Nick Mallinson says the facility has been set up to help develop more cost effective urban light rail schemes, as well as branch

lines. "We see an opportunity to not only build new vehicles but look at the infrastructure, which represents the biggest cost of railways.

"We are trying to provide much lower cost solutions for a network's 'twigs and branches' where it can be difficult to make an economic case for a railway," he adds.

"To do that we need to look at different infrastructure, vehicles and signalling systems. We may even get to a point where trams are controlled by an iPhone."

Nick says that very light rail could provide a useful mode of transit for areas not well served by public transport, with smaller autonomous pods one day providing an option for the final leg of journeys to residents living in rural areas.

"Heavy rail is very good at moving

thousands of people long distances very efficiently, but onward connections need to be better to encourage more people to abandon their cars," he adds.

"There are a lot of routes closed due to Beeching which you would not reopen using traditional metros and could benefit from a 'lighter' approach. We are talking to a couple of developers that are keen to look at very light rail to help achieve pollution targets and raise the value of their land by improving public transport.

"We think there are at least 20 medium sized towns and cities in the UK that would desperately like a tram system but cannot afford traditional light rail. I would say we are reaching a tipping point with this concept."



↑ Kemble station (top) could be reconnected to Cirencester: a route that is still largely intact

Cirencester campaigners look to introduce lightweight vehicle

Plans are being developed to introduce a very light rail system in Gloucestershire to provide a service between Cirencester and Kemble, which used to be linked by a railway prior to the Beeching cuts of the 1960s.

Such a service would make use of former railway trackbed that remains clear of development, but several bridges would need to be rebuilt along the 8km route.

The plan is led by electronics engineer Richard Gunner and his wife Jane from the Cirencester Community Railway group. "My wife's father was always saying someone ought to reopen the line and after he passed away we thought 'now is the time to make it happen'," says Richard.

Feasibility work for reinstating the line is backed by a £50,000 grant from the Government's 'Restoring Your Railway' Fund and the hope is that – subject to funding and

granting of a Transport & Works Act order – construction could begin in a few years.

Richard points out that many residents of Cirencester have to drive in order to catch a train and said a recently extended car park at Kemble could be full within a few years. Pressure on the roads is set to increase with development of over 2300 homes to the south of Cirencester.

"Part of the feasibility study was to consider alternatives, but very light rail came out as the most cost effective option and offers the lowest carbon footprint," Richard adds. "With a climate crisis looming there has to be viable public transport systems for people to use."

The group is proposing to begin with two vehicles using a single track with passing places and to synchronise very light rail services with trains arriving into Kemble station.

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Green routes give deserted rail tunnels new purpose

Volunteer led efforts to repurpose old railway structures as leisure and commuting routes for walkers and cyclists are being taken forward across south Wales, reports Steve Dale.

If you build a cycle track next to a main road, you are only likely to get limited uptake. But if you can create something that is really attractive and away from the stress of traffic, people will flock to it," says Sustrans founder and former chief executive John Grimshaw.

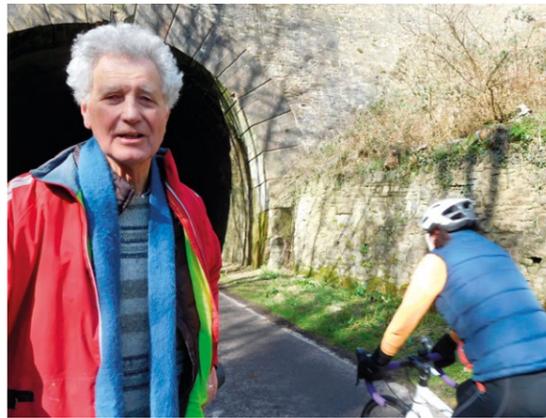
With this in mind, John's current organisation Greenways & Cycleroutes is overseeing finishing touches to a new off road active travel route on the border between England and Wales, near Chepstow.

The 8km Wye Valley Greenway project connects Wydean school in Sedbury with Tintern further north – in what is an area of outstanding natural beauty – and has involved conversion of a former railway tunnel for walking and cycling. The scheme is being delivered in large part by volunteers.

John and the group's co-founder Caroline Levett took on the challenge of getting the scheme built after various previous attempts over the years fell by the wayside. "When we started Greenways we resolved to only do the 'impossible' projects," says John.

"The reason why some of these projects are very difficult is that the sheer amount of time you have to put in to get them through is 'unfundable' in a commercial sense," he adds.

"However if you have a group of volunteers doing the negotiations you



↑ John Grimshaw enlisted volunteers prior to the current lockdown to help deliver the Wye Valley Greenway



"People find our greenway routes because they are where they want to go." Caroline Levett

stand a much better chance because you are not looking at the bottom line all the time."

Key to the Wye Valley Greenway project's delivery was that John – as chief executive of Sustrans – struck an agreement in the mid 1990s with the Transport Secretary of the day allowing use of the 1.1km Tidenham Tunnel, which last accommodated trains in 1981.

"We think this route will be enormously popular. It is an absolutely spectacular site in wonderful countryside," he says.

The new greenway is expected to attract all types of uses, including tourism and leisure as well as for local commutes and travelling to school.

Caroline adds: "We never advertise our routes; people find them because

they are where they want to go."

She explains that safe, off road greenways which people may visit for leisure – such as on a family holiday – are important for getting non-cyclists to try the mode. "To say you only want to build routes where people will make work journeys seems very short sighted because you are not getting the next generation coming along."

Local enthusiasm for the new greenway and volunteering efforts have played a crucial role in its delivery.

Volunteer coordinator Jeremy Cowen – who lives in Chepstow – says: "Being able to access the Wye Valley directly from the town using sustainable low carbon active travel means this really is the dream. I am hoping this will set a precedent for more of these routes in the local area."



↓ Contractors prepare new surfacing



Breakthrough expected on Rhondda reopening

Campaigners hoping to reopen the long abandoned Rhondda Tunnel in the heart of the South Wales valleys for use by pedestrians and cyclists are growing increasingly optimistic.

The 3.1km tunnel ceased taking railway services between the Rhondda and Afan valleys 50 years ago. Reviving the structure as an active travel route, according to the Rhondda Tunnel Society, would help to connect deprived communities and attract tourism to the area.

The society was set up in 2014, but for its chair Steve Mackey the mission to reopen the tunnel began in the 1960s. As a child living in the village of Blaencwm where one of its portals is located, he would walk through the tunnel when no trains were running and "marvel at the workmanship".

The tunnel closed on safety grounds in 1968, prompting young Steve to paint on the

commemorative stone above the Blaencwm portal the words 'please open me'.

When the portals were eventually sealed in 1980 the stone was removed and presumed lost. But in an unusual twist of fate, Steve rediscovered the stone in 2013 in a patch of brambles while out walking.

It now resides at nearby Treherbert railway station, waiting to return to the Rhondda Tunnel. "When we reopen the tunnel it will be one of the longest for walking and cycling in the world," says Steve.

However a key challenge to overcome first relates to the ownership of the structure, which is currently under Department for Transport control. The society is encouraging the Welsh Government to take on responsibility for the tunnel and allow its reopening.

"The Welsh Government is showing great interest these days,"



↑ Steve Mackey (left) and Tony Moon hope to see the tunnel open to cyclists



says Steve. "It has been a long and laborious process but I am optimistic we will see the transfer of ownership within the next six months."

This, explains the society's project secretary Tony Moon, would allow the group to apply for grants to carry out a £10M reopening programme, involving excavation of the tunnel's buried portals and minor repairs as well as a new visitor centre and car parking.

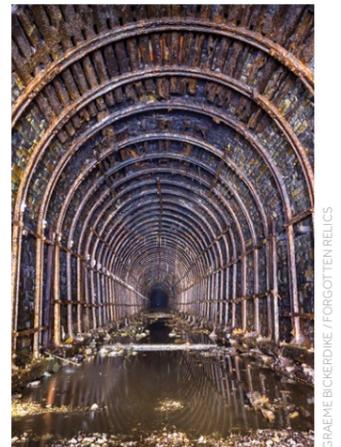
"Detailed examinations have shown the tunnel itself is structurally sound," says Tony. "It just needs a clean and a cycle path put in it."

The whole programme could take 18 months.

It is hoped that development of a visitor experience around a reopened Rhondda Tunnel would see it become a key part of a growing tourism offer in the area.

The society's business plan subcommittee chair Debra White adds: "Our aim is to provide an important active travel route for locals and also encourage more people to come into the valley.

"It is such a beautiful place and we see tourism as the way forward for this area."



↑ Inside the Rhondda Tunnel

● Welsh Government is in discussion with the Department for Transport over transferring ownership of another disused structure – the Abernant rail tunnel – which could form part of a future active travel route from Merthyr Tydfil to Aberdare.

Merthyr Tydfil and Rhondda Cynon Taf County Borough Councils are working together to develop the scheme.

The 2.3km structure was designed by Isambard Kingdom Brunel and the last train ran through it in 1962.

Last summer saw 3.5km of remaining railway track removed from the route and planning permission came in July. Bat licences were then granted in August – owing to a large number of horseshoe bats in the area – and main works in the Tidenham Tunnel completed by the end of September.

This included installation by volunteers of lighting through the tunnel and a steel shield to stop debris falling through an air shaft. Further volunteer activity along the route has included wall building and fencing.

Jeremy adds: "We had a great range of people involved across a series of work camps, many of whom arrived professing to have no knowledge or skills. But by the end of the week, they found themselves having acquired new talents."

Much of the path itself including asphalt surfacing through the tunnel

has been built by contractors, with the whole scheme costing under £250,000. The route will formally open on 1 April.

John Grimshaw concludes: "What we really want to see is a change to more sustainable transport in Britain. Our particular contribution to that is to build wonderful places where people can get the confidence to cycle again."

● Greenways & Cycleroutes is also working on plans for a second greenway route nearby, linking the town of Lydney on the bank of the River Severn to Parkend in the Forest of Dean where it would connect with a network of forest paths.

The project has the backing of local councils and a planning application was submitted recently for the route, which would involve building several bridges and a tunnel under an existing steam railway.



Call to save structures: Plans to infill or demolish 130 former railway bridges and structures over the next five years have been slammed by campaigners keen to see disused infrastructure converted into active travel routes.

A petition against the plans by Highways England – which manages the historical railways estate – has been launched by an alliance of walking, cycling and heritage advocates known as the HRE Group. It says the plans could compromise future greenway schemes by blocking or severing the routes the structures span or carry.

Highways England says it has contacted local authorities to see if they have any use for the structures.

For more on this story, see TP Weekly News, 13 January.

Pothole funding challenge continues to frustrate

Britain's local roads still require more investment and new approaches to help prevent further deterioration, according to industry commentators.

Increased capital funding for road maintenance committed by the Government last year has been slow to reach the network, and more will be needed to make a dent in the pothole crisis, sector specialists say.

Participants in a discussion convened to mark National Pothole Day in January suggested that some local roads are reaching a stage of deterioration where they are "dangerous" and potentially in need of closure.

A survey of councils conducted as part of the annual campaign also found that 81% of respondents believe the pothole problem has worsened over the last five years, while 57% have had their funding for road repairs cut over the same period.

Chancellor Rishi Sunak announced at last March's Budget a new Pothole Fund worth £2.5Bn over five years to help councils 'tackle potholes and stop them from forming'.

But construction and infrastructure specialist Aria Consult's director Des Bourne notes that – in light of the pressures authorities are under, not



↑ Condition of some local highways is still a cause for concern ASPHALT INDUSTRY ALLIANCE

least with Covid – "it is no surprise that seeing this money trickling through is patchy at best".

"A lot of people think the silver bullet is simply to put more money into road repairs without understanding how long it takes for that money to make its way onto the network," he adds.

Des also makes the point that councils need time to carefully plan spending as part of their asset management strategies.

Road condition campaigner Mark Morrell says: "A big problem in relation to funding is when the Government suddenly turns the tap on, but doesn't realise there is a lead time for works to actually be delivered."

He also calls for an additional £1.5Bn to be committed every year to fund resurfacing projects, which he says would allow authorities to "plan, improve productivity and get the best economies of scale". A small increase in fuel duty could help pay for this, he adds.

"Just repairing potholes is a waste of money – they are a sign of a more fundamental carriageway failure."

Impacts of Covid have not all been negative on the road maintenance sector, notes materials provider UltraCrete's brand manager Richard Moss.

The first lockdown last year saw many local authorities take the opportunity of quieter traffic conditions to bring forward maintenance works on their networks. "I think there is a drive now to collaborate more across the industry since the pandemic," Richard adds.

However it was also suggested that major national issues including the Coronavirus crisis and Britain's exit from the European Union may have taken Government's focus away from giving councils the long term highway budgets they desperately need.

Civil Engineering Contractors Association's chair of the Midlands >

Speedy repairs in Stoke: Plant manufacturer JCB has launched a new machine which it claims can repair a road in under eight minutes.

The firm's PotholePro cuts the defect, crops the edges and cleans the hole ready to be filled, mechanising jobs traditionally done manually.

The machine has been tested in Stoke-on-Trent where, in initial trials, it completed 51 road repair jobs in 20 days, which the company says would have taken a team of up to six operatives 63 days to complete normally.



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road maintenance

> region Nigel Drew, of R&C Williams, advocates more productive approaches to programming repairs – such as filling several potholes in an area at the same time – to help make better use of available funding. But he notes difficulties with booking road space to carry out works.

“I think we have got to start thinking a little bit outside of the box on how we can maximise what we do,” he says.

“If we have a gang with an impact protection vehicle we can probably get two or three times as much done compared to relying on normal traffic management”.

In terms of innovation, materials supplier Emtek's Northern Ireland director Neil McKee highlights a further difficulty in that trials of new approaches often do not continue beyond a pilot scheme.

“Industry can bring innovation, but the real challenge is in getting the departments to have the appetite to try and build a longer trial or really push out pilot schemes.” **SD**



“It takes a long time for repair money to make its way onto local roads.”

Des Bourne



↑ Filling several defects at once can be more efficient YUNANIK – SHUTTERSTOCK

● Commenting on the topic, CIHT chief executive Sue Percy said: “Despite the efforts of central and local government, the local highway network is not in a good state and not up to the job of supporting the country's ambitions for the future.

“In our ‘Improving Local Highways’ report we outlined a series of

recommendations that would make a real difference including the need to establish a new inflation linked local highways fund on top of current funding, creation of an improved system of monitoring and a national condition database.”

For further information visit ciht.org.uk/ilh

Midland authorities form a new highways alliance

Benefits of greater collaboration at this challenging time are being recognised by local highway authorities across the Midlands who are joining forces to share good practice, innovation and procurement resources.

This spring sees the launch of a new group known as Midlands Highway Alliance Plus. It brings together 35 authorities within the region by merging three existing bodies: the Midlands Highway Alliance, Midlands Service Improvement Group and the West Midlands Highway Alliance.

“Our whole ethos is focused on collaborative working,” says Midlands Highway Alliance executive board chair Ann Carruthers of Leicestershire County Council. “It is about collectively discussing how we develop, organise and operate as a sector in the region.”

She adds that particular focus will be placed on best practice, “raising the bar” and horizon scanning to future proof the sector, with the new organisation combining the key specialisms of its constituent groups.

“Thirty five members represent just over 20% of highway authorities in the country,” she adds. “There is a powerful voice there when it comes to engaging with Government and the wider industry.”

Midlands Highway Alliance manager Peter Barclay adds: “One of the things we are trying to make very sure of with this merger is that we

don't lose any of the identifying features of any of the former organisations.”

For example the Midlands Service Improvement Group specialised in supporting its members with technical expertise and sharing knowledge, while the West Midlands Highway Alliance was noted for ‘blue sky thinking’. The Midlands Highway Alliance – alongside distributing good practice – offered routes to market through its procurement frameworks.

The new collaboration comes at a time when authorities are struggling to maintain their networks with increasingly limited funding, while facing the pressures of continuing to deliver during Covid and the looming threat of climate change.

Ann Carruthers continues: “The plea to Government has consistently been to give us a multi year funding settlement.

“None of us can really afford major surface reconstructions any more, it takes too much out of your limited budget. But if we had sight of a five year programme we could deliver far more effectively and get a better value outcome for the network.”

Midlands Highway Alliance programme board chair Ian Bamforth of Worcestershire County Council adds that the procurement frameworks offered by Alliance Plus will make it easier to get



↑ Ann Carruthers of Leicestershire County Council

works under way quickly when the Government hands out one-off capital funds.

Supporting authorities to bring forward and share innovations will also be a focus for the new organisation, which could include a fresh look at what materials will be needed on future highways in light of climate change, as well as how technology could be better used for asset management and road inspections.

Ann Carruthers adds: “As one authority, you are very limited in what you can do. But under something like the Midlands Highway Alliance Plus we can collaborate, learn from each other and bring resources together. This is absolutely the way to go in this day and age.”



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Driving towards digital roads

↑ Highways of the future and autonomous vehicles will need to fully consider motorists' needs BABAROGA - SHUTTERSTOCK

Transitioning to digital roads will not just be a technical challenge, but require better engagement with the public a CIHT and Atkins event heard.

Sector professionals creating highways fit for a digital age need to be more vocal about their ambitions, remarked Atkins' innovation director Matt Peck to an online discussion held last month.

"There are lots of impressive things to talk about and we should be proud of what we do," he said. It is important, he added, to "get out there and be a bit more public".

Highways England's executive director for strategy and planning Elliot Shaw agreed. "We need to shout louder and be more positive; it could help get more new entrants into the sector."

Elliot added the next five to eight years will be crucial to convey to the public the need for digital roads and how they can support longer term changes like the rise of connected and autonomous vehicles.

"Change will be incremental and momentum needs to build, but it's important we don't get overwhelmed by big future visions." He added change needs to be delivered in "bite sized pieces" and there is an opportunity to deliver real benefits in the shorter term.

Connect Plus Services managing director David Neal said that without a "step by step approach" to introducing new ideas, people may struggle to envisage what a future highway network could look like.



↑ Ian Spellacey

Atkins strategic highways client director Ian Spellacey added that one challenge in delivering digital roads will be helping road users accept a "loss of freedoms" when sitting in autonomous vehicles. "We must bring people on the journey," he remarked, especially when it comes to security and the ownership of data.

Highways England's head of scheme planning and strategic sponsorship Wayne George agreed that the "customer space is the most challenging aspect" of introducing technology enabled highways compared to the more tangible aspects of their design, construction, operation and maintenance.

He also called for the "hidden aspects of data science" to be promoted more fully across the sector to showcase progress made to date.

CIHT chief executive Sue Percy warned that motorists "will not necessarily react in the same way" to digital roads, adding "technology in a vacuum will not convince or assure the public". Communicating with the public will be key, she added.

Sue said that digital systems must not just be developed for use on the strategic network, but be of benefit to major and local highways and apply internationally as well. "Accompanying regulations need to be thought about, alongside technological solutions."

Nissan's senior research engineer Bob Bateman explained that vehicle manufacturers developing autonomous technology are looking outside of the automotive sector to recruit software engineers, to

industries including gaming.

CIHT President and event chair Martin Tugwell asked if there is enough collaboration between the transportation sector and car makers.

"Two years ago, definitely not," Bob replied. "Now it is completely different; we engage with many involved in smart road infrastructure and smart cities." He added the ban on selling internal combustion engine vehicles by 2030 represents "a good opportunity to kick start a digital roads revolution".

Connect Plus Services digital transformation manager Adam Talbot said the highway sector can learn a lot from aviation, where data science represents the "crown jewels" of some airlines. But many in highways are not ready yet. "To get the sector to shift to that operating model is a massive leap."

The event also heard from ITS Leeds professor Oliver Carsten who called for creation of a standard high definition digital map of roads which autonomous vehicles can understand. He also said rural routes could benefit greatly from digital systems and must not be overlooked.

Concluding the discussion, Martin Tugwell set out how CIHT will continue to convene events such as this one as the sector looks to identify and realise the opportunities presented by digital roads and connected vehicles. "This will require new partnerships and relationships if we are to realise the full potential," he said. **MW**

● If you would like to be involved in similar digital discussions, email communications@ciht.org.uk



↑ Sue Percy



↑ Bob Bateman

Keeping motorists front of mind

Making sure future users of driverless taxis enjoy convenient and comfortable journeys is the aim of a new initiative.

Research exploring how robotaxis of the future might best meet passengers' needs will ramp up this year as part of the ServCity autonomous vehicle programme.

The project places significant focus on how such taxis could successfully integrate into complex urban environments.

It will explore the potential demand for them in London and establish a 'blueprint' for how users could engage with a driverless service at different stages of their journey: from hailing a taxi to specifying a destination and even making changes en route.

"The push towards autonomy has been mainly focused on engineering and technology to date," explains consultant SBD Automotive's director Andy Hart. "As that has reached a certain level of maturity, the big question now is how it will work for people in the real world."

The company is one of six partners on the ServCity project and is focused mainly on human factors research alongside the University of Nottingham. Other partners are Nissan, Hitachi, TRL and the Connected Places Catapult.

Research fellow Dr Madeline Hallowell from the university adds:



"Get the user experience right and more people may ditch the car."

Madeline Hallowell



↑ Human factors research inside a simulator SERV CITY

"The importance of this project for us is making sure these services are accessible and inclusive for everybody."

"Getting the user experience right is crucial for safety and satisfaction, which will hopefully lead to people feeling more comfortable to use these services and potentially making the decision to ditch the private car."

The university is focusing on how 'human-machine interfaces' – such as in car displays or interaction points on the outside of a taxi – might work and will explore how members of the public would interact with these through simulator and virtual reality based evaluations.

Meanwhile SBD is looking into how an experience based on a smartphone app would work for passengers.

"Robo-taxis have such incredible potential for reducing congestion, improving safety and helping the

environment, but only if people want to use them," Andy Hart says.

In addition to exploring human factors, the £11.5M ServCity project – which runs to the end of 2022 – will also see on road testing begin later this year at TRL's 'Smart Mobility Living Lab' in Greenwich.

This aims to evaluate the viability of using roadside sensors such as CCTV cameras and infrastructure to vehicle communication to provide 'shared situational awareness' for vehicles.

Living Lab's head of technical James Long says this could help to "unlock" complex urban environments for autonomous vehicles by giving them an advanced view of conditions ahead.

The Connected Places Catapult's programme manager Edward Mayo adds: "At the end of the project we hope to have a vehicle safely navigating the streets of London." **SD**



↑ A study of motion sickness could lead to improved design of driverless cars RCA

Motion sickness study to start soon

Combating the threat of motion sickness in future autonomous cars is the aim of a new study led by the Royal College of Art, which starts this spring.

Results may help vehicle designers to create interiors and interactive systems that reduce the chance of passengers experiencing nausea.

Motion sickness in cars is often triggered when looking down to read or using a laptop – and autonomous vehicles are not

likely to make this worse.

But according to Dr Cyriel Diels of the college's Intelligent Mobility Design Centre, one of the perceived benefits of autonomous cars is that more people will have time to engage in non driving related activities.

If many people feel sick doing so, this may undermine the business case for such vehicles, he explains. Traveling backwards and in windowless cars may also make matters worse.

"Whereas we accept that most people will get sick trying to read in a conventional car, the consumer expectations of autonomous vehicles are different. This is a key driver for our research," he says.

One possible way of helping occupants of driverless cars steer clear of motion sickness is to provide audible or visual 'predictive cues' in anticipation of a sudden movement. Preliminary results of the study are expected later this year.

Realising savings from precise asset condition measurements

Investing in accurate condition measurements of a highway network can lead to better decisions around procurement, reduce costs and ultimately improve surface quality, says Marc Tite.

Introduction

It is increasingly common for highways teams to be challenged by procurement colleagues, senior managers or finance departments to offer a saving for new contracts when coming to the end of a current term maintenance or framework arrangement.

So how are you going to deliver savings on your contracts going forward, what are the options enabling you to do this and what is in your actual control?

Information held by a local highway authority about its assets, their condition and status represents the best way to prove to contractors that you know what you have and what needs to be maintained. This may seem logical, but increasingly this is not always the case.

Most asset owners know intuitively that by aligning this with their highway infrastructure asset management plan they should be able to give potential contractors the best information. But how?

As stated in the Highway Infrastructure Asset Management Guidance, an asset management plan should provide information on how a network is managed, its performance requirements and the programme of works. To achieve this we have to start by considering what asset information is available.

And to understand how an asset is



↑ Rich data helps highways run efficiently GAIST



↑ Accurate road condition measurements can help authorities to better understand their assets

performing, we have to ask if the data behind the information is current, appropriate and complete. Having a robust asset register, pavement construction records and carrying out regular condition surveys help to keep this information current. However it is worth not under estimating the scale of doing this and the ramifications if you do not. This is where accurate measurements come into play.

Measuring accurately

If the survey data and asset register data are off by 10% at source it can have a massive financial impact later on. If budgets are over estimated it could be tempting to hold onto the reserve but this could be money that a council is able to allocate elsewhere, such as for children's services.

On the flip side, if the measurements were under estimated then a highways team could be under funded and never meet required performance indicators. Nothing is gained by an inaccurate contract.

It also would not give confidence to senior managers or Section 151 officers that a highways team really understands its assets. For example,

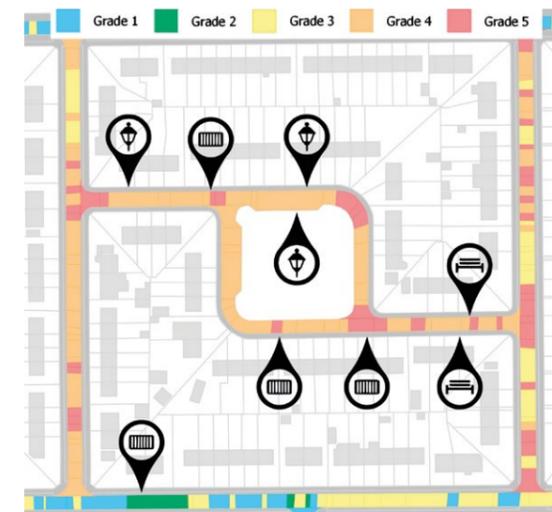
looking at long term 25 year modelling or potential multi million pound investments, a 10% error of £10M is £1M, which equates to a few extra capital investment schemes being delivered or not for many local authorities.

It is also politically damaging, economically stunting and detrimental to a local authority's reputation if a budget is spent in such a manner. Plus also a hit to the teams who work so hard to plan and deliver this work and in doing so helping to dispel any misconceptions about the level of skill and experience required to carry out highway tasks.

Carriageway and footway widths

When measuring simple things like carriageway and footway widths it can be easy to look at nominal widths, but this can lead to huge inaccuracies. This is why getting the most accurate surveys where the carriageway, footway and other assets are mapped and spatially referenced is important.

It goes back to that 10% error point: getting this wrong in today's financial climate could mean the difference between a broader budget being in



↑ Carriageway widths can fluctuate along the length of a road

place to look after vulnerable people in vital services elsewhere.

Looking at the carriageway, the image above shows how carriageway widths can fluctuate along its length. If using a standard nominal width measurement across the whole carriageway length, you could be around 15% out on unclassified roads and as much as 25% out on the principal road network.

For instance, looking at the junction mouths highlights huge variables in the widths, as well as things like laybys, parking bays and central reservations. You can see there are many nuances when looking at a local road layout.

Considering different uses

It is similar with footways, their widths fluctuate along with their surface materials and condition. As can be seen from the photograph below the footway consists of various widths.

The footway in the picture is in a suburban location that has to contend with multiple uses, such as vehicle crossovers allowing local residents to gain access to their properties, which increases the width and uses a different surface material.

Moreover, grass verges to allow segregation between highway users create a narrower footpath which is often of bituminous construction. Providing access to public transport necessitates a change in footpath width, along with a flagged surface material and a raised kerb.

The footway is also where a number of other assets are located which impact the width of the footway, such



Marc Tite is an assistant director of professional services with Gaist. He leads on the Department for Transport funded 'Digital Inspector' trial and specialises in asset management, lifecycle modelling and BIM.

as utility apparatus (telegraph poles and cabinets), highway electrical assets (street lighting and signals) and other assets (bollards, barriers and trees).

These can all have a significant impact on how the surface area of a footway is calculated. Having accurate data can also help authorities to develop a picture of what they need to maintain for public use and where their liabilities are.

Sharing knowledge of your asset base beyond the carriageways and footways cannot be underestimated.

Having quality, current, appropriate and complete infrastructure asset information will support the position of knowledge that a highways team is trying to provide in order to reduce the potential risks in future maintenance programmes and contracts.

Lifecycle modelling

These measurements have implications when the data feeds into lifecycle modelling and forward works programmes, which enable potential contractors to understand what are the asset management aims of a highway authority. If your base data is not accurate, any modelling carried out would not be right too and will give the highway authority incorrect data to pass onto their stakeholders.

When talking about procurement and how all this data feeds into that process we need to discuss risk, particularly risk to the contractor. A bidding contractor would look to tender documentation to estimate the extent to which the highway authority has a clear understanding of how its infrastructure is performing.

Supplying the local authorities' highway infrastructure asset management plan at this point in the process would allow the highways team to demonstrate a clear understanding

of its current position and future plans for the maintenance of the network.

If there are any uncertainties or anomalies in the information then the tendering contractors will need to find ways to mitigate the risk.

The most common way to mitigate any risk for a contractor would be to increase its costs. Given the various lengths of contracts this could create over inflated costs, especially if they consider 25% error rates.

Conclusion

By being able to demonstrate a good understanding of asset data along with sound repeatable condition data, a highway authority can validate to a contractor the type of asset, how much they have, where they are and just as importantly how they are performing.

Having easily accessible data to hand would allow a highway authority to prove its confidence in the data, which would help to drive down the price of a contract, as there would be fewer unknowns in the system and therefore reduce the risk.

If you truly want to have better decisions that lead to better procurement, do not underestimate the money that can be wasted from inaccurate measurement data on existing networks. Ten percent inaccuracies could lead to an even greater strain on services (including highways, but also elsewhere) that are already under huge pressure from a changing financial landscape.

● Further details about asset condition will feature in a CIHT webinar on 17 February at 1pm. To take part, visit ciht.org.uk/events

Acknowledgement

This article has been peer reviewed by the CIHT Asset Management Panel.



→ Footways often feature varying widths, as here in a suburban setting

Qualified members celebrate success

Congratulations to all the CIHT members who have achieved professional qualifications through the Institution recently. Remote interviews continue to be conducted for CTPP, CEng, IEng and EngTech reviews in light of the pandemic, with over 100 applicants assessed in this way last year.

Four individuals were recognised with awards for outstanding performance from the latest round of successful candidates, including three from Amey Consulting: CEng candidates Darren Mitchell and Kajamugan Velventhan and EngTech applicant Catherine Downes.

Mott MacDonald's Zarith Sofia Magad – who is based in Singapore – was also named as an outstanding CEng candidate, and will be profiled in a later issue of TP.

Commenting on his success, Motherwell based principal civil engineer Darren Mitchell said it had been "extremely hard work" but very rewarding to achieve CEng and added: "The feeling of receiving the confirmation email is something I will always remember."

He has already received a promotion since gaining the qualification, and noted that his work with local schools and STEM initiatives to help inspire younger generations into the industry likely played a part in the outstanding candidate award.

"My advice would be to identify any gaps in experience early so they can be addressed to meet the requirements. Also, set a target date and stick to it," he said.



← Darren Mitchell, Kajamugan Velventhan and Catherine Downes

Senior engineer Kajamugan Velventhan – based in Crawley – said he was "overwhelmed" to be recognised as an outstanding performer by the Institution.

"Practice makes perfect," he said, offering advice to prospective candidates. "I prepared well by practicing my presentation several times and doing mock reviews with my colleagues."

He also encouraged applicants not to be nervous about the interview: "Treat this as a discussion between three professional engineers," he said.

Senior technician in the consultant's Liverpool traffic team Catherine Downes said she was delighted to gain the EngTech qualification. "This is something I have been working towards for a while and with two children, it was often difficult to find the time."

She hopes the achievement will lead to greater responsibility in her role, and is now targeting IEng status. "I think my passion for the industry

and my confidence at interview made me stand out to the panel.

"I also spoke about how I had taken ownership of my own development with self learning and CPD," she said, adding: "preparation is key to a good interview."

Several members also achieved CTPP at the latest round of professional review interviews. Among them was Alex Thomas, a senior transport planner with Sweco, based in Glasgow, who said that the recognition has boosted his confidence and will encourage him to take on more challenges.

He highlighted the value of finding a mentor to identify any skills gaps in a candidate's portfolio of evidence. "It is important to maintain a detailed account of the projects in which you have been involved," he added.

For more information about professional qualifications visit ciht.org.uk/education or contact education@ciht.org.uk

Professional qualifications have recently been achieved by the following members:

Chartered Engineer (CEng)

- Stephen Andrews, Amey
- Maria Bacon, Sweco
- Colin Edward Bell, WSP
- Paul Brown, Amey
- Giulio Cabianca, Foster+Partners
- Dalton Cenac, Hillingdon Council
- Dionysia Chatzirapti, WSP
- Giacomo D'Angelo, AECOM
- Herve Etave, Arcadis Middle East
- Arash Khojinian, Highways England
- Zarith Sofia Ahmad Magad, Mott MacDonald
- Liam McEvoy, Department for Infrastructure
- Graeme McIntosh, Sweco
- Avinash Menon, Koleko Solutions
- Darren Mark Peter Mitchell, Amey

- Daniela Gabriela Mitru, Jacobs
- Alex Morrell, Jacobs
- Alessandro Pagani, Jacobs
- Cameron Patterson, Jacobs
- Nuno Manuel Gonçalves Simão
- Frankos Skarkalas, WSP
- Vivian Skreka, WSP
- Mohamed Tantawy, CDM Smith
- Konstantinos Vavatsoulas, Jacobs
- Kajamugan Velventhan, Amey
- Samantha Whittaker, Highways England

Engineering Technician (EngTech)

- Nicola Breward, Pick Everard
- David Collins, Jacobs
- Catherine Downes, Amey
- Luke Houghton, AECOM

- Sarah-Jane Imrie, Northumberland County Council
- Jose Nunes dos Santos, Gloucestershire County Council
- Martin Oertelis, WSP
- Max Reeve, Norfolk County Council
- Aaron Rosser, Skanska
- Neil White, Amey
- Steven Wilson, Dundee City Council

Incorporated Engineer (IEng)

- Oluwatoyin Oluwafemi Dada, Amey
- Michael Jack, Arcadis
- Rudolf Muller, Pell Frischmann
- Andrew Pearce, WSP
- Matthew David Thomas, Warwickshire County Council

Chartered Transport Planning Professional (CTPP)

- Nichola Byrne, WSP
- Peter Mark Conlan, Cundall
- Ross Andrew Coulthart, Sweco
- Antony Edward Kivistik, Mott MacDonald
- Deborah Anne Livingstone, Systra Corporation
- Damian Murray, Atkins
- Rosalyn Schaverien, Jacobs
- Daniel Edward Sheppard, Arup
- Alexander Anthony James Thomas, Sweco

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 Martin Tugwell FCIHT
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 Sue Percy CBE

These pages are edited by Steve Dale. To suggest stories for CIHT News email: steve@transportation-mag.com

Copy to be considered for publication in the next issue should be submitted by Friday 19 February

Better engagement needed over temporary street changes

Implementation of temporary street changes to support active travel during Covid proved divisive within communities and greater public engagement will be needed on future schemes, a CIHT webinar heard in January.

Introducing the session which focused on experience within the capital during the pandemic, CIHT Network Management & Operations Panel chair and London Councils director of transport and mobility Spencer Palmer said: "What has been achieved in a short space of time is unprecedented."

"But it is fair to say it hasn't all gone smoothly; doing things quickly inevitably means we won't always get it right first time, and can cause a certain amount of public outcry."

The event heard that, across the capital, Transport for London's 'Streetspace' plan has seen over 60km of new and upgraded cycling



↑ Spencer Palmer

infrastructure delivered throughout the pandemic, with more in the pipeline.

Over 180 street space reallocations were seen in urban centres to aid social distancing and 96 low traffic neighbourhoods were created.

Transport for London's head of network sponsorship Sam Monck said evidence shows low traffic neighbourhoods to be effective in reducing local car use, improving air quality and reducing casualties, and have enjoyed majority support from the public. But the "pace and scale" of their rollout angered some.

Eight of the schemes implemented have since been withdrawn in London. Sam said experience over the last year has reinforced the importance of



← Street space was reallocated to cyclists in the capital
 TEXTUREMASTER - SHUTTERSTOCK

consultation and there are lessons to be learned around public engagement.

He added: "Part of the problem was that we didn't have a well informed, well evidenced narrative ready around many of these schemes in advance. We now have a very large scale monitoring programme in the boroughs that should give us all evidence about what works and what doesn't."

London Boroughs of Richmond and Wandsworth's assistant director of traffic and engineering Nick O'Donnell highlighted how the authority sought to deliver schemes that already had strong supporting evidence, local or political support before the lockdown hit.

"The more evidence led you can be on something the stronger the case you can make and the stronger politicians feel in being able to defend decisions," he said.

Mark Frost of Fern Consulting described how the public pushback against temporary active travel measures has created stress for many

practitioners, but acknowledged that the criticisms had merit in some cases.

"We need to get better at giving people the opportunity to engage in these decisions," he said. "The 'take home' for me," he added, "is that the public simply does not find it acceptable to drive out one morning and find a bollard; it doesn't give them a feeling of ownership over where they live".

He added that public trust could start to be regained "if people see us responding and changing things as a consequence of post trial implementation consultation".

The session was part of a CIHT webinar series on the impact of Covid on transport.

See ciht.org.uk/events for more information.

- Transport for London plans to appeal a High Court judgment which in January ruled its Streetspace plan and a bus only corridor on the A10 Bishopsgate as "unlawful", following a judicial review brought by the taxi trade.

Entries open for prestigious annual awards

Submissions for the CIHT Awards 2021 are now being welcomed across 11 categories.

Entering the Awards gives organisations and projects in highways and transportation the chance to celebrate their achievements and showcase best practice, innovations and key contributions to society to a global audience.

"This year more than any other, the Awards provide a great opportunity to highlight what you have been doing through this

challenging time for our sector," said CIHT's Director of Policy & Technical Affairs Andrew Huggill.

"A lot of organisations are doing really important work and we want to celebrate that," he added. "Whatever contribution you make to the industry, there will be relevant categories for you."

Entries for the awards can be made free of charge via an online submissions platform. Projects of any size and in any location are welcome to enter, and will be judged by a panel of impartial judges with a

diversity of experience and opinion. This year's awards categories are as follows:

- CIHT / Ringway Climate Change Award
- CIHT Collaboration Award
- CIHT Creating Better Places Award
- CIHT Employer of the Year Award
- CIHT Engineering Award
- CIHT Healthy Transport Award
- CIHT Innovation of the Year Award
- CIHT International Award
- CIHT Road Safety Award
- CIHT Team of the Year Award
- CIHT Transport Planning Award

Detail of the criteria for each category can be found on the CIHT website. The deadline for entries to the Awards is 15 March, after which a shortlist is due to be announced in April.

Following positive feedback last year, shortlisted entrants are once again set to be showcased through a series of webinar events, before the winners are revealed in June.

For more information about the Awards and details of how to enter visit ciht.org.uk/awards

Governance changes boost Council election opportunities

Members who are keen to put themselves forward to serve on the CIHT Council are urged to submit their nomination for election online by 26 February, to mi-nomination.com/ciht

This comes as members are reminded of upcoming changes to CIHT's governance arrangements – including amendments to the Royal Charter and Byelaws – which are set to be introduced from June after receiving formal Privy Council approval in November.

The amendments mean there is an increased opportunity for members to make a difference and influence the future of CIHT by becoming Council members. The following governance changes will affect representation on Council from the 2021-22 term:

1. Increased number of Council members

This change will provide further diversification of skills and experience and include a wider range of membership grades. As a result, the following vacancies are available in the 2021 elections:

- Two additional Ordinary Member vacancies.
- Four additional Regional Member vacancies: one extra vacancy from each devolved nation and one from the Republic of Ireland. For the 2021 elections, two vacancies are available for Wales, one for Scotland, one for Northern Ireland

and one for the Republic of Ireland.

- Up to six young professionals and a further two representing Associate members: two of the young professional vacancies on Council remain for the last two winners of the Young Professional of the Year Award. The additional four vacancies will be decided by the Nominations Panel and members are invited to put their names forward.

2. Members can stand for Council elections with four supporters

Reducing the number of supporters to four rather than eight will make it more attractive for a wider representation of members to run in the Council elections.

3. Extend voting rights to Associates, Graduates, Apprentices and Part Time Students

The previous provision of voting members being only full Members and Fellows was not compatible with a progressive and inclusive Institution.

All the recommendations accepted by the Privy Council are detailed at: ciht.org.uk/news/governance-review-recommendations-accepted/

Under the new governance arrangements, Council will meet three times a year (once outside



SHUTTERPRODUCTIONS - SHUTTERSTOCK

↑ Nominations are open for the elections

London) and new digital options are being adopted to improve accessibility.

Council's remit and responsibilities include advising the Board of Trustees on the strategic and professional direction of the Institution and acting as a 'sounding board' for Trustees and directors as part of policy development.

It also hosts outside speakers who contribute to debates, helping to shape CIHT positioning on specific issues.

In addition, Council's role includes approving nominations for Honorary Fellowships, awards and the appointment of Trustees. Members serve on Council for three years after which they can seek re-election for a further term. For more information, contact governance@ciht.org.uk

Spring Conference to explore future visions

Details are being firmed up for CIHT's Spring Conference which this year is set to focus on three key themes: 'Climate', 'Places' and 'Innovation'.

The three day virtual event takes place on 13 to 15 April and will provide delegates with the chance to hear from leading thinkers, clients and politicians who are involved in shaping the future of transport.

It comes at a time when Covid presents the transportation sector with an opportunity to

reconfigure future policy and practice for the benefit of the environment and citizens.

The conference will explore how the sector will advance in the aftermath of the pandemic across the three themes, with focus on day one being placed on decarbonisation and the steps needed to deliver on the UK's net zero commitment.

The second day will look at active travel, public transport and the impacts of increased home working, plus focus on the development of new guidance for professionals including a revised Manual for Streets.

Innovation will then be the theme of the final day when digital changes, innovative thinking and future technologies will be discussed, and the workforce skills required to deliver these.

In addition to the main programme, there will be the opportunity to visit 'Major Project Rooms' and 'Expert Booths' where attendees can engage with and learn from project managers and technical specialists.

Speakers are set to be confirmed for the event shortly. To stay up to date with all the latest details on the conference, visit: ciht.org.uk/event/spring-conference-2021/



↑ Decarbonisation will be a major talking point

Webinars

CIHT members can access a wealth of online resources including webinars. Log in to the Members' area at ciht.org.uk and click on 'Resources'.

Mobility during the pandemic

18 February, 12.30pm

Considering how cycling, walking and green spaces can be used to best effect at the current time, plus a look at behavioural shifts.

eventbrite.co.uk

Role of buses to help revive towns and cities

19 February

Including a look at next steps to develop a national bus strategy to help the travel mode recover.

landor.co.uk



↑ Transport in Cork

Role of regional cities

23 - 24 February

How smaller conurbations including Cork, Coventry and Perth are attracting people to live, work and visit.

academyofurbanism.org.uk

Delivering environmentally sensitive projects

24 February, 12.30pm

Ensuring ways in which biodiversity can be fully considered on rail infrastructure schemes.

apm.org.uk



↑ Commissioner Will Norman

Improving transport accessibility and growing active travel

2 March, 9am - 1pm

Including input from London's walking and cycling commissioner, Transport for All and Sport England.

westminsterforumprojects.co.uk

Barking Riverside extension

10 March, 4.30pm

A discussion about the London Overground project designed to support new housing and job creation in Essex.

thepwi.org

Nationally significant infrastructure projects

22 - 25 March

Guidance to help those taking forward applications for and the delivery of large projects.

waterfrontconferencecompany.com

Future of planning policy in England

25 March, 9am - 1pm

Featuring an examination of the 'Planning for the Future' White Paper and a look at Government priorities for policy reform.

westminsterforumprojects.co.uk

Data driven urban mobility

25 March

Use of data for connected and automated mobility, real time passenger information and advanced traffic management.

globalmasstransit.net

Artificial intelligence and machine learning

29 March, 9am

A look at next steps for these technologies and the role they can play in recovering from Covid.

insight-conference.com

Delivering local infrastructure projects to boost growth

31 March

Featuring speakers from the Ministry of Housing, Communities & Local Government and the All Party Parliamentary Group on Infrastructure.

insidegovernment.co.uk

Compulsory purchase for major infrastructure

27 April

Hear about latest guidance on the best approaches to take when considering a land acquisition.

waterfrontconferencecompany.com

Climate change policy in Scotland

3 June, 9am - 1pm

Including discussion of priorities for the COP26 event in Glasgow and the pathway to decarbonisation and net zero.

scotlandpolicyconferences.co.uk

Networking

For further event listings, visit ciht.org.uk/events

Light rail conference

18 - 19 May, Newcastle

Including a look at modernisation and expansion of the Tyne & Wear Metro

eventbrite.co.uk

Future logistics event

30 June - 1 July, Farnborough

Former astronaut Tim Peake will offer some space related ideas that may help solve logistics challenges on the ground.

futurelogistics2020.vfairs.com

Intelligent Transport Systems World Congress

11 - 15 October, Hamburg

A showcase of smart mobility solutions for the sector.

itsworldcongress.com

Intertraffic conference

29 March - 1 April 2022, Amsterdam

Focusing on developments in traffic management, infrastructure and road safety.

intertraffic.com



↑ Cyclists in Amsterdam

Rewind: Listen again to CIHT webinars held recently

Visit the Members' area at ciht.org.uk to access these events and others.

Putting pedestrians first

A presentation led by CIHT Republic of Ireland discussing the importance of considering those on foot when delivering transport plans.

What has Covid changed?

Three events exploring what impact the pandemic has had on the transport sector and some of the new opportunities presented.

Liverpool flyovers deconstruction

Looking at the recent investigation, assessment and removal of two post tensioned concrete viaducts. Organised by CIHT Northern Ireland.

Electric scooter trials

A presentation from Beryl Bikes about its rental schemes in Norwich and on the Isle of Wight. Hosted by CIHT East of England.



↑ One of Liverpool's Churchill Way flyovers before it was removed

Pavement skid resistance

Hear from senior highway consultant Ian Walsh about latest developments in the field. Organised by CIHT North West.

Active travel in Edinburgh

A look at projects in the Scottish capital designed to make conditions more favourable for walkers and cyclists.

Audits



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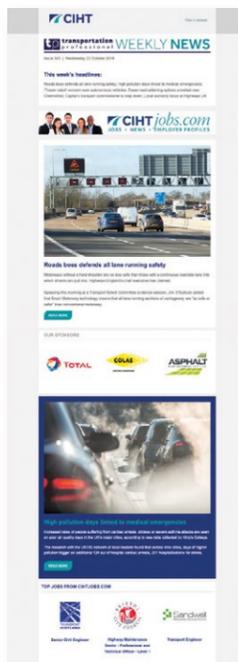
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Reducing Carbon in Highways

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ULTILOW
Low temperature warm mix asphalt

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Turning old tyres into new roads

ULTIPAVE
Single layer 20mm asphalt for fast, single layer resurfacing

To help meet the modern-day challenges in highways construction, Tarmac have developed a range of innovative, market leading asphalt products designed to curb the threat of climate change. Our own challenge is to now lead the charge in achieving wider industry adoption.

Warm mix asphalt
reduces CO₂
by **10-12%**

Warm mix low temperature asphalts have been available for some years, but at present only 4-5% of total UK asphalt is laid using this technology. Compare that to the United States who are nearer 50%. Opening the door to potential on site cost savings over traditional hot mixes and offering significant carbon reducing sustainability benefits, why wouldn't you talk to us about our Ultilow range of products?

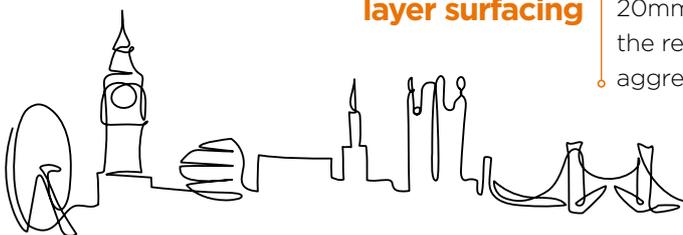
8% saving
in CO₂ emissions

500 tyres
recycled per km

Tarmac have also seized the opportunity to go full circle by re-purposing some of the 40 million waste tyres that the UK disposes of each year; producing a high performing rubber modified asphalt that delivers up to an 8% saving in CO₂ emissions. This ensures that for every kilometre of road surfaced using this material, approximately 500 tyres are being recycled.

Fast, single layer surfacing

Completing the offering is Ultipave Single Layer, Tarmac's 20mm asphalt for fast, single layer resurfacing that reduces the reliance on high volumes of premium sizes of primary aggregate and excessive transportation costs.



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