

Zero Carbon Transport

Sat 27 March 2021



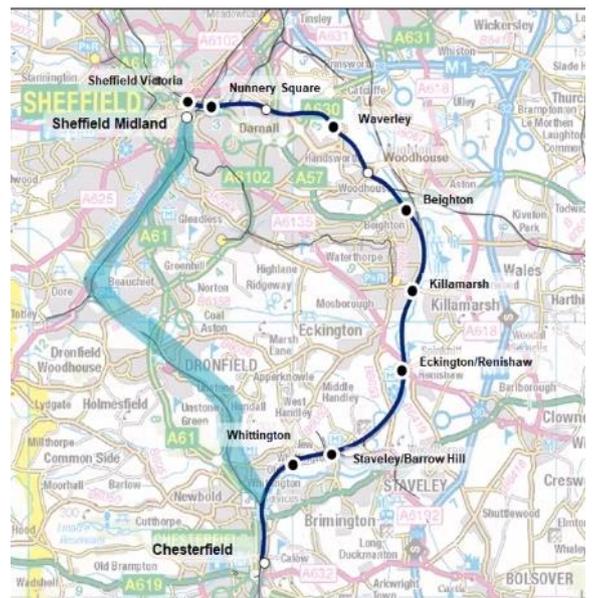
This was the second in a series of Zoom events designed to celebrate and prepare for the 26th UN Climate Change Conference of the Parties (COP26) in Glasgow. These events cover different climate themes, bringing together experts and examples of best practice to identify the actions needed to achieve a zero carbon society. Transport is responsible for around a third of Chesterfield's and Derbyshire's carbon emissions with road transport and cars the main contributors. At this event three the speakers talked about how we can achieve a zero carbon transport system though reopening the Barrow Hill rail line to passengers, bus regulation and free buses, and e-bikes.

A recording of the session can be [found here](#) (Passcode: .tk9!Li)

The speakers

Alex Forrest, Senior Programme Manager (Rail), Sheffield City Region Combined Authority, talked

about the [restoration proposal](#) for the Barrow Hill Line (between Sheffield and Chesterfield) to allow passenger services to use the current freight route. This has been one of ten proposals shortlisted under the government's [Restoring your Railways fund](#) which they hope to hear a decision from Government about progressing to the next stage in the next couple of weeks. The Authority also has a range of other schemes they would like to investigate (see their [Integrated Rail Plan](#)). The Barrow Hill Line used to have passengers until 1963 but is a well maintained double-tracked freight line with 2 freight trains per hour. The proposal will involve **5 new stations at Whittington; Barrow Hill & Staveley; Eckington & Renishaw; Killamarsh; Beighton** which will link existing communities with limited public transport and high car dependency to employment hubs. A new station is also planned at Waverley, a new interchange station at Nunnery Square to integrate with the Sheffield Supertram network and a new station at Sheffield Victoria. It may need a 4th platform at Chesterfield but this is still to be confirmed.



There is capacity for per **2 passenger trains hour**, though this requires the reopening of Sheffield Victoria station so the first phase would just be one train per hour to Sheffield Midland station. Although the historic sites of some of the stations are a long way from the communities they serve, there could be connecting buses. The proposal will have a positive impact on congestion and pollution and provide quicker, more efficient and reliable connections to nearby job opportunities for several deprived communities, providing inclusive growth. The scheme is simple, deliverable and scalable. It will help to connect to the considerable development potential along the route (40,000 new homes) and alleviate capacity constraints on the Midland Mainline, particularly with the arrival of HS2.

Matthew Topham, Better Buses Campaigner (West Yorkshire) of [We Own It](#) talked about 'Fare free buses: we can't afford not to!'. He noted that buses, particularly free buses are transformative and have massive economic and social benefits. The loss of bus services in the last 35 years has limited work and educational access and opportunities, increased social isolation, and pushed people into car ownership. Much of this problem was caused by bus network deregulation (in the 1980s) such that private companies decide routes, fares and standards. This leaves them free to cherry pick the most profitable routes and extract the most value, leading to monopolies and fare inflation. After deregulation bus use in Yorkshire has gone down 60%. He advocates making bus free at the point of use which will increase bus use and shift away from cars but will help reduce poverty and boost local economies.

There are free buses in around 100 towns and cities worldwide. Wakefield, Dewsbury and Huddersfield have had free city/town buses for years and there is evidence of increased shopping trips as a result and important social benefits for people who wouldn't be able to make those journeys otherwise. Dunkirk (pop 88,000) made its bus use free in 2018 and a year later trips were up 85%, half of new bus users previously drove and 1 in 10 had sold their 2nd car.

Matthew noted that deregulation was incompatible with free buses at scale as companies run at full profit. We will only see a wholesale move to free buses with an end to deregulation, replacing the current 'wild west' system with one of public control. They have managed it in Yorkshire by the local authorities paying for tendered services through a contract. However if all services were free they would be run under contract, then the buses are effectively regulated with fares, routes and standards set by the local authority. This is the norm in most other parts of the world.

Some places, such as London and Northern Ireland, have retained public control of their buses, and done much better with bus use in London doubling since 1986. If we are to win free buses we need to bring bus services under public control to stop money leaking out through dividends. He noted the private bus companies are already heavily subsidised: **in Derbyshire 2/3 of the bus company operating costs come from the public purse**. If we are to win free buses, we must bring the network under public control.

How do we do that? He suggested that rather than small tweaks, perhaps putting 2 or 3 services put out to tender, we want to change the whole system so people have near door to door public transport services. He noted that Greater Manchester had just announced a decision to franchise its buses, although this took a grassroots concerted campaign. He recommended that a two tier authority like Derbyshire should apply to the Secretary of State for Transport powers to franchise or reregulate their buses and recommended we push our councils to do that.

Matthew estimates that **it would cost an additional £13 million to make Derbyshire buses fare free** – equivalent to 7% council budget – but savings from reduced cost from ill health, social isolation, air pollution. Buses provide very high value for money. For every £1 spent, local authorities have £2

value generated. To meet climate challenge need to drastically change network, make buses free, and rather than asking can we afford it, can we afford not to.

Alastair Meikle, Director of [Inclusive Pedals](#) talked about the potential for e-bikes in Chesterfield. He explained that in the UK e-bikes are limited to a speed of 15.2mph which allows most people to cycle faster and further, they are emission-free, gives physical and health benefits, and are particularly useful for local trips of around 8-10 miles. In the Netherlands a study which lent e-bikes to people found they didn't necessarily go further but they cycled more frequently. Last year half of all bikes sold in the Netherlands and around a third of bikes sold by Halfords in the UK were ebikes. There has been more than a doubling of ebike sales in recent years.

A map of the [Derbyshire Cycle Network](#) shows that Chesterfield has some very good off-road routes with traffic-free loops to the east of Chesterfield being created, though a route to the west to the Peak District is missing. Combined with an excellent train service there is a really good potential for cycle tourism with lots of places of interest on the cycle route. The [Chesterfield Cycle Network](#) is typical for a town of this size. What is needed is a proper connected and segregated cycle network to make people feel safe. There are proposals for a new East-West cycle route which will be really useful, and Derbyshire County Council are building a North-South cycle route with the Dronfield section being built now which will complete the route between Dronfield and Tupton. These will provide a good spine of East-West and North-South routes. The town centre which is partially pedestrianised, provides real potential for e-cargo bikes which combined with the potential for a new rail parcel service and a planned new cycle hub planned at the train station would make e-cargo bike delivery very simple and make a big difference.

Alastair's social enterprise has two new projects (1) [Cycling Without Age](#) – where volunteers will take out less able members (from care homes and assisted living homes) for a bike ride using a triobike (an e-trishaw partly funded by Chesterfield Borough Council) which will start after easter, and (2) an e-bike loan scheme for Derbyshire Community Health Service. They have 4000 staff and will be able to borrow e-bikes for 1-2 weeks and then, if they like them, can purchase one through the Cycle to Work scheme.

Q & A

Barrow Hill Passenger Rail Line

Q. It sounds fantastic but are there any downsides to the reopening of the Barrow Hill line to passengers?

A [from Alex] Not many downsides. One challenge is capacity issues in Sheffield, but also in Chesterfield and may need a 4th platform if 2 trains per hour. One option is to continue 1 train to Derby and only terminate one at Chesterfield. Similarly if one train/hr to Victoria, also looking at reopening the line to Stocksbridge – so may be possible to continue north to Stocksbridge instead. SCR are looking at how this links into the wider network to provide greater connectivity. It won't disadvantage freight services. The main challenge is cost but looking at leveraging local sources and working closely with local councils (Derbyshire, Chesterfield, North East Derbyshire) the Staveley Town Fund and developer funding.

Q. I can see this could reduce carbon use but how about zero carbon?

A [from Alex] We looked at electrification but it may be diesel initially as the line is not electrified and don't have the funds for that. However this is part of Network Rail's electrification programme which is looking increasingly likely to the Midland Mainline – so when they electrify Kettering-Sheffield they will also do the Barrow Hill line as well.

Q. Like the idea of Sheff Victoria again! Did you consider Metro / Rail Tram at all? Suspect costly.

A. [from Alex] yes we considered tram-train and some people are keen on that. It remains an option but it may not be appropriate if we extend the services south to Derby or further north. Some difficulty as the tram network in central Sheffield is quite constrained, so would have to build more tram capacity. One of the things we want to promote for the railway is cycle trips linking to the canal and Trans Pennine Trail etc. That is another reason for trains rather than trams, which don't take bikes.

Comment: thanks Alex! Even trains hardly take bikes, and then grudgingly & likely to leave you stranded. [Bromptons Rule!]

Comment: The line is regularly used for diversions and currently has a couple of non-stop services per day for drivers to keep up their route knowledge.

Comment: Since Barrow House Roundhouse attracts thousands when it has "special" weekends, this will alleviate transport. many from other parts of the country travel to BH by rail, and usually have to get a taxi from Chesterfield. This is good news. Do retain Barrow Hill as the name for the station.

A [From Alex] yes we are aware of the attraction of the Barrow Hill Roundhouse, and in fact have a letter of support from them. It will help people get there as the Barrow Hill station is very close.

Q. If HS2 didn't go ahead would that mean there would be station capacity in Sheffield and funds for electrification of local services?

A [from Alex] Difficult to answer as speculative as to what service we will get from HS2. However minimum is only 2 trains/hr from London and only one net additional train so may not make that much difference. Electrification will also happen anyway over the next 20 years. Sheffield is the largest city in the north without any rail electrification, and SCR continues to push for that.

Comment: Our local political leadership seem to very invested in HS2. The sort of proposals being outlined here represent a far better utilisation of public funds for environmental, economic development and social justice outcomes.

Integration of transport and planning

Q. Matthew, do you think that the Planning system can be used to ensure bus services for new housing, retail and employment areas are set up right from the first occupation of new properties?

A [from Matthew]. the fundamental problem with deregulation is that bus companies are able to cherry pick routes and they extract all the value from busy routes, but if it is not profitable to run a quieter service to a new housing development they don't have to. The Council then has to fund this but has a limited budget. If the Council tenders the service to guarantee service, it's going to be difficult to get funding. If the bus network was under public control the local authority controls fare box so can cross-subsidise from more to less profitable routes which makes it easier to provide bus services to new developments.

Comment: Planning is used to set up bus services for new developments (S106). They either finish after 5 years just before they get used or don't start until 2 years after the housing is developed, by which time people are used to using their cars.

Comment: I endorse that – I am on the planning board for my local council and a big development outside Derby came up with the provision of a bus service for 5 years but who knows what happens after that? Urge people to get involved in their Local Plan and make sure it has provisions for transport to be better integrated.

Comment: New housing developments we see in Derbyshire seem to be planned around the assumption of car access and ownership.

Comment: Authorities who have declared a Climate Emergency can use this as a 'Material Planning Consideration - irrespective of whether in Local Plan!

Franchising, free buses and zero carbon buses



Comment: Pressure for franchising needs to be applied right now on candidates and sitting councillors There's the DCC election on 6th May

Q. I love my bus pass, not because it's free but because it's so easy – I can get on any bus and don't have to work out which ticket you need.

A [from Matthew]. This is one of the really powerful things about changing how the bus network is run. Now it's so complicated because so many ticket types. For example in one transport corridor in Leeds there are over 100 ticketing options – how do you know you are getting the best value? In London you get one ticket, which caps your fare. In the short term regulation gives simple integrated ticketing. In the long term free buses makes it easy.

A [from Alex] Bugbear that you can't get integrated tickets with trains and buses. Some do bus-plus train tickets but not all train companies do it, or on rural routes. When we open the Barrow Hill line we would like to integrate with cycling and buses and with supertram. Transport for the North had a project to provide integrated tickets for all travel modes in the north but funding cut by government recently.

Q. Anything to say about zero carbon buses?

A [from Matthew] Government has been announcing for some time they will build 4000 electric buses in the UK but current policy means there is no requirement for those buses to be used and most of those here built go to New Zealand so don't decarbonise our transport system. There are two plants that build e-buses in West Yorkshire and could expand capacity so not zero sum game between New Zealand and UK. Some city regions also investing in hydrogen options for buses.

Comment: Public control of buses could / should lead to INTEGRATED transport system!

Comment: The Dunkirk system also emphasises the social justice benefits of free bus provision. The system positively discriminates in favour of the most marginalised sections of the population. In Dunkirk one of groups for whom the free bus system has been a real benefit is the 'sans papiers' refugee population, by definition one of the most marginalised groups. Social justice is key argument to use in Chesterfield, Bolsover and North East Derbyshire.

Comment: First Bus South Yorkshire has made a hefty loss in the last few years - probably being supported by profits in Leeds!

Comment [from Matthew] Make initial investment with franchising but the system runs more efficiently so in long run works out better. Competition Commission in 2011 said that deregulation has allowed 3% more profits than expected under free market as de facto monopolies.

Q. Doesn't the government's new bus strategy abolish deregulation as you have to be in an enhanced partnership to receive funding after end July? These partnerships work well in many cities like Derby. Manchester not a good example of franchising, with all sorts of problems with it.

A [from Matthew] Government strategy says it wants to end the commercial market but enhanced partnerships don't do that, and clear that they are operating within the current deregulated system. Centre for Cities goes through and compares the benefits from partnerships and reregulation which shows you get much more power and control from reregulation. So while partnerships could, in an ideal world, deliver some benefits, there are still a lot of barriers that mean this is unlikely. They also could never deliver the full range of benefits possible under franchising. So although the government likes to frame it as the end of deregulation, it is not. It is better than nothing but a far cry from what we need which is to bring the network under public control.

Q. Free fares may work within cities but not sure how they would work on longer distance services. And will it mean buses competing with trains? Believe we need integrated fares rather than free fares.

A (from Matthew). True that the main places where there are free fares are cities and towns but not sure it is true that buses will compete with arterial lines on trains as people would prefer to get on a speedy train than a long bus journey. We need transport across all modes to be run as a public service and integrated, to make it easy to get door to door without a car.

A [from Alex] Don't think there is a lot of competition as trains are used for longer journeys. New bus service over Snake Pass which competes with Hope Valley line but takes twice as long.

Speed reduction

Q. *Is there a proposal reduce road traffic speed to 20MPH especially in residential areas?* On Chatsworth Rd the speed goes progressively from 30mph near Brookfield school, up to 40, 50 and 60mph at Holymoorside. To encourage people, particularly families, to cycle, if no reduction in speed we won't encourage people to use the cycle lanes.

A [from Alastair] For the East West cycle route the proposal is to reduce the speed limit on Chatsworth Rd from 40mph to 30mph. 20mph would be extremely useful, especially next year when speed limiters will be introduced on all new cars, and there is a campaign to get 20mph introduced in all residential areas in Derbyshire.

Comment: there is a 20s plenty for Derbyshire campaign - contact Lisa if interested. Email transitionchesterfield@yahoo.co.uk Transition Chesterfield's [response to the East West Cycle route consultation](#) also called for 20mph limits on Chatsworth Rd.

Comment: Speed - the problem John articulates seems to be not the speed limit, but the speed traffic is traveling at! All the focus on speed is way too simplistic, and detracts from the real problem, which is bad driving. Speed limits / penalties are blunt tools, very badly implemented. (As usual, almost all countries in Europe do it far better than we do!)

E-bikes and cycling

Q. *Presumably any large employer can adopt ebike loan scheme?*

A [from Alastair]. Reasonable cost to it so employer has to be certain size but a number in town and no reason why can't be extended. One off cost for bikes and potential ongoing cost to replace bikes/batteries but DCHS can borrow for 1-2 weeks so quite a turnover. Could have smaller scheme to loan out for a month. Model can be adapted to any size company.

Q. *Any plans to build more bikes locally and what is the impacts on local employment from bikes, buses and trains?*

A [from Alastair] Chesterfield has a no. of areas of deprivation so if people in those areas can move around more easily by bus or bike they can access more jobs.

Comment: A [TUC report on greener jobs](#) showed that if you want to create more jobs build bike lanes not roads.

Q. *For a two tier authority without capacity and funding of large authorities, how can we get a more integrated transport system?*

A. [from Matthew] Bus Back Better strategy has created some pots to help LAs do this work of evaluating bus network and can look at public control as an option – people need to press for that. Profit margins in London much lower than from private bus companies, so more money for funding of bus services. Draw together a coalition from across region – everyone has an interest in making transport system work better and help lives.

Q. *What is the one thing you want individuals to ask their councils to do*

A. [Alex] Key theme is that transport modes should not be looked at in isolation – can assist each other by integration. Transport needs to be looked at and funded in joined up way so bringing more under public control may help with that.

[Matthew] One thing is to urge Derbyshire County Council to ask the Secretary of State for franchising powers and ask for public control – which will have a transformative effect and can make bus network more reliable and cheap.

[Alastair] – need connected and easy to use cycle network where people are protected from traffic, and good signage, which combined with e-bikes will make cycling available to more people.

Further reading

The restoration proposal for the Barrow Hill line can be found here:

<https://moderngov.sheffieldcityregion.org.uk/documents/s2708/Appendix A - SCR bid for Barrow Hill Line.pdf>

Alex's article in [Rail Technology Magazine](#).

Centre for Cities report [Delivering change – improving urban bus transport](#)

Briefing for Friends of the Earth on [Transforming public transport: regulation, spending and free buses for under 30s](#)

CPRE report [Every Village, Every Hour](#) – showing how we can have a bus system fit for the climate emergency

[Transport for New Homes](#) – campaign to get transport better integrated with new development

Government consultation on national planning framework (ended 27/03/21)

<https://www.gov.uk/government/consultations/national-planning-policy-framework-and-national-model-design-code-consultation-proposals>

CREDS briefing paper – [e-bike carbon savings – how much and where](#) shows e-bikes have the potential to slash transport emissions

Acknowledgements

Many thanks to the three speakers: Alex Forrest, Matthew Topham and Alastair Meikle, and thanks to Margaret Hersee for technical support.

Save the date for future events (Last Saturday of the month)

Food (24 Apr); Education (22 May) Circular Economy (26 June), Tree planting and flood prevention (31 July), Rewilding (25 Sep)