
Report to: Transport Committee

Date: 4 September 2020

Subject: **Carbon Reduction pathways and Connectivity plan update**

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Is this a key decision?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Is the decision eligible for call-in by Scrutiny?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Does the report contain confidential or exempt information or appendices?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If relevant, state paragraph number of Schedule 12A, Local Government Act 1972, Part 1:	

1 Purpose of Report

- 1.1 To provide the Transport Committee with an update on the findings to-date of the West Yorkshire Carbon Emission Reduction Pathways study, and next steps.
- 1.2 To provide the Transport Committee with an update on work to develop a West Yorkshire connectivity plan and long-term transport investment pipeline, and to seek agreement to a timetable for production and consultation on the plan and pipeline.

2 Information

Transport carbon reduction pathways

Background

- 2.1 The Combined Authority has declared a climate emergency and set a target that commits the region to achieving net-zero carbon by 2038, with significant progress to be made by 2030. The task is challenging and will require significant and swift action to decarbonise all sectors, including transport.

- 2.2 The West Yorkshire Carbon Emission Reduction Pathways (CERP) study was commenced in 2019 to demonstrate the ways in which the climate emergency could be addressed, and the target met. The CERP covers the five key sectors of Transport; Buildings; Power; Industry; and Land-use and Agriculture, and consists of three main tasks: to develop three emission reduction pathways, to set out the timescales for decision-making and deployment, and identify the policies and actions that need to be implemented.
- 2.3 The Combined Authority and Local Enterprise Partnerships' Green Economy Panel has been overseeing the CERP study. The technical work in respect of the transport sector is being overseen by this Transport Committee, with detailed input provided by a Members Working Group, reporting to Transport Committee.
- 2.4 The study's work to-date including key findings was reported to the Combined Authority meeting on 27 July 2020¹. The report covered:
- The scope of the study, including the approach to modelling three different pathways to understand potential differences in carbon reductions from 2020 to 2038;
 - Key findings from the first part of the study;
 - An overview of some actions and what they could mean for businesses, residents and communities in the region;
 - Plans for engagement with stakeholders

Key findings of the CERP

- 2.5 The key headlines from the first part of the study are that West Yorkshire could meet its decarbonisation target, by:
- Achieving emissions savings of between 73% and 82% by 2038 through the measures that have been modelled across the three future emissions reduction pathways;
 - The remaining 18% to 27% could be reduced through a combination of specific, ambitious measures and innovative new technologies as they become available. Examples of more ambitious measures could include:
 - Increasing the amount of land allocated to the planting of trees
 - Generating more electricity from large-scale solar farms
 - Maintaining levels of remote working seen during the COVID-19 pandemic;
 - Providing funding and support for innovative emission reduction technologies (e.g. capturing carbon dioxide directly from the air and either using it for a specific purpose or storing it underground).
- 2.6 To achieve the outcomes described in paragraph 2.5 above, requires:
- Ambitious leadership at local, regional and national levels
 - Funding support and policy change from national Government
 - A robust plan to overcome challenges including public behaviour change and technology supply chains

¹ <https://westyorkshire.moderngov.co.uk/documents/s16571/Item%2011%20-%20Carbon%20Emission%20Reduction%20Pathways.pdf>

- A strengthened partnership approach from the public sector, businesses and communities
- 2.7 The CERP work to-date is particularly clear that achieving the levels of emission reduction modelled will require government to provide funding support and policy change, for example in respect of heat decarbonisation, domestic retrofit and aviation, and that there exist key challenges needing to be overcome at national and local level to better align policy, strategy and investment programmes.
- 2.8 The CERP study found that transport is the largest emitting sector and a critical area for carbon emissions reduction for the region. Transport emissions are dominated by road transport and private vehicle use, and actions will be required to significantly reduce the demand for travel by private car, and to address that demand through increasing levels of walking, cycling, bus and train travel, plus remote working.
- 2.9 All of the modelled pathways to decarbonisation will require ambitions which stretch current national and local policy and targets. The headline figures provided by the CERP study in terms of information targets to 2038 are that action should be taken within West Yorkshire to:
- Reduce private car travel by at least 21%, from currently 17,689m passenger km per annum for all trips
 - Increasing travel by walking by circa 78%, from 528m passenger km per annum for all trips
 - Increasing travel by bike by circa 2,000%, from 119m passenger km per annum for all trips
 - Increasing travel by bus by circa 39%, from 1,147m passenger km per annum for all trips
 - Increasing travel by rail by circa 53%, from 2,151m passenger km per annum for all trips
- 2.10 Specifically in respect of vehicle use and technology, to meet the decarbonisation target, the modelling undertaken by the study assumed:
- Private car use decline by between 21% and 38%
 - Sales of petrol and diesel cars in the region ending by either 2030 or 2035 (– with both of these targets ahead of the current Government ambition of 2040 but, if commitments are brought forward to 2035, which is currently under consultation, the alignment with national targets would require less action at a local level).
 - Sales of plug-in hybrid vehicles ending by 2035 under the Max Ambition scenario but continuing beyond 2040 in other scenarios.
 - Sales of zero emission HGVs increasing by between 1,000 and 2,000 per year.
 - HGVs switching from petrol and diesel engines being 79% electric battery powered or two-third powered by hydrogen fuel cell.
 - Sales of conventional petrol and diesel buses ending by 2031 across all scenarios.

- Up to 66% of buses powered by electric battery and up to 34% by hydrogen fuel cell.
 - For aviation, demand for domestic aviation reducing by 20%, and demand for international aviation remaining at 2020 levels or limited to a 25% increase.
- 2.11 In terms of the impacts on businesses and communities, these changes will mean that in 2038, people may:
- Commute to work less - working from home and using teleconferencing more extensively than pre-COVID19 levels, wherein a minimum of 12% of all trips taken today will not be needed in 2038 because of remote working.
 - Change travel behaviour for work and other purposes (such as shopping and leisure) – walking more for trips of less than 2km, cycling more for trips less than 10km and using public transport (buses and trains) over the private car. In 2038 the modelling work for the CERP study suggests that as a minimum: 4% of all trips will be by walking, 12% by bicycle, 7% by bus and 15% by train.
- 2.12 The figures identified above in paragraphs 2.9 to 2.11 are based on current information and the modelling work undertaken for this study, and serve as a guide to be refined over time, but they are useful at this stage in highlighting the scale of the challenge and the necessity for significant behaviour change plus the fast adoption of low carbon technology. The information included in paragraphs 2.09 to 2.11 effectively presents policy choices.
- 2.13 The Combined Authority and partners will need government to make decisions on certain issues. For transport this includes national policy on reducing emissions from aviation. Aviation currently contributes a small proportion of this region's emissions at 3.6%. The most ambitious ('Max Ambition') pathway modelled an 82% reduction in emissions could be achieved in the region, but if passenger numbers at Leeds Bradford Airport (LBA) were to increase to 7 million per annum, as currently proposed, the emissions reduction achievable under the 'Max Ambition' pathway would be reduced to 79%, therefore requiring even greater ambition in respect of the measures identified in paragraphs 2.5 and 2.8 to meet the 2038 target. The Combined Authority will develop a set of asks of Government as part of Tasks 2 and 3 of the CERP study. This would include the need for Government to accelerate its decarbonisation strategy for aviation as soon as possible.

Engagement on the CERP

- 2.14 Engagement has already taken place to build an understanding of, and gather feedback on, the findings of the CERP study with the West Yorkshire partner councils, including Leaders and Chief Executives. It is fully understood that more engagement is required with a wider stakeholder audience on the findings of the study and to gain their input into the development of the policies and actions that need to be implemented.

- 2.15 The Combined Authority meeting of 27 July endorsed the findings of the CERP study and approved that the next phases of the study should begin in August 2020, with a focus on engagement with wider stakeholders.
- 2.16 Public consultation is planned to run in late 2020 / early 2021 with dates and details to be confirmed. This consultation will be used to gauge the appetite for suggested policy choices and to inform the prioritisation of early activity to address the climate emergency in West Yorkshire.
- 2.17 As a prelude to full public consultation, the Combined Authority is now engaged in a round of stakeholder engagement, through:
- An online survey - of circa. 400 stakeholders (including the partner councils, the bus and rail industries, businesses and interest groups (e.g. Friends of the Earth) to seek early input to shape draft policy and actions. This survey runs to 4th September 2020. The survey covers the five sectors. The transport section of the questionnaire provides questions relating to travel demand, shift to low emission transport modes, and low emission transport technologies. Each section also contains a question relating to inclusivity, recognising the Combined Authority's continued commitment to inclusive growth and that the transition to a low carbon economy cannot be at the expense of vulnerable and minority groups and residents, communities and businesses of West Yorkshire.
 - Focus groups - to run from the 7th to 9th September 2020. The Transport focus group will be held on the 8th September and involve circa. 20 people with the partner councils plus representatives of academia, industry stakeholders and interest groups, to provide a deep dive into specific questions of transport policy and actions. The focus groups are by invitation only to assist with managing the session and gaining meaningful feedback.
 - Written feedback from the focus groups and online survey will be provided to members of Transport Committee, with an opportunity for the Transport Committee Zero Emissions Transport Working Group to reconvene to consider more fully the stakeholder input and possible policy responses.
- 2.18 The responses to the online survey and focus groups will feed into the development of a draft policy recommendations and an implementation road map to be used for the public consultation. The Combined Authority agreed that a further report would be brought back to one of its meetings for approval to go out to public consultation. It proposed also to return to Transport Committee in late 2020/early 2021 with the feedback from the current round of engagement and the proposals for public consultation on the transport elements of this work, prior to gaining approval from the Combined Authority.
- 2.19 The CERP study and this early engagement is expected to provide key inputs to, the development of the transport connectivity plan and long term investment programme (or pipeline) for West Yorkshire. The early engagement on the CERP study runs in front of the proposed engagement on the connectivity plan and pipeline described in paragraph 2.31 of this report.

- 2.20 Funding asks of government to assist the delivery of a West Yorkshire decarbonisation pipeline of interventions and the connectivity plan and long-term investment pipeline were made in the West Yorkshire COVID-19 Transport Recovery Plan, which was agreed by the Combined Authority on 27 July 2020
- 2.21 In March 2020, the Department for Transport (DfT) published the government's policy paper 'Decarbonising transport: setting the challenge',². The document set out a review of existing climate related transport policy and existing forecasts of future emissions by mode, before suggesting six priority areas around which a national transport decarbonisation plan could be focussed and how government intended to work with others to develop that plan. The policy paper is a pre-cursor to the government's publication of a Transport Decarbonisation Plan. No formal consultation has been launched by DfT on the policy paper, although views from relevant organisations were invited over the summer of 2020. The Combined Authority will use the opportunity to highlight to DfT the Carbon Emission Reduction Pathways study.

Connectivity plan and long term investment pipeline

Background

- 2.22 The Transport Committee has been overseeing work to develop a Connectivity plan and long term investment pipeline. This is an evidence led approach to identifying our connectivity challenges and solutions, consistently applied across the whole geography of West Yorkshire. This work will identify a pipeline of transport improvements to be delivered up to 2040 covering bus, rail, cycling, walking, mass transit, digital demand responsive transport and other innovative solutions, with the intent to enhance economic performance by connecting all of our important places.
- 2.23 The approach to the plan and pipeline takes the view that transport should not be a barrier to people accessing jobs, to businesses choosing to invest here and to improving the health of our residents and visitors. Improvements in transport should be a catalyst for change across all these objectives. The plan and pipeline has a particular focus on our disadvantaged and peripheral areas, with the intent to address social inclusion. The work also responds to the Combined Authority's objective to decarbonise the region's economy, described above.
- 2.24 The Combined Authority's Transport Strategy 2040 provides a framework of high-level transport policies aimed at delivering a modern, integrated transport system, to transform the region's economy and deliver inclusive, sustainable growth. A daughter document, the HS2 Growth Strategy, set out the strategic case for change for building on the once-in-a-generation opportunity provided by the arrival of HS2 and Northern Powerhouse Rail (NPR) in the region, to transform the region's economy. The benefits of HS2 and NPR alone cannot

² <https://www.gov.uk/government/publications/creating-the-transport-decarbonisation-plan>.

however deliver inclusive, sustainable growth and a lack of transport infrastructure and capacity at the regional and local level is an inhibitor. The HS2 Growth Strategy identified corridors and communities in need of improved connectivity.

- 2.25 Some significant transport investments are currently planned and being delivered through the West Yorkshire Transport Fund, Connecting Leeds and Transforming Cities Fund programmes, and by the rail industry, which will provide the early years of a connectivity pipeline. However, there remains insufficient capacity, resilience and quality in our transport system, particularly serving key employment centres, which will constrain business and labour market catchments, plus the ability to train and develop the next generation by restricting access to colleges and universities. Transport in West Yorkshire requires substantial investment and the partners require a longer term pipeline of transport investments, which address a full range of strategic and local connectivity needs. The connectivity plan and pipeline will help make the case to Government for longer-term transport budgets to deliver improvements, including unlocking the government's infrastructure fund linked to the West Yorkshire devolution deal.

Evidence for the connectivity plan and pipeline

- 2.26 The initial work on the connectivity plan has focussed on gathering and analysing a wide range of transport and socio-economic evidence, with a particular focus on corridors and communities identified as having the greatest economic need. A total of 24 corridors have been investigated, with the input of the partner councils through three workshops held in respect of each corridor. Possible transport interventions for improving connectivity were assessed against criteria related to the Combined Authority's priorities for growth: Enabling Inclusive Growth, Boosting Productivity, Tackling the Climate Emergency, and Delivering 21st Century Transport. This analysis has identified a long list of potential transport investments within each corridor.
- 2.27 The information from all 24 corridors has been collated into 10 Corridor Case for Change reports, which group related corridors. These reports are currently being finalised and will be published as part of the evidence base for the connectivity plan and pipeline. The 10 Case for Change reports cover:
- Five Towns to Leeds
 - Wakefield to Leeds
 - Calder Valley and Bradford
 - Leeds, Bradford and North Kirklees
 - South and East Leeds
 - Leeds to Huddersfield
 - Airport, Airedale, Wharfedale
 - East Kirklees to Wakefield
 - West Kirklees to Calderdale
 - North Yorkshire to Leeds
- 2.28 The evidence and outputs of the Case for Change reports are being integrated with other workstreams, including the Combined Authority's work to

investigate technology and route options for Mass Transit, Bus Network Reviews, Rail Vision and a Rail Capacity Study, Local Cycling and Walking Infrastructure Plans and a Future Mobility Strategy, as well as West Yorkshire District Local Plans, to produce a connectivity plan and long term investment pipeline for the whole of West Yorkshire, and all modes.

Engagement on the connectivity plan and pipeline

- 2.29 The proposed interventions will be identified in a number of spatial plans that show which transport modes and interventions are understood to provide the most appropriate solution for a particular geography and need. Engagement has already taken place with West Yorkshire Leaders to gather feedback on the findings of the corridor studies and related workstreams and the emerging list and location of interventions.
- 2.30 The Combined Authority is working towards the publication of a draft connectivity plan and long term investment pipeline in the winter of 2020. The outline programme for consultation and engagement is:
- **August - November 2020:** Document preparation
 - **September - October 2020:** Further engagement with West Yorkshire Leaders and Transport Portfolio Holders on plan content
 - **September/November 2020** – Proposed workshop with Transport Committee and Portfolio Holders to provide input to the production of the connectivity plan and pipeline and the proposals for consultation
 - **20 November 2020** – Transport Committee to agree the contents and arrangements for public consultation on the connectivity plan and pipeline
 - **December 2020 - January 2021:** Public consultation
 - **February – March 2021:** Analysis of public consultation responses
 - **Spring- Summer 2021:** Re-shape interventions and priorities following consultation
- 2.31 The draft Connectivity plan document for consultation is proposed to contain the following content:
- **Forward** - What the Connectivity Plan is for
 - **Strategic Context** - Why we need a plan and pipeline of interventions
 - **Developing the programme** - How we are developing the plan and pipeline
 - **Connecting Places** - The central role of places in shaping the plan and pipeline
 - **How our proposals help deliver the strategy** - the key themes of choice and capacity of transport modes in improving connectivity
 - **Maps** - Where interventions are needed. Maps will also be provided by transport mode with a narrative provided with each map
 - **Pipeline / Outline delivery programme** - When interventions need to be delivered, split into four categories:
 - **Implementation Plan 1:** Delivery before 2023
 - **Implementation Plan 2:** Development before 2023
 - **Implementation Plan 3:** Delivery 2023 - 2030

- **Implementation Plan 4:** Delivery 2030 - 2040
- **Next steps** - Approach to refining the long list of interventions identified in the outline implementation plans, defining individual projects and finalising the sequencing for delivery

2.32 The initial Implementation Plan (IP1) for the period to 2023 will be populated to a large extent by schemes that are already known and in funded programmes such as the West Yorkshire Transport Fund, Connecting Leeds and Transforming Cities Fund programmes, and the plans of industry partners such as Network Rail, plus additional action required to place the West Yorkshire partners on the path to realising the target for net zero carbon.

2.33 The consultation will seek to identify stakeholder responses to the findings of the work to-date and to gain their input into the development of the future implementation plans. A further report will be brought to the 20 November 2020 meeting of the Transport Committee to provide details of the connectivity plan and pipeline and the proposals for consultation and to seek approval to go out to public consultation. It is proposed that a workshop is held with Members of Transport Committee and Portfolio Holders in September or November (- date to be confirmed) to provide input to the production of the connectivity plan and pipeline and the proposals for consultation

2.34 The Connectivity plan and pipeline and the CERP will align with the actions of the West Yorkshire Covid-19 Transport Recovery Plan, but the connectivity plan deliberately looks beyond shorter term COVID-19 implications at longer term needs, over the next 10 to 20 years. At this stage in the Covid-19 pandemic and the recovery process it is too early to have a definitive view around what the long term future holds for transport demand, but an assumption has been made that underlying factors such as land use and socio-demographics which already underpin the connectivity plan are likely to remain and may become more significant in respect of addressing inequalities, exacerbated by the impacts of Covid-19. It can also be expected that there will remain time-pressure for strong action on climate change and air quality. A separate report, Item 5, to this Transport Committee provides information on how transport and decarbonisation are at the heart of the Covid-19 recovery plans.

3. **Clean Growth Implications**

3.1 The work described in this report is central to ensuring that the region understands how it can decarbonise key sectors by 2038 and make significant progress by 2030. Results of the West Yorkshire Carbon Emission Reduction Pathways (CERP) study is feeding into the Combined Authority's Connectivity plan work to develop a pipeline of future transport interventions for a sustainable, and inclusive, economy.

4. **Financial Implications**

4.1 There are no financial implications directly arising from this report.

5. Legal Implications

5.1 There are no legal implications directly arising from this report.

6. Staffing Implications

6.1 There are no staffing implications directly arising from this report.

7. External Consultees

7.1 No external consultees were engaged in producing this report. The report identifies proposals for consultation on the West Yorkshire Carbon Emission Reduction Pathways (CERP) study and the West Yorkshire Connectivity plan and long term investment pipeline.

8. Recommendations

8.1 That the Committee notes the updates provided in this report.

8.2 That the Committee agrees the proposed timetable for the production of, and engagement on, the connectivity plan and pipeline identified in paragraph 2.30.

8.3 That the Committee receives a further report to its 20 November 2020 meeting to provide details of the connectivity plan and pipeline and the proposals for public and stakeholder engagement, to consider approval to consult on the plan

8.4 That the committee agrees to hold a workshop at a date to be confirmed with Members of Transport Committee and Portfolio Holders to provide input to the production of the connectivity plan and pipeline and the proposals for public and stakeholder engagement.

9. Background Documents

None.

10. Appendices

None