

AGENDA ITEM 7

HIGH PEAK BOROUGH COUNCIL

Report to Corporate Select Committee

6th June 2016

TITLE:	Trans Pennine Tunnel Study
PORTFOLIO HOLDER:	Councillor Kemp
CONTACT OFFICER:	Pranali Parikh – Regeneration Manager
WARDS INVOLVED:	All areas

1. **Reason for the Report:** To inform and update Councillors on the progress of the Trans Pennine Tunnel Feasibility Study.
2. **Recommendation**
 - 2.1 That the report be noted.
3. **Executive Summary**
 - 3.1 In December 2014 the Department for Transport (DfT) published its Road Investment Strategy: Investment Plan, which confirmed that it would be exploring the feasibility of a major new road link under the Pennines between Sheffield and Manchester.
 - 3.2 In July 2015, the Department for Transport (DfT) and Transport for the North (TfN) jointly commissioned Highways England to assess the feasibility of a new strategic highway route connecting Manchester and Sheffield across the Pennines.
 - 3.3 This report is a summary extract from the Trans Pennine Tunnel Study Interim Report, published 24 November 2015. This Interim Report provides an initial response to DfT and TfN on the following issues:
 - The strategic case for a scheme, involving an assessment of scheme objectives against national, regional and local policies and the wider case for change in the North of England.
 - The economic case for a scheme, using the principles described in the Government's Web-based Transport Analysis Guidance (WebTAG).

- The feasibility of designing and constructing a new strategic route between Manchester and Sheffield, recognising the particular issues associated with the construction of very long sections of tunnel.
- The feasibility of operating and maintaining this new strategic route, focusing on the particular challenges (including driver behaviour and incident management) associated with long lengths of tunnel.
- The potential synergies that could result from combining a road corridor with a heavy-rail or light-rail service following a similar route.
- The environmental impact of the scheme.

- 3.4 The defined objectives of the trans-Pennine tunnel project are as follows:
 Objective 1 – To provide a safer, faster, and more resilient road connection between Manchester and Sheffield, creating more capacity and an additional east-west connection.
 Objective 2 – To fulfil the aims of the Northern Transport Strategy to deliver a scheme that will contribute to the transformation of the economy in the North.
 Objective 3 – To protect and improve the natural environment by reducing through-traffic in the Peak District National Park and by getting the right traffic onto the right roads.
 Objective 4 – To support wider socio-economic needs and leave a long-term legacy of improved road connectivity, better access to labour markets, wider employment opportunities, better land use, and more effective integration between transport modes.
- 3.5 The Interim Report is available on the Government website and the web link can be found at the end of the report. Further work on the strategic case, economic case, traffic considerations, construction considerations, operational and maintenance considerations and environmental considerations is continuing. Further details in the form of an interim report are due to be published in July. This will identify and shortlist options for a strategic route within the study area. Assuming there is a viable strategic and economic case for the shortlisted options, these will be evaluated and a final report published in October 2016.

4. **How this report links to Corporate Priorities**

- 4.1 The Trans Pennine Tunnel, when constructed, will have implications for aims of the 2015-2019 Corporate Plan, namely:
- Aim 1 -To help create a safer and healthier environment for our communities to live and work
 - Aim 3- To help create a strong economy by supporting further regeneration of towns and villages
 - Aim 4 - To protect and improve the environment

5. Options and Analysis

5.1 Option 1 – (recommended) Note the report and continue to be represented on the Stakeholder reference group and other interested bodies.

5.2 Option 2 – (not recommended) Do not continue to be represented on the Stakeholder Reference Group. No recommended as the Council would not have any input to process

6. Implications

If the feasibility study is taken forward then there will be implications for the Council. However, at this stage there are no direct implications.

6.1 Community Safety - (Crime and Disorder Act 1998)

None direct

6.2 Workforce

If the feasibility study is taken forward then there will be implications for the Council. However, at this stage there are no direct implications.

6.3 Equality and Diversity/Equality Impact Assessment

This report has been prepared in accordance with the Council's Diversity and Equality Policies.

6.4 Financial Considerations

If the feasibility study is taken forward then there will be implications for the Council. However, at this stage there are no direct implications.

6.5 Legal

If the feasibility study is taken forward then there will be implications for the Council. However, at this stage there are no direct implications.

6.6 Sustainability

If the feasibility study is taken forward then there will be implications for the Council. However, at this stage there are no direct implications.

6.7 Internal and External Consultation

Liaising with stakeholders

6.8 Risk Assessment

Under option 2 there is an increased risk the scheme would not meet the objectives of the council. Continuing to be represented mitigates this risk and allows the views of the Council to be heard.

7. **Background and Detail**

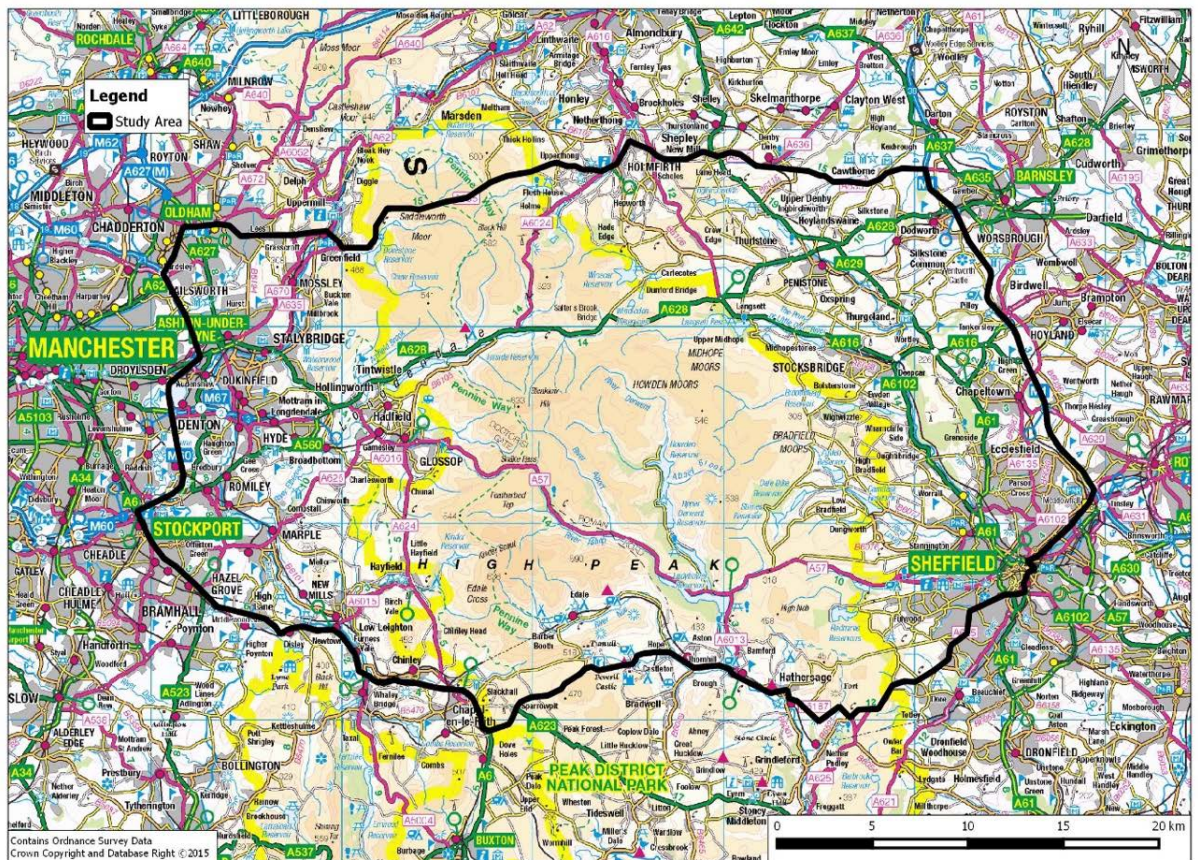
Background

7.1 The study area, shown on the following map, is bounded to the west by the M60 Manchester orbital motorway and to the east by the M1 motorway. It is bounded to the north by the town of Holmfirth and extends south to Chapel-en-le-Frith. The rationale for choosing this study area for scheme options is that:

- the M60 and M1 motorways provide clearly defined borders and provide links to the strategic road network;
- the A635 is the most northerly direct road link between Manchester and Sheffield; and
- the A623 and A6 similarly provide the most southerly direct road link between Manchester and Sheffield

North and south of these two boundaries the potential routes would become much less direct and significantly less desirable and will not capture enough traffic from the existing routes. A wider study area, which includes and extends beyond, the entire Northern Powerhouse area, has been used to consider the economic and traffic impacts of the scheme.

7.2



7.3 The new strategic road link between Manchester and Sheffield ranges from 40-50km long and will be dependent on the route options taken forward. It will involve the construction of a number of above-ground structures, bridges, retaining walls and earthworks, as well as the need to improve the existing highway infrastructure (including signage). The new link will include a tunnelled section, which could range from between 20-30km, making it one of the longest road tunnels ever built.

7.4 At this preliminary stage the feasibility of a new strategic highway route connecting Manchester and Sheffield was explored and it was found that:

- a) Against the background of the Government's ambition to establish the Northern Powerhouse economy there is a clear strategic case for the scheme, which is aligned with central and sub-national Government policy and which reflects the transportation, socio-economic and environmental objectives of the scheme;
- b) the economic benefits of the scheme could include direct user benefits resulting from time savings and the improved resilience of the route compared to existing roads across the Pennines together with wider and more significant benefits in productivity, labour markets, land use and investment in the region;
- c) the scale of the wider economic benefits has yet to be established but initial analysis shows that these could be significant and complementary to other

elements of the developing Northern Powerhouse strategy. As we identify potential route options the scale of economic benefits will be quantified and compared with the costs which will also be very large;

d) the construction of a new strategic route between Manchester and Sheffield is technically feasible, recognising that the extensive tunnelling required through the National Park and the provision of suitable connections to the Strategic Road Network (SRN) presents some significant technical challenges;

e) the operation and maintenance of this new road link – which includes extensive tunnel sections – would also be feasible; and

f) the development of a combined road and rail corridor through the tunnelled section could offer some additional benefits, although road and rail would need to occupy separate tunnel bores and we have not yet established the operational case for this type of solution.

7.5 Both the DtT and TfN have identified a new major link under the Pennines between Manchester and Sheffield in their strategic plans. According to the One North report, the number, capacity and reliability of east west road connections is a constraint on the economy. The link between Sheffield and Manchester is one of the main gaps in connectivity in the North of England. The existing roads have low average speeds and a poor collision record. They cross the National Park and are affected by inclement weather throughout the year. A new route is expected to improve connectivity, promote growth, improve capacity and safety, offer greater resilience, and reduce the impact of traffic on the high-quality environment of the National Park. Importantly, if the wider policy towards creating a Northern Powerhouse is successful, then the constraints on connectivity between Manchester and Sheffield, and their impact on the wider transport network in the North, will hold back growth across the region.

7.6 So far there has been little analysis of the economic case as the design of the potential scheme is at an early stage. There are however indications that there is potential for significant benefits. These include:

- Significant reductions in travel time of up to 30 minutes for both passenger and freight traffic between Manchester and Sheffield, with potential knock-on implications for travel times on other parts of the network as travel patterns change in response to changing network capacity and quality as well as traffic congestion on other parts of the network to reduce as capacity increases but there may be increased pressure on local roads that provide access to the new road;
- There are likely to be significant reliability benefits to existing users of roads across the Pennines. These roads are frequently out of action during periods of poor weather;
- The reduced travel over the Pennines could itself have positive impacts on the environment;
- high level illustrative scenario modelling of productivity effects on business from better links between Sheffield and Manchester has been carried out. These scenarios show productivity benefits of between £171m and £421m per annum, with further potential gains to productivity arising from increased

competition across markets. However these are just scenarios and benefits may be higher or lower when actual data has been analysed;

- There are also potential benefits from increasing the attractiveness of the North to inward investment arising from improved access to labour markets, suppliers, business accommodation, distribution centres and warehousing; and
- Importantly, the Northern Powerhouse is about putting together a whole programme of investments where complementary projects are packaged and where their interactions result in higher returns than individual projects alone. This is where the Northern Powerhouse concept comes into play, in that the range of cross-sector investments could result in projects having a larger impact than they would as stand-alone investments.

7.6 This report is a summary extract from the Trans Pennine Tunnel Study Interim Report, published 24 November 2015. The full report is available on the government website and the link is attached below. Further work on the strategic case, economic case, traffic considerations, construction considerations, operational and maintenance considerations and environmental considerations is continuing. Further details in the form of an interim report are due to be published in July. This will identify and shortlist options for a strategic route within the study area. Assuming there is a viable strategic and economic case for the shortlisted options, these will be evaluated and a final report published in October 2016.

Dai Lerner
Executive Director - Place

**Web Links and
Background Papers**

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/409011/trans-pennine-summary.pdf

Location

Regeneration Services
Moorlands House,
Leek

Contact details