Transport for the North Board Meeting - Item 5

Subject: Central Manchester Rail Infrastructure
           Supporting Reliability Across the North
Author: Jim Bamford
Sponsor: David Hoggarth
Meeting Date: 8 January 2020

1. Purpose of the Report:
1.1 To consider the advice that Transport for the North needs to issue to the Secretary of State for Transport on Infrastructure enhancements in the Manchester area to support wider rail reliability
   - Piccadilly & Oxford Road (‘Package C’)
   - DfT’s ‘Other options’
   - Additional/Transport for the North ‘Other options’

   in the context of other investments needed and/or planned to the rail network in the North of England.

2. Executive Summary:
2.1 The current railway infrastructure in Central Manchester does not support all the services that have been committed in the Northern franchise, with the result that:
   - Some train services that have been contracted in the current franchises are not able to operate; and
   - Services that do run have far lower reliability than is required, both in Manchester and across the north of England.

2.2 Network Rail has produced an ‘Update’ on its Cross Manchester Capacity & Reliability Improvement Project, which found that: “There is no single project solution to resolve the capacity and reliability issues .... for the Cross-Manchester programme”. The strategic choices are:
   ➢ investment in the infrastructure;
   ➢ some reduction to the train service; or
   ➢ accept the very poor reliability that is a consequence of using the existing infrastructure so intensively.
2.3 **Infrastructure enhancements**
A package of potential enhancements to the infrastructure have been identified that would allow operation of the committed franchise services and much improved reliability, including:

- 2 Additional platforms at Piccadilly and longer platforms at Oxford Rd (the Northern Hub ‘Package C’ works);
- A new turnback siding east of Victoria;
- Works at Manchester Airport, extending platform provision;
- Potential ‘Other options’ at 9 locations to the north and west of central Manchester; and
- Potential works south of Piccadilly.

and it is recommended that Transport for the North’s should support those options for the improved reliability that they would produce.

2.4 Following receipt and consideration of reports in September 2019 and November 2019, the Rail North Committee has made a set of recommendations to the Board about advice that Transport for the North should issue to the Secretary of State for Transport on those infrastructure enhancements, which are set out in section 5.

2.5 **Service changes/reductions**
As a palliative measure until adequate infrastructure is provided it will be necessary to reduce and/or change services in central Manchester. DfT engaged rail industry expert Richard George to recommend what service changes could be made in the short-term (i.e. by December 2020). Those proposals for short-term service changes/reductions are being considered by the Rail North Committee, which will advise the Rail North Partnership accordingly.

3. **Consideration:**

3.1 **Background**
Over the past 50 years, there has been recurring substantial retrenchment of rail infrastructure across the north of England, including:

- the number of platforms at central Manchester stations has been reduced from 49 in the 1960s to 25 today; and
- all of the main east-west freight routes avoiding central Manchester that existed in the 1960s have been closed so that the only east-west route now for freight trains is through central Manchester (the Castlefield corridor or Victoria).

3.2 At the same time that the infrastructure has been reduced, the number of passengers has increased - broadly doubling over the last twenty years. Thus, more passengers than ever before are having to fit onto the reduced infrastructure. With the exception of Merseyrail the
services that run to and through the north are the most unreliable in the UK – as can be seen below.

![Graph showing percentage of trains which are late (i.e. more than 1 minute)](image)

3.3 As a consequence of historic long term underinvestment, the current railway infrastructure in Central Manchester does not support all the services that need to operate and which have been planned to be run to accommodate current passenger levels, so that:

- some train services that have been contracted in the current franchises are not able to operate; and
- services that do run have far lower reliability than is required.

3.4 **Infrastructure enhancements that were planned**

The ‘Northern Hub’ works in CP5 (2014 – 2019) were planned to enhance the infrastructure sufficiently to enable some more services to accommodate the year-on-year growth in passenger numbers as specified in the current Northern & TPE franchises. Some Northern Hub works have been built (e.g. the Ordsall Chord), but ‘Package C’ to enable 16 trains per hour to run on the Castlefield corridor, by:

- re-modelling Manchester Oxford Road for longer, more frequent trains; and
- providing two additional through platforms (15 & 16) at Manchester Piccadilly.

has not yet been started.

3.5 Those Package C works required a Transport and Works Act Order (TWAO). A Public Inquiry was held and reported in 2015, and the TWAO has been awaiting a Ministerial decision since then.

The broad price range of Package C in full is around £700-800m.
3.6 **Detrimental effect on train performance**

The 5 Train Operating Companies (TOCs) that operate across the North of England – Northern, TPE, LNER, West Coast and Cross Country – have far worse punctuality than train operators for the rest of Britain. The last figures published by ORR show that those 5 north of England TOCs:

- have fewer trains on-time than any of the other 13 TOCs in the rest of Britain; and
- suffer almost double the level of late trains than the rest of Britain.

3.7 Some of that unreliability – e.g. problems with trains, or traincrew issues - is the responsibility of the TOCs. But much of the unreliability is caused by inadequate infrastructure and can only be resolved by infrastructure enhancement, without which that large element of unreliability will continue endlessly into the future. The absence of the ‘Package C’ works is a key part of why the infrastructure is inadequate and has contributed to the very significant deterioration in reliability of train services. Other infrastructure constraints in Manchester also exist and would also need to be addressed to maximise the benefits of the Package C works.

3.8 In April 2019 the Castlefield corridor (Manchester Piccadilly - Oxford Road - Deansgate) was formally designated as ‘Congested Infrastructure’. It is one of only 3 locations in Britain so designated, and the only such location for which additional infrastructure is not already being constructed. In fact, there are a further two locations in Manchester:

- Manchester Piccadilly – Slade Lane junction – Stockport; and
- Manchester Airport;

where infrastructure constraints prevent franchise service commitments from operating, and which appear to meet the criteria for designation as Congested Infrastructure.

3.9 Services through Central Manchester go to/from virtually the whole of the North of England, so delays caused there have a serious detrimental impact right across the north. The opening of the Ordsall Chord has made this more complex and transmits more delay across a larger area. Provision of adequate infrastructure in central Manchester is therefore essential for improving reliability of train services across the North of England.
3.10 **Action required to resolve the problem**

At DfT’s request, Network Rail has now undertaken a review of the original ‘Package C’ scheme. It found:

a) that without the works at Oxford Road and Piccadilly it would be necessary to reduce the service to 14 trains per hour (tph) to allow ‘robust’ operation compared to the 16tph committed through the Northern & TPE franchise agreements – although how reliable such ‘robust’ operation would be has not been fully quantified; and

b) that there is no simpler and cheaper set of works on the Castlefield corridor itself that would robustly provide for 16tph and longer (8-car) trains.

3.11 It has also been identified that there are problems:

a) at Manchester Victoria caused by the increased number of trains passing through and terminating there, and

b) at Manchester Airport where longer and/or more platforms are needed;

and that there are potential works at 9 other locations north and west of Manchester which could potentially improve the reliability of trains using the Castlefield corridor.

3.12 In Spring 2019 DfT approved £2.4million for the next stage development of the works at Manchester Victoria, Manchester Airport and the 9 other locations north and west of Manchester.

Network Rail will recommend a shortlist of schemes for further development funding to the North of England Programme Board in February 2020.

3.13 Given the issues described above and the recommendations from Richard George and Cross Manchester Capacity and Performance, DfT is working with NR to formulate an integrated planning, decision making and implementation group for the rail network in Manchester. It is planned that a team will be formed very shortly drawing on expertise from the rail industry and stakeholders. The structure and scope of the team are being finalised.

**Synergies with the wider north of England.**

3.14 Chronic unreliability is a problem across the whole of the north of England. A majority of Northern trains are late in the areas in and around all of the north’s 5 biggest cities, with:
• Liverpool and Sheffield suffering virtually as badly as Manchester;  
• Leeds only marginally better; and  
• Newcastle a little better but still with half of Northern trains late.

This is shown in the chart below. TPE and long-distance trains (LNER, West Coast & Cross Country) as shown in paragraph 3.2 earlier are even more unreliable.

In the case of Leeds, an industry workshop was convened in November which shortlisted a range of potential investments that would improve capacity and performance. A paper will be presented to North of England Programme Board in February and development funding will be sought.

3.15 In addition to the 3 Manchester ‘Congested Infrastructure’ locations (see 3.8) there are a number of other locations across the north of England where infrastructure constraints prevent franchise service commitments from operating, and which therefore appear to meet the criteria for designation as Congested Infrastructure, and there may be other locations which have not yet been identified. A report on those other locations across the north will be brought to the March 2020 meeting of the Rail North Committee.

3.16 The Trans-Pennine Route Upgrade scheme excludes work at Manchester, Leeds or York but it has been established that even after the TRU works, TRU services will only be able to operate reliably if the current problems at Manchester, Leeds and York have been resolved by enhancements at those locations.

3.17 **Service changes/reductions**  
DfT has engaged Richard George to advise on what reductions and/or changes to train services through the Castlefield corridor might be necessary/least-bad as palliative measures for the interim period from December 2020 until any infrastructure enhancements are delivered.
Richard George made a presentation to Transport for the North’s Rail North Committee on 5 November 2019 about his service proposals. Those proposals were then considered by a Transport for the North’s Member/Officer Working Group, and Transport for the North’s Rail North Committee will be considering what Transport for the North’s view should be expressed to the Rail North Partnership Board to inform the final decision.

4. **Conclusion:**

4.1 At its meetings on 12 September 2019 and 5 November 2019, the Rail North Committee received reports and a briefing which summarised the Network Rail ‘Update’ on cross-Manchester Capacity & Reliability issues and gave further information on related matters. The Committee made a set of recommendations to the Board about advice that Transport for the North should issue to the Secretary of State for Transport on those infrastructure enhancements, which are set out in section 5.

4.2 The most pressing locations for investment in the north include those that have been formally recognised to be Congested Infrastructure, which is the case for Manchester.

5. **Recommendation:**

5.1 **Infrastructure enhancements**

It is recommended that the Transport for the North’s Board should state clearly that:

- resolution to the current problems of congested infrastructure should be through provision of adequate infrastructure rather than long-term reductions in services or unreliable operation: and
- any reductions in service that might be necessary in the short-term should be recognised as temporary palliative measures until the infrastructure has been enhanced.

5.2 It is recommended that the Transport for the North Board should:

1. Advise the Secretary of State to approve the next stage (which is understood to be detailed design) of the ‘Package C’ works by:
   a. Approving the TWAO now;
   b. start GRIP 4 (detailed design) without further delay; and
   c. Identify Do Minimum costs for Oxford Road & Piccadilly (for longer trains & increasing passenger flow);
2. Welcome and Strongly support the DfT/NWR ‘Other options’, in particular:
   a. The Manchester Victoria eastern turnback which should be approved immediately;
   b. Manchester Airport, which should be progressed urgently, including synergies with Airport road works planned for 2020-2021;
   c. early development of 3 quick-wins;
   d. Ordsall Lane grade-separation; and
   e. Salford Crescent

and request consideration of similar options south of Piccadilly, including:
   - Assess Piccadilly – Slade Lane/Stockport urgently for the benefits of and optimum location for grade-separation; and
   - assess the value of 6-tracks Longsight – Slade Lane;

3. Request a piece of work to assess freight options avoiding Castlefield; and

4. Seek designation of Stockport & Manchester Airport as ‘Congested Infrastructure’.

5.3 It is recommended that Rail North Committee receives future reports on the development of schemes to address other locations of apparent ‘Congested Infrastructure’ across the north: and that the Rail North Committee advises Transport for the North’s Board appropriately
List of Background Documents:

The following background papers were considered in preparation of this report:

- Report to the TfN Rail North Committee, 12 September 2019, item 6.3 Investment Planning Update
- Report to the TfN Rail North Committee, 5 November 2019, item 8.0 Central Manchester Options

Briefing provided to members of the Transport for the North’s Rail North Committee 5/11/19.

NOTE – Background papers are those documents relating to the subject matter of the report which disclose any facts or matters on which the report or an important part of the report is based and have been relied on to a material extent in preparing the report, BUT do not include any published works or exempt or confidential information. (s100D Local Government Act 1972)

If you wish to access these background papers – please contact <Jim Bamford, Head of Investment Planning, TfN Strategic Rail, Westgate, Grace Street, Leeds, LS1 2R. Tel 07816 598790. E-mail: jim.bamford@transportforthennorth.com

Required Considerations

Please confirm using the yes/no options whether or not the following considerations are of relevance to this report. <Delete this line from completed report.>

**Equalities:**

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<th>Consideration</th>
<th>Comment</th>
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<th>Director</th>
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<tr>
<td>Equalities</td>
<td>A full Impact assessment has not been carried out because there are no apparent equalities issues on this matter</td>
<td>Jim Bamford, Head of Investment Planning,</td>
<td>David Hoggarth, Director TfN Strategic Rail</td>
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Age  | No  
Disability | No  
Gender Reassignment | No  
Pregnancy and Maternity | No  
Race | No  
Religion or Belief | No  
Sex | No  
Sexual Orientation | No  

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## Environment and Sustainability

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<td>Sustainability / Environment – including considerations regarding Active Travel and Wellbeing</td>
<td>A full impact assessment has not been carried out because there are no specific sustainability issues other than that the proposals would, if implemented, promote the use of rail including modal shift from cars.</td>
<td>Jim Bamford, Head of Investment Planning,</td>
<td>David Hoggarth, Director TfN Strategic Rail</td>
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## Legal

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<td>Legal</td>
<td>Transport for the North’s Legal Team has confirmed there are no legal implications.</td>
<td>Deborah Dimock</td>
<td>Julie Openshaw</td>
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## Finance

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<td>Gareth Sutton</td>
<td>Iain Craven</td>
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## Resource

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<td>Transport for the North’s HR Team has confirmed</td>
<td>Stephen Hipwell</td>
<td>Dawn Madin</td>
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there are no resource implications.

**Risk**

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<td>Risk</td>
<td>A risk assessment has been carried out and the key risks are included in the report.</td>
<td>Jim Bamford, Head of Investment Planning,</td>
<td>David Hoggarth, Director TfN Strategic Rail</td>
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**Consultation**

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<td>Consultation</td>
<td>A consultation has not been carried out because this report and the debate on it serves as the opportunity for TfN members to express their views.</td>
<td>Jim Bamford, Head of Investment Planning,</td>
<td>David Hoggarth, Director TfN Strategic Rail</td>
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