

Transport for the North

Rail North – Strategic Rail Director Consultation Call

Subject: Manchester Recovery Taskforce Recommendation

Author: Adam Timewell, Senior Commercial Manager

Sponsor: David Hoggarth, Strategic Rail Director

Meeting Date: Wednesday 14 July 2021

1. Purpose of the Report:

- 1.1 This report outlines the short-term timetable recommendations from the Manchester Recovery Task Force (MRTF) in its capacity of identifying solutions to improve rail performance for passengers across the North by reducing congestion around Greater Manchester which links the major hubs in the region.
- 1.2 This report asks Committee members to:
 - 1) Endorse the Train Service timetable structure of the Task Force's proposed option B+ from December 2022.
 - 2) Note the roadmap for further development of services beyond 2022.
 - 3) Agree that the industry should proceed with detailed timetable development and plan for a second phase of public consultation in Autumn 2021.
 - 4) Note that the long-term infrastructure and service solution for Manchester continues to be developed and that quarterly roundtable meetings are planned between Transport for the North members and ministers following the special NTAC meeting.

2. Executive Summary:

- 2.1 The Manchester Recovery Task Force was set up in January 2020 to address the unacceptable levels of train performance impacting across the north. The Task Force developed options for consideration and

assessed carefully how these options will improve the overall reliability of the network as well as the impact they will have on passengers. These options were designed to improve performance in the short-term pending the delivery of enhanced infrastructure in the medium to long term. Improving the reliability of services is expected to lead to an overall increase in rail usage.

- 2.2 A public consultation was held on these options between January and March 2021. Whilst there was common agreement in the responses that improvements needed to be made to improve reliability, there were a range of views as to how that should be achieved. A formal consultation response will be issued in July/August 2021 that sets out the results and explains the Task Force's response.
- 2.3 Following analysis of the consultation, the Task Force produced an enhanced alternative to Option B (Option B+) to address as many as possible of the issues identified in the consultation responses. Then, following discussions with Committee Members and special Northern Transport Acceleration Council (NTAC) meeting there has been a period of collaborative work between the Task Force, the timetable planning teams and local officials to further iterate some of the detail and resolve as many issues as possible but without compromising the performance gain. The table in Appendix A shows the variances between pre-Covid, current, and proposed service specifications.
- 2.4 Option B+ delivers significant passenger benefits: 95% of passengers are unaffected by the recommended changes; passengers travelling to/through Manchester are estimated to save 100,000 minutes each day based on reduced delays; A regular commuter into Manchester would be expected to suffer an hour less delay each month compared with the performance offered by the December 2019 timetable.
- 2.5 Working with the Task Force, Transport for the North has secured a future roadmap for service development (Appendix D). This links investment in infrastructure to services and shows service enhancement opportunities aimed at identifying solutions to address those issues raised in the responses or the further assessment but that are not able to be directly addressed in 2022.
- 2.6 The alternative option to endorsing the Option B+ timetable structure would result in the continuation of the Covid timetables with further changes based on meeting demand at the time and only being considered if it did not have a significant impact on performance levels or the maximum number of trains accepted by Network Rail on the Castlefield Corridor.
- 2.7 This is a major change to the timetables on many routes, and the industry must avoid a repeat of May 2018 where insufficient time was available to planners. Providing direction now brings Manchester in line

with the whole industry and means the second, detailed consultation in autumn 2021 can occur at a time where responses can be properly acted on within normal industry timescales.

3. Considerations:

Background

- 3.1 The railways in and around Central Manchester are a major congestion pinchpoint impacting on the reliability of services across a wide area of the North of England. Not only does it drive poor performance across the North, it also prevents service enhancements from being delivered and constrains economic growth. The issue has become more urgent as Network Rail has designated the Castlefield Corridor as 'congested infrastructure' – one of only a small number of pieces of railway nationally to have such a designation. This means that as well as developing long-term solutions to the problem, service changes need to be developed to improve reliability for passengers
- 3.2 The Department for Transport (DfT) has established a Task Force (Manchester Recovery Task Force) to develop solutions to the problem including short-term timetable changes. Network Rail has been developing an infrastructure plan for the area which is currently divided into three tranches covering short, medium, and long-term proposals.
- 3.3 Transport for the North, in its Statutory Advice to the Secretary of State, stated that resolution to the current problems of congested infrastructure should be through provision of adequate infrastructure rather than reductions in services or ongoing unreliable operation and that 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. Members therefore requested a roadmap for future service and infrastructure enhancements alongside consideration of short-term service changes.
- 3.4 It should be noted that some performance improvements were implemented in December 2020 with the withdrawal of the 'off pattern' additional peak Transport for Wales Rail Limited (TfWRL) services from Chester, and the cessation of terminating the other peak TfWRL trains at Manchester Piccadilly.

Timetable Options Objectives

- 3.5 The Task Force worked during 2020 to develop options for consideration. Three options (A, B and C) were developed for consideration and public consultation. The objectives for all options were:

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- to improve train performance for everybody;
 - to maintain service levels for as many passengers as possible; and
 - to create a timetable that is based on sound principles from which it will be possible to build improvements, as infrastructure investment becomes available.

All options have several essential features in common, which are:

- a reduction in frequency on the Castlefield Corridor the key 'Congested Infrastructure' constraint;
- better spacing of trains on the Castlefield Corridor to avoid delays knocking-on to following trains;
- fewer conflicts at key junctions to avoid trains crossing each other's paths;
- better linkage of services at Victoria to reduce trains turning around in platforms; and
- a move towards regular 30- or 60-minute service patterns, to standardise operations and make train service patterns simpler for passengers, particularly when they need to interchange to complete their journey.

The congested infrastructure declaration supporting capacity report showed the need to limit the number of Castlefield Corridor trains to 12 all day, and up to 13 in peak hours – including freight.

Performance Assessment

- 3.6 Timetable options A, B and C have been tested using a microsimulation model to assess the reliability impact of changes to the timetable in Central Manchester (See Appendix B). Analysis by the Task Force shows that, pre-Covid, three services were particularly poor performers in central Manchester, and had a significant impact on the transfer of delays across the network:
- Long distance trains from Yorkshire and the North East via the Ordsall Chord.
 - Southport to Alderley Edge trains which link many congested parts of the network across the city from Bolton to Stockport.
 - South Yorkshire to Manchester Airport services which reverse at Manchester Piccadilly, consuming two train paths in each direction. These trains impact on the Castlefield Corridor through the reversing moves they make. There is also an attaching and detaching of units at Manchester Piccadilly that increases the risk of performance impacts.
- 3.7 Prior to the consultation this testing had covered the standard off-peak hour, but during the consultation further testing has now been completed for the peak periods for Options B and C. The off-peak performance benefits of Option A were not considered to have a

significant enough impact to conduct a further peak period assessment. Although this option has not been subject to explicit peak modelling, the off-peak performance benefits can be similarly expected to be maintained through the peak period in line with the Options B and C results

- 3.8 The all-day tests show that a similar level of performance benefit is possible with Options B and C both providing 24-25% overall reduction in delays, noting that Option C has had a reduction in benefit from the off-peak only assessment which was used during the consultation.
- 3.9 The changes to specification proposed by the Task Force in response to the consultation, Option B+ is not, in the professional judgement of the Task Force, expected to materially different from the results achieved in Options B and C, and high-level performance metrics suggests further improvements may be possible. This judgement is made based on the high degree of consistency between Option B+ and options already tested. Further performance testing of Timetable B+ is proposed later in 2021, alongside the consultation on calling patterns.

Consultation and Passenger Impact Assessment

- 3.10 A public consultation ran from January until March 2021. The majority of responses received focused on objections to changes in loss of direct connectivity or service frequency on specific routes. Each key issue raised in the consultation responses was assessed against the number of daily passengers affected for each option rather than the number of responses received (See Appendix C). The key issues raised across the concerns on all three options combined affects approx. 7% of total daily journeys across Manchester.
- 3.11 The Task Force proposal (Option B+), based on the Option B specification with the addition of Southport and Wigan to south Manchester, along with Liverpool to Manchester Airport and Chester to Manchester Airport connectivity, mitigates a significant number of passenger impacts raised through the consultation, as shown in Appendix C.
- 3.12 The options have been assessed to establish the level of peak seating capacity that would be delivered on each route into central Manchester. There are a small number of routes where the reduction in frequency (required to deliver performance benefits) presents a risk of overcrowding if pre-Covid levels were to return. This includes Wigan to Manchester and Warrington to Manchester Oxford Rd which the Task Force is currently developing short-term mitigation options.
- 3.13 It is therefore proposed as part of the roadmap (Appendix D), that a train lengthening programme is developed as required by post-Covid demand. To minimise performance risk this should be progressed before extra services are introduced in future. The plan for 'longer, fewer' trains to improve reliability therefore leads to a need for

additional trains and works to lengthen platforms on routes currently limited to 3 or 4-car operation, building on industry work already undertaken on this issue.

Affordability Assessment

- 3.14 Work has been undertaken with train operators and Network Rail to develop the required train crew, rolling stock and infrastructure changes, assuming pre-Covid demand. Based on the analysis undertaken, the timetabling benefits from improved reliability significantly outweigh any dis-benefits from increased timetabled station to station time.
- 3.15 Of particular note is the finding that the revenue impact of better performance is greater than the loss of revenue from any diminution in service levels and/or connectivity. In many ways this challenges “conventional wisdom” and is a critical finding from the work potentially capable of wider application as we address similar issues of capacity elsewhere on the network.
- 3.16 It worth noting the important development of increasing operating resources to deliver a robust performing timetable structure. Both Northern and TPE estimated that additional diesel rolling stock were needed in all options due to longer turnarounds and the need to maintain pre-Covid capacity. Option C additionally requires more electric rolling stock for Northern due to longer turnaround times. Option A, requires minimal additional traincrew, Option B requires further additional traincrew, and Option C significant extra traincrew.
- 3.17 Some infrastructure investment is required to underpin the new timetable introduction including platform and depot enhancements to facilitate where longer trains will operate and improve operational performance.
- 3.18 All the Task Force proposals offer a strong business case. Option C poses the highest financial risk due to the highest level of operating cost and revenue forecasts. An assessment has indicated that direct modelling of Option B+ would not materially change train mileage and other operating metrics and no major impacts on revenue are expected compared with the Option B which saw strong growth from the improved performance levels.

Alternative Option

- 3.19 Given the congested nature of the infrastructure and the poor reliability related to the pre-covid timetable, the alternative option to endorsing the Option B+ timetable structure would result in the continuation of the Covid timetables. Further changes based on meeting demand at the time would only be possible if they did not have a significant impact on performance levels or the maximum number of trains accepted by Network Rail on the Castlefield Corridor.

3.20 Whilst the current Covid timetables have seen improved performance levels prior to the pandemic, these improvements have been achieved through cutting services and not through changes to the structure of the timetable. Each time more services are reintroduced on the previous pattern, reliability has been shown to reduce. The current timetable structure is therefore not considered to be robust enough to reliably cope with further increases in service levels and does not deliver the required peak capacity to support a return to pre-Covid commuting patterns.

4. Conclusion:

4.1 The Task Force recommendation (Option B+) is Option B with an all-day service from Southport/Wigan to Manchester Oxford Rd. It reduces trains on the Castlefield corridor by 15% and delivers the principles of regular interval services for the majority of routes. Performance modelling shows significant performance benefits in Options B and C (24-25% delay reduction) which, in the professional judgement of the Task Force, is not expected to materially differ in Option B+. This improved performance also generates significant patronage and revenue, giving a positive benefit: cost ratio. Option B+ delivers direct connectivity for 6,000 of 8,500 passengers potentially affected by changes in the options (more than any other option). Option B and B+ also have the fewest deliverability risks.

4.2 The outcome of the assessment has demonstrated that the December 2019 timetable is deemed undeliverable due to its performance and passenger impact, and the Castlefield Corridor Congested Infrastructure Declaration on the number of the trains that should operate on the corridor.

4.3 There are several further steps aimed at identifying solutions to address those residual issues raised in the responses or the assessment but not directly addressed by the B+ option. These are outlined below in section 5 and in the roadmap (Appendix D).

5.0 Further Steps:

2022 Timetable Development

5.1 In parallel, further work has been undertaken with Northern and East Midlands Railway to assess the cross-Warrington service issues at a high level for consideration. The Task Force is currently engaging with relevant stakeholders on options that aim to restore cross-Warrington connectivity; however, this may require a trade-off with stopping patterns.

5.2 The Task Force is also currently exploring options that could deliver improved capacity for services from Wigan when required that could also align to a future delivery of Golborne Station. Further work is

underway assessing the implications of these options. TfGM are engaged in this process.

Roadmap

- 5.3 At the request of Committee Members, Transport for the North has secured a roadmap produced by the Task Force (Appendix D). This links investment in infrastructure to services and shows Service Enhancement Opportunities aimed at identifying solutions to address those issues raised in the responses or the further assessment but that are not able to be directly addressed in 2022.
- 5.4 There is a need to develop a train service plan and supporting infrastructure for how we best connect economic centres to Manchester Airport. As part of this, the Task Force has been asked to develop specific future options to enhance connectivity with the Sheffield City Region. It is proposed that a working group is established to look at developing a set of options that balances performance, passenger experience, and affordability. The working group will need to consider some of the service trade-offs and infrastructure that are likely to be needed. In the interim, we will continue to work with areas such as South Yorkshire on developing options that cater for bespoke demand patterns e.g., International University students.
- 5.5 As the Transport for Wales driver training programme for its new train fleet reaches completion (May 2023), there is an opportunity to work with relevant stakeholders on the right solution for the North Wales service to Manchester given its importance to union connectivity between UK nations. It is recommended that further work be undertaken to assess demand, cost and performance implications of any changes to the routeing of North Wales services, as well as alternative uses of paths on the Castlefield Corridor. Required level crossing interventions to reduce risk levels are currently being developed, with two locations requiring increased barrier down time and only one likely to require changes to infrastructure.
- 5.6 Work continues on developing plans for preparing the Manchester network to operate longer trains to meet capacity and improve performance. This has been broken into immediate requirements for the Task Force's recommended service structure and remaining requirements to operate a 6-car length fleet. This includes preparing business cases for funding of platform enhancements and additional fleet.
- 5.7 It is proposed that the Task Force continues and considers how the infrastructure and timetable development evolves in unison over the 2020s and into the next decade through the use of the roadmap.

6. Recommendations:

6.1 Committee Members are asked to:

- 1) Endorse the Train Service timetable structure of the Task Force's proposed option B+ from December 2022.
- 2) Note the roadmap for further development of services beyond 2022.
- 3) Agree that the industry should proceed with detailed timetable development and plan for a second phase of public consultation in Autumn 2021.
- 4) Note that the long-term infrastructure and service solution for Manchester continues to be developed and that quarterly roundtable meetings are planned between Transport for the North members and ministers following the special NTAC meeting.

7. Appendices:

- 7.1 Appendix A – Service Specification Table
- 7.2 Appendix B – Performance Assessment Table
- 7.3 Appendix C – Passenger Impact Assessment
- 7.4 Appendix D - Roadmap

List of Background Documents:

There are no background papers to this report.

Required Considerations

Equalities:

Age	Yes	No
Disability	Yes	No
Gender Reassignment	Yes	No
Pregnancy and Maternity	Yes	No
Race	Yes	No
Religion or Belief	Yes	No
Sex	Yes	No

Sexual Orientation	Yes	No
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Consideration	Comment	Responsible Officer	Director
Equalities	A full Impact Assessment has not been carried out. Passengers will benefit from increased reliability however some passengers will see a reduction in frequency or direct connectivity	Adam Timewell	David Hoggarth

Environment and Sustainability

Yes	No
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Consideration	Comment	Responsible Officer	Director
Sustainability / Environment – including considerations regarding Active Travel and Wellbeing	A full Impact Assessment has not been carried out as the changes proposed do not constitute an application for development consent (EIA) or changes to a development programme / policy (SEA). There is no significant change to diesel fleet composition or mileage, so carbon impacts insignificant – and in general measures to increase public transport usage have a positive impact in terms of achieving the objectives of Transport for the North’s	David Hoggarth	David Hoggarth

	Decarbonisation Strategy.		
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Legal

Yes	No
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Consideration	Comment	Responsible Officer	Director
Legal	The Transport for the North legal team have confirmed that there are no new legal implications for Transport for the North as a result of this report	Julie Openshaw	Dawn Madin

Finance

Yes	No
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Consideration	Comment	Responsible Officer	Director
Finance	Transport for the North Finance Team has confirmed there are no financial implications for TfN.	Paul Kelly	Iain Craven

Resource

Yes	No
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Consideration	Comment	Responsible Officer	Director
Resource	Transport for the North HR Team has confirmed there are no direct	Stephen Hipwell	Dawn Madin

	resource implications as a result of this report.		
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Risk

Yes	No
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Consideration	Comment	Responsible Officer	Director
Risk	A risk assessment has been undertaken and key risks are included in the report.	Haddy Njie	Iain Craven

Consultation

Yes	No
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Consideration	Comment	Responsible Officer	Director
Consultation	A public consultation has been carried out and the passenger impacts are included in the report.	Adam Timewell	David Hoggarth

Appendix A – Service Specification Table

^Please note services between Liverpool-Warrington-Oxford Rd are currently being reviewed as per section 5.1 of this report.

*Please note the York-Victoria service (North TPE) is subject to the outcomes of the current ECML consultation process.

Routes		Dec 19	May 21	Option B+
Castlefield	CLC / Hope Valley	1tph Liverpool-Norwich 1tph Liverpool-Airport 1tph Airport-Cleethorpes 2tph Liverpool-Oxford Rd	1tph Liverpool-Norwich 1tph Liverpool-Airport 1tph Piccadilly -Cleethorpes 2tph Liverpool-Oxford Rd	2tph Liverpool- Cleethorpes /Norwich 2tph Liverpool- Warrington C ^ 1tph Warrington C -Oxford Rd ^ 1tph Warrington C -Oxford Rd (Peak) ^
	Bolton	1tph Scotland-Airport 1tph Blackpool-Airport 1tph Blackpool-Hazel Grove 1tph Southport-Alderley	1tp2h Scotland-Airport 1tph Blackpool-Airport 1tph Blackpool-Hazel Grove 1tph Southport-Alderley	1tph Scotland-Airport 1tph Cumbria-Airport 2tph Blackpool- Airport 1tph Southport- Oxford Road
	Chat Moss	1tph Liverpool-Airport-Crewe 1tph North Wales-Airport 1tph Cumbria-Airport	1tph Liverpool- Airport 1tph North Wales-Airport 1tph Cumbria-Airport	1tph Liverpool- Airport 1tph North Wales-Airport
North TPE		2tph Fasts to Liverpool 2tph Fasts via Chord 1tph Hull-Piccadilly 1tph Huddersfield - Piccadilly	1tph Fast to Liverpool 1tph Fasts via Chord 1tph Hull-Piccadilly 1tph Huddersfield - Piccadilly	2tph Fasts to Liverpool 1tph Redcar-Airport 1tph York- Victoria * 1tph Hull-Piccadilly 1tph Huddersfield - Piccadilly
Victoria North Side		1tph Chester-Leeds 1tph Victoria-Leeds via BDI 1tph Wigan-Leeds via DEW 1tph Wigan-Blackburn via TOD 1tph Kirkby-Victoria 2tph Rochdale-Blackburn/Clitheroe	1tph Chester-Leeds 1tph Victoria-Leeds via BDI 1tph Wigan-Leeds via DEW 1tph Kirkby-Blackburn via TOD 1tph Rochdale-Clitheroe 1tph Southport-Stalybridge	1tph Chester-Leeds via BDI 1tph Victoria-Leeds via BDI 1tph Wigan-Leeds via DEW 1tph Kirkby-Blackburn via TOD 2tph Rochdale-Blackburn/Clitheroe 1tph Southport-Stalybridge

		<p>1tph Southport-Stalybridge 1tph Stalybridge-Man Vic 1tph Preston-Victoria <i>1tph Wigan-Victoria (Peak)</i> <i>1tph Liverpool-Victoria (Peak)</i></p>	<p>1tph Stalybridge-Man Vic 1tp2h Preston-Victoria <i>1tph Wigan-Victoria (Peak)</i> <i>1tph Liverpool-Victoria (Peak)</i></p>	<p>1tph Victoria-Stalybridge <i>1tph Wigan-Atherton-Victoria (Peak)</i> <i>1tph Wigan-Golborne-Victoria (Peak, for future use)</i> <i>1tph Liverpool-Victoria (Peak)</i></p>
South Manchester		<p>1tph Liverpool-Airport-Crewe 1tph Piccadilly-Stockport-Crewe 1tph Piccadilly-Stoke 2tph Piccadilly-Buxton 1tph Piccadilly-Chester <i>1tph Piccadilly-Stoke (Peak)</i> <i>1tph Stockport-Chester (Peak)</i> <i>1tph Alderley-Picc (AM)</i></p>	<p>1tph Liverpool-Airport Airport 1tph Piccadilly-Stockport-Crewe 1tph Piccadilly-Stoke 1tph Piccadilly-Buxton 1tph Piccadilly-Chester <i>1tph Piccadilly-Stoke (Peak)</i> <i>1tph Stockport-Chester (Peak)</i> <i>1tph Alderley-Picc (AM)</i></p>	<p>1tph Piccadilly-Airport-Crewe 1tph Piccadilly-Stockport-Crewe 1tph Piccadilly-Alderley Edge 1tph Piccadilly-Stoke 2tph Piccadilly-Buxton 1tph Piccadilly-Chester <i>1tph Piccadilly-Stoke (Peak)</i> <i>1tph Piccadilly-Hazel Grove (Peak)</i> <i>1tph Stockport-Chester (Peak)</i></p>

Appendix B – Performance assessment table

	Dec 2019	A	B	C
Average minutes late per train in central Manchester (modelled 1000-1400)	3.0	2.5 - 17%	2.3 - 23%	2.1 - 30%
Average minutes late per train in central Manchester (modelled 0600-1400)	3.1		2.3 - 25%	2.4 - 24%

Appendix C – Passenger impact assessment

Passenger journeys impacted by loss of connectivity in each option	A	B+	C
North Wales to Victoria or via Northwich	2,148	0	1,323
Wigan to South Manchester	1,845	0 (retained in +)	1,845
Airport from Sheffield / Cleethorpes	0	1,447	1,447
Liverpool to Airport	0	0	1,059
Southport to South Manchester	791	0 (retained in +)	791
Airport trains from Newcastle	0	294	0
Cross-Warrington services	0	198	198
Cheshire stations to Stockport direct	0	0	58
Total	4,784	1,939	6,721

Passenger journeys impacted by reduction in frequency in each option	A	B+	C
Airport trains from York / Leeds / Huddersfield 2tph to 1tph	0	2,093	2,093
Atherton Line moving to 3tph peak, 2tph off peak	1,724	1,724	1,724
Buxton to Manchester 2tph to 1tph off peak	1,425	0	0
Total	3,149	3,817	3,817