Oldham-Rochdale line conversion to Metrolink

Summary
Greater Manchester owns and is accountable for the largest light rail network in the UK carrying 44 million passengers per annum. The Metrolink network includes 93 stops along 62.8 route miles. The service is operated and maintained on Greater Manchester’s behalf through an operating agreement with KeolisAmey Metrolink. The network consists of 5 miles of previously closed railway lines, 32.9 miles of converted heavy rail lines and 24.9 miles of new lines. This includes the Oldham and Rochdale Line (ORL), a 13.9 mile line running from Manchester City Centre to Rochdale Town Centre via Oldham, mainly using a converted heavy rail line which was closed in 2009. The line was re-opened in a modified form as a light rail line between 2012 and 2014, as part of phase three of the Metrolink system’s expansion, which also included new lines to Ashton-under-Lyne, East Didsbury and Manchester Airport.

Benefits of conversion to Metrolink
2008/09 patronage figures highlight in its final year operating as a heavy rail service, the Oldham – Rochdale line carried 1.1 million passengers. The ORL, now operating as a light rail service, carries some 6.2 million passengers per annum, representing a 6 fold increase.

The line has changed from being heavily subsidised to being part of a financially sustainable network that is revenue generating.

The cost of conversion was £204m, and £96m for the new lines through the town centres (in today’s values).

As a heavy rail service, the line had a mixed stopping pattern that effectively only provided a 30 min frequency to all stations on the line providing an average capacity of 1,200 per hr. Metrolink has enabled a significant increase in frequency with Manchester to Shaw and Crompton now operating as a 6 minute service and Shaw and Crompton to Rochdale Town Centre as a 12 minute frequency. The ORL now has a capacity for over 6,000 passengers per hour to and from Manchester, with room for further expansion.

The number of stops on the corridor has also increased from 11 to 20 stops. This represents almost twice as many stops where people can access the network, providing the opportunity for lots of shorter, local journeys, which is reflected in the demand increases in the off-peak. In order to better serve Oldham town centre, a new street running line was constructed, with four new stops at Westwood, Oldham King Street, Oldham Central and Oldham Mumps. Additionally, in order to better serve Rochdale town centre and Rochdale Bus Interchange, a short street-running line was constructed from Rochdale railway station to Rochdale Town Centre supported by several entirely new stops at South Chadderton, Freehold, Kingsway Business Park and Newbold. Delivery of transport infrastructure penetrating Oldham and Rochdale Town Centres has acted as a catalyst for wider investment and regeneration of those traditionally deprived areas.

The former heavy rail service was operated predominantly by ‘Pacers’, supplemented by ‘Sprinter’ rolling stock. The conversion to Metrolink led to the introduction of modern light rail vehicles, significantly enhancing the quality of the journey for passengers.

Metrolink is 100% accessible and has removed uncertainty for customers who have specific needs. Metrolink was designed with accessibility built in from the start and used the (at the time) innovative model of the Disability Design Reference Group (individuals with a wide range of needs). Building on the success, TfGM continue to work with the DDRG to further improve accessibility across its transport portfolio. This is in direct contrast to the current accessibility provision of the Greater Manchester rail network with circa 50% remaining inaccessible.

Relevance for Williams Review
Manchester’s record of success with Metrolink shows that you can deliver high quality services when those who design and deliver them are close and accountable to the customers they serve. The OLR highlights the potential benefits that may be delivered through opportunities (where appropriate) to segregate more local services – either fully segregated or using tram-train opportunities. Tram-train – meaning the operation of light-rail vehicles with street-running capability on the National Rail network sharing track with heavy rail trains – could facilitate additional metro services. Metrolink / tram-train opportunities form part of our Greater Manchester Transport Strategy and Delivery Plan aspirations and may provide an opportunity to support major potential residential developments identified in the Greater Manchester Spatial Framework 2019 revised draft.
### Oldham-Rochdale line conversion to Metrolink

<table>
<thead>
<tr>
<th>Heavy Rail (pre-2009)</th>
<th>Metrolink (2012-14 onwards)</th>
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</thead>
<tbody>
<tr>
<td>Varying degrees of accessibility at some stations including need to negotiate gaps between platforms and trains</td>
<td>Unified accessibility standard across a fully accessible network</td>
</tr>
<tr>
<td>1.1 million trips (2008/09)</td>
<td>6.2 million trips with an annual increase of 6.9% (March 2019)</td>
</tr>
<tr>
<td>Subsidised railway</td>
<td>Revenue making</td>
</tr>
<tr>
<td>11 stations</td>
<td>20 stops</td>
</tr>
<tr>
<td>Little expansion of parking provision</td>
<td>5 new park and rides</td>
</tr>
<tr>
<td>Little incentive to reduce car use</td>
<td>Promotion of modal shift to public transport: estimated a quarter of all trips on the new extension would have been made by car</td>
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<tr>
<td>Limited cycle provision</td>
<td>Addition of 3 new cycle hubs</td>
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<tr>
<td>Predominantly ‘Pacer’ rolling stock</td>
<td>Modern light rail vehicles</td>
</tr>
<tr>
<td>Effective half hourly service consisting of express and stopping services</td>
<td>Frequency: 6 minute service to Shaw and Crompton and 12 minute frequency to Rochdale</td>
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<tr>
<td><strong>Wider benefits:</strong> Scheme flexibility - introduction of new stops as well as relocation of existing heavy rail stops to align with areas of growth</td>
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Case Study: Altrincham Interchange

Project Description

Altrincham Interchange was developed in the mid 1970s as part of the then redevelopment of Altrincham Town Centre. At that time it was one of the first public transport interchanges of its time between rail and bus. The conversion of the electrified Altrincham to Manchester rail line as part of Metrolink (Phase I) in the early 1990s introduced a further mode to the Interchange and saw an increase in passengers using the facility.

Redevelopment of the site provided an accessible transport Interchange that now integrates bus, tram and rail services. Work included replacement of the 1970s bus station with a single passenger concourse; a new canopy and other improvements to the Metrolink platform; replacement of the existing aged footbridge with a new accessible footbridge with lifts connecting all services; public realm improvements; and provision of a Cycle Hub as part of a Greater Manchester wide cycling initiative.

Costs and Funding: £19 million
Greater Manchester Transport Fund, including some LSTF and S106 contributions.

Primary Aims and Objectives

- Creation of a modern, accessible, high quality transport interchange
- Effective integration of bus, Metrolink, rail and cycling modes
- Provide passengers with simple connections and seamless journeys for a better travel experience
- Provide a facility that can meet existing requirements and travel demands, and accommodate future growth in travel demand arising from developments around Altrincham and more widely
- Improve access and connectivity to the wider transport network and employment and other opportunities across the city-region
- Improve the appeal of Altrincham as a place to live, work and invest
- Act as a catalyst for further regeneration of the town centre and beyond

Key Benefits

- Increased attractiveness of public transport
- Improved facilities for passengers in a better environment
- Improved safety and security for passengers
- Increased accessibility between services / platforms and walking routes through the interchange
- Better management of the bus and Metrolink facilities
- A more attractive and impressive gateway into the town centre
- Improved connectivity between Altrincham and the wider city-region
- Supports the regeneration of Altrincham
- Enhanced multi-modal integration

Relevance for Williams Review

As part of this scheme, a new covered passenger footbridge was installed linking all three modes to the interchange at a cost of circa £4.5m. Network Rail costs totalled circa £1.5m, representing 43% of the total scheme cost (despite the scheme being delivered by TfGM). Network Rail upfront and emerging costs are uncontested, disproportionately high and inevitably increase. The difficulty of doing business with Network Rail in any meaningful way is acting as a major barrier to growth and development in our regions. Devolving decision-making, budgets and funding, rethinking cumbersome industry processes and de-centralising activities as far as possible will all help unlock the current rigidity.
Case Study: DfT Access for All CP6 Nominations

Summary
Rail accessibility is key to modal-shift and ensuring the railway is available to all. TfGM worked hard to ensure we put in 10 strong prioritised nominations for Access for All for CP6, jointly with Northern. The allocation of monies is entirely at the Government’s discretion. With our top priorities being unfunded, this has the potential to frustrate our local regeneration agenda.

Background
Access for All is a key part of the Government’s strategy to improve the accessibility of Great Britain’s railway. In July 2018, Government made up to £300 million available to extend the Access for All programme across Control Period 6 (CP6 2019-2024). Following a competitive nomination process, in April 2019, Government announced a further 73 successful stations to get an accessible route. This included 27 previously deferred from CP5 as a result of the Hendy review.

Greater Manchester Nomination
Greater Manchester submitted a joint nomination with Northern for 10 stations. Two stations were successful, namely Daisy Hill and Irlam, prioritised 3rd and 4th by TfGM and Northern. The rationale for our top two priorities is summarised below to highlight how local decision making can take a well rounded view and consider a range of factors that have the opportunity to drive local growth.

Priority 1: Walkden station is the second busiest station in Salford outside of the regional centre, with significant growth forecast as the closest station to the Royal Horticultural Society’s fifth national garden, which is expected to be used by an estimated 600,000 visitors per year once established. Furthermore, in order to tackle congestion, improve air quality, and encourage modal shift to realise an efficient, effective and affordable integrated approach to Greater Manchester’s public transport system, we offered the opportunity to deliver a holistic response at Walkden including delivery of a new park and ride facility.

Priority 2: Swinton station provides access to Salford City Centre Civic Centre, which accommodates employment for over 1,800 staff, as well as providing essential children’s services, social care, benefits and housing services. Furthermore, the area has been identified locally as a Town Centre Challenge location, which seeks to provide improvements in Greater Manchester’s city-region’s town, alongside addressing the housing crisis.

Relevance for Williams Review
Rail accessibility remains a significant challenge for Greater Manchester with over half of stations still having accessibility issues. Given previous experiences, to address the considerable gap in accessibility there is a need to review how to get funding and make decisions about improvements in future. We believe there is the opportunity for investment decisions of this nature to be devolved to combined authorities to ensure funding is able to take account of wider transport, land-use and social benefits. This chimes with the National Infrastructure Commission’s National Infrastructure Assessment which recommends that cities should have the powers and funding they need to pursue ambitious, integrated strategies for transport, employment and housing. Specifically, that: Government should set out devolved infrastructure budgets for individual cities for locally determined urban transport priorities, and Government should allocate significant long term funding for major capacity upgrades in selected growth priority cities. Within this context, Greater Manchester would have the opportunity to prioritise funding to align to local priorities.
Case Study: Northern Hub Programme

Summary
Northern Hub is vital to the performance of the railway and the movement of customers into and across Manchester effectively. Only 8 of 17 schemes in the proposal package have been delivered to date. This has contributed to the chaos caused by the May 2018 timetable change and impeded the development of key city centre development.

Background
The Northern Hub programme (originally known as the Manchester Hub) was developed by the Northern Way and Network Rail in 2010. It is a complex package of multiple interventions which were collectively designed to improve the role of rail services across the North of England by: increasing frequency of services between major cities in the North; providing new direct train services between cities in the North where it has previously been necessary to change in Manchester; reducing journey times; and providing new direct links to Manchester Airport. The original work had identified that central Manchester represents a significant bottleneck and that a lack of passing facilities led to slower journey times, as fast trains cannot overtake stopping services. The final proposed package consisted of 17 separate schemes, that collectively delivered the aims set out above and represented excellent value for money.

Relevance for Williams Review
Delivery of these schemes has been protracted and, in the case of improvements at Piccadilly and Oxford Road stations, subject to affordability challenges. At the same time, promised train service improvements have also failed to materialise. Since the May 2018 timetable problems, it has become apparent that the bottleneck in central Manchester has still not been resolved and realisation of the benefits of the Northern Hub investments is not being realised. The Northern Hub schemes on the Hope Valley line are still not sufficiently committed to allow discussion of potential train services, and bidders for the latest franchises were precluded from proposing service improvements on this line.

Along with the transport issues, the unresolved TWAO is putting on hold key city centre developments, impacting on local investment and growth. Centralisation within both Government and Network Rail has brought effective decision-making within the industry almost to a halt. There is greater opportunity for investment decisions of this nature to be devolved to ensure funding is able to take account of wider transport and spatial strategies. A collaborative approach, aligning local and national objectives, would ensure that these are complementary and balanced.
Mini Case Study: Network Rail Performance Issues

Summary
Network Rail are difficult to work with, as has been raised by many third parties on many occasions. Decisions are made by Control Room staff which consider movements of trains and staff, rather than getting customer where they need to go. It is impossible to build something on the railway without their involvement and everything costs more than it would in any other industry. TfGM have many examples of this. Some which demonstrate our frustration with real clarity are set out below.

Navigation Road – Disruption Prioritisation and Effect on Customer
Network Rail make decisions about services on a rail only basis, rather than one which is multi-modal and accounts for what affects the largest number of customers. An example of this is to what degree they prioritise failures of the level crossing at Navigation Road. Failures of this crossing are ranked as low in terms of impact because only a low frequency heavy rail service uses this route. However, potentially 8,800 Metrolink passengers per hour can be affected if this crossing fails. A local mode agnostic decision making authority would prioritise differently with a better outcome for the customer.

Blackrod rail station DDA scheme – Sponsors Not Providing Client Guidance
Network Rail was not proactive in providing advice relating to approval and design, which led to significant time delays. There was a lack of rigorous communications and an over-emphasis on DfT design guidelines which were not applicable. Despite designs complying fully with all planning and building regulations, Network Rail advised that they would not approve the design without the DfT formally accepting the proposed approach. However, following discussions with Network Rail and DfT, Network Rail accepted that they do not need approval from DfT. This resulted in extensive delays.

In addition, Network Rail provided late advice surrounding the need for the Manchester-bound scheme to be a compliant design for a Trans European Network (TENS) route, which was not achievable with the final design. Network Rail finally accepted the design after further delay.

Note: TENS was established by the European Union to support as a key interconnection and interoperability of national networks as well as access to such networks, and as such TENS routes are subject to specific guidelines with regards design, amongst other facets.

Hindley Park and Ride – land boundaries and ownership issues
TfGM developed a park and ride scheme with Network Rail, on Network Rail land. Network Rail land clearance and design approvals were obtained. TfGM had identified a preferred contractor to deliver the scheme when a land ownership issue, affecting part of the proposed park and ride site, emerged between a local resident and Network Rail. This led to a legal dispute, and TfGM has had to place the project on hold for over three years.

Hazel Grove - Example of Changes to Design/Scope
As part of the Hazel Grove park and ride scheme, TfGM paid for Network Rail to create a new Network Rail maintenance compound as the decked car park would restrict the height and length of vehicles accessing the existing compound at the rail station. Network Rail completed the compound works ahead of the construction of the decked car park, but three months into the construction of the decked car park Network Rail requested access to the track via the construction site (rather than the new compound that TfGM understood had been built for this purpose). However, this issue was eventually resolved and Network Rail did not access the track via the car park after requests from TfGM.