

Report of Director of City Development and WYCA

Report to Scrutiny Board (City Development)

Date: 7th September 2016

Subject: Inquiry into the Development of NGT

Are specific electoral Wards affected? If relevant, name(s) of Ward(s):	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Are there implications for equality and diversity and cohesion and integration?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Is the decision eligible for Call-In?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Does the report contain confidential or exempt information? If relevant, Access to Information Procedure Rule number: Appendix number:	<input type="checkbox"/> Yes	<input type="checkbox"/> No

Summary of main issues

1. The Leader of the Council has formally requested Scrutiny Board to “consider undertaking a Scrutiny Inquiry into the role of the Council, the West Yorkshire Combined Authority(WYCA)/METRO and the city’s public transport operators in relation to the decisions for both NGT and Supertram.”
2. The Inquiry will consider the development of both projects and what lessons can be learned to inform future decisions on major transport projects in the City
3. Detailed background information was provided at the July Scrutiny meeting. This report provides further background and additional information requested at that meeting.
4. The Council is currently undertaking a city-wide “Conversation” on the future of transport in Leeds to develop a future transport strategy for the city.

Recommendations

1. Members are requested to note and comment on this report.

1. Purpose of this report

- 1.1 This report provides Members with background information on the development of the Supertram and NGT projects and starts to explore the lessons that can be learned from both Projects. It also provides an update on the new Transport Strategy emerging from the Transport Summit held on 10th June and the ongoing city wide Conversation on Transport.

2. Background information

- 2.1 Leeds Supertram formed a key element of the 1991 Leeds Transport Strategy. The Department for Transport (DfT) granted full network approval in March 2001, but in November 2005 the project was cancelled by the DfT on the grounds of affordability.
- 2.2 The DfT commissioned consultants Atkins in August 2005 to examine the potential of a high quality bus alternative to Supertram. This culminated in a report which concluded that a “Bus Rapid Transit” (BRT) option has the potential to offer a lower cost and value alternative to the Supertram proposal.” A copy of this report is included in Appendix A. The Promoters were concerned about the lack of robust evidence for the conclusions set out in the report and expressed their concerns in a letter to the DfT in October 2005. (Appendix B.)
- 2.3 These initial BRT proposals developed into the NGT scheme with significant engagement with the DfT and consisted of three routes to North, South and East Leeds, including a loop round the city centre, and linking key trip generators including the city’s hospitals and universities. The scheme included enhanced cycling facilities and park and ride sites and a significant degree of priority over general traffic in order to deliver high levels of reliability across the network. Electrically powered trolleybuses were proposed to operate the system
- 2.4 Following a public inquiry held in 2014 The DfT announced on the 12th May 2016 that the Transport and Works Act Order (TWAo) application had not been granted. However in an unprecedented announcement the DfT did still award the £173m allocated to Leeds for public transport projects in the City.
- 2.5 More detailed background information was given in the July 2016 Scrutiny report

3 Main Issues

3.1 Leeds Transport Summit / Conversation on Leeds Transport Strategy

- 3.1.1 The on-line questionnaire element of the Transport Conversation to help develop the Leeds Transport Strategy (see bit.ly/TransportLeeds and Appendix C) is now live and there have been hundreds of responses so far. Traditional and social media is being used to advertise it so that as many people as possible can complete it. Further meetings with stakeholders from across the city, including those who attended the Transport Summit, will also feed into the conversation.

- 3.1.2 An independent panel of experts is being set up to help support and challenge the emerging transport strategy and priorities. A cross-party Members group is also being established.
- 3.1.3 Transport will be on the agenda for the Community Committees when they return after the summer break.
- 3.1.4 The Council has received a letter from DfT confirming that the £173m previously set aside for NGT should remain available for public transport improvements in Leeds. An outline business plan submission to DfT in the Autumn is required to secure the funding. The Conversation with the City will continue well into next year including a further round of consultation in early 2017 to seek views on a more detailed vision and proposals. The overall project however will have this initial milestone for the reason given. This first phase of consultation will continue until late September to inform a report to the Executive Board in October 2017 to enable the submission to DfT In Autumn. Feedback from initial Community Committee meetings, the Members group and stakeholder workshops will also inform the Executive Board report.

3.2 Lessons Learned; Gateway Review

- 3.2.1 As reported in the July Scrutiny report, a Local Partnerships Gateway 1 Review was held in January 2013. The purpose of this was to consider the 'business justification' for the project and to provide an independent peer assessment of the project's potential for success. A summary of the Review's findings were included in the previous NGT Scrutiny Report and Appendix D of this report details the actions undertaken in relation to the Review's recommendations.

3.3 Lessons Learned: Inspector's Report

- 3.3.1 The TWAO decision letter from Martin Woods of the DfT included a summary of the Inspector's recommendations from his 900 page report.
- 3.3.2 The Secretary of State reached his decision by weighing up the predicted benefits against the likely adverse impacts of the scheme.
- 3.3.3 The Benefits of NGT were documented in the Business Case which was scrutinised in detail and approved by the DfT in both 2009/10 and 2011/12 prior to their approval of Programme Entry status. A revised Business Case was being prepared for submission to the DfT for their next approval stage which would have occurred following approval of the TWAO. The earlier Business Cases which were included in the TWAO submission detailed all the economic information on the project including projected revenues and expenditure as well as journey time savings etc.
- 3.3.4 A component of the Business case was the Economic Forecasts which were documented in the SDG Report (Jan 2014); Wider Economic Impacts. See

Appendix F. The background and explanation of the assessment used is detailed in Appendix E. It was forecast that NGT would;

- Lead to an increase of 3,687 jobs in Leeds District by 2031.
- Result in Wider Economic Impacts of £115m PV (in 2010 prices). As noted, these were not included in the DfT-specified Cost Benefit Analysis (CBA) but they did appear in the Appraisal Summary Table (AST). If they were included in the CBA they would increase the Benefit Cost Ratio (BCR) of the project to 3.65:1.
- Increase Gross Value Added of the Leeds District in 2031 by £235.6 million per annum. (This is an alternative way of expressing the Wider Economic Impacts and should not be added to the User Benefit figure.)

- 3.3.5 It is clear from this analysis that the Leeds economy would have received a significant and positive economic benefit from NGT.
- 3.3.6 The Inspector raised issues against details and conclusions within the Business Case however the Business Case had been previously approved by the DfT in both 2009/10 and 2011/12 and would be further assessed by the DfT in the 2 further approval stages before receiving final approval.
- 3.3.7 Details of the likely adverse impacts and proposed measures to mitigate these impacts were contained in The Environmental Statement presented at the Inquiry by the Promoters.
- 3.3.8 One of the objectives of NGT was to “Reduce transport emissions of CO₂ and other greenhouse gases”. The NGT vehicle would emit no emissions itself and would have replaced some diesel buses, thereby improving air quality in some areas. The SoS stated in the decision letter “The Inspector was, however, concerned that although trolley vehicles would provide a carbon efficient means of transport per journey which was better than a hybrid bus, the impact of the scheme in operation on overall air quality including carbon emissions would be negative due to the impact on other traffic and the use of grid electricity”. The Environmental Statement acknowledged that there would be some minor adverse impacts on air quality and carbon however these would not be significant.
- 3.3.9 The project would have had an impact on heritage, open space, trees and conservation areas, mainly due to widening, and providing new lengths of carriageway to accommodate the NGT/Bus/cycle lanes. This impact was assessed and appropriate mitigation measures were provided e.g. 3:1 tree replacement policy including “super replacement” trees. However there still remained a relatively small but significant vocal local opposition to the detrimental impacts of the project.
- 3.3.10 This local opposition, particularly in the North of the City was well organised and mobilised to sustain their arguments during the course of the Public Inquiry.
- 3.3.11 The Secretary of State concluded that the scale of harm identified by the Inspector was not justified by the uncertain level of benefits of the scheme.
- 3.3.12 A commentary on the individual decision points are included in Appendix G

3.4 Lessons Learned: Advancements in Technology

- 3.4.1 During the development of NGT, advancements in bus technology throughout the world were monitored and alternatives to NGT were considered as part of the Programme Entry Business Case in 2009 and again in 2012. The DfT agreed with the Promoter' assessment that cheaper bus- based alternatives did not deliver sufficient benefits and offered lower value for money and were therefore rejected in favour of the Trolley Bus Option.
- 3.4.2 Prior to the Public Inquiry in 2014 a review of the vehicle (sub mode) options was undertaken by Mott MacDonald (See Appendix H). A summary of the findings is in the table below:

Sub Mode	Commentary
Trolleybus (with OHLE)	Proven and energy efficient option to deliver NGT operations with zero adverse on-street emissions. Overhead wires provide benefits of a 'sense of permanence' associated with fixed track systems to be set against cost and visual impact. Specification of vehicles with traction batteries and super-capacitors beneficial to maximise energy efficiency and permit catenary free operation within visually sensitive areas.
Standard hybrid	No capability to operate solely on electric power but offers reduced CO2 emissions and local air quality benefits. A mature technology with market traction, providing a lower cost alternative option that would make a limited contribution to the NGT scheme objectives.
Plug-in hybrid	Has capability to operate on electric power for distances of up to 7 km, enabling operation with zero adverse on-street emissions in sensitive areas. Vehicles, including 18 m articulated version, based on proven technology expected to be in full commercial production by late 2015. (Currently Plug-in hybrid buses are not in full production anywhere in the world)
OHLE Free Electric Bus	Use of super-capacitor technology for 100% OHLE free operation currently insufficiently proven and presents unacceptable risk to scheme delivery.
Fuel cell hybrid	Commercial application unproven and remains uneconomic for commercial use. Expensive vehicles and technological risk. Electric propulsion offers more cost effective, proven and energy efficient options to deliver NGT operations with zero adverse on-street emissions
Battery electric	Unsuitable for NGT due to insufficient range and capacity of current production vehicles and the performance and technology risks involved in use of unproven battery powered

	18 m articulated buses and fast charging technology.
CNG (Bio-methane from waste)	Data Performs best in minimising well to wheel CO2 emissions of NGT vehicles but low energy efficiency and unable to operate 'adverse emission free' over any part of route. Bio-methane is more energy efficient when used to generate electricity, which could be used to power vehicles.

3.4.3 Following the Public Inquiry the Project Team continued to monitor advancements in bus technologies particularly in the ability of Trolley Bus Vehicles to operate for short distances without Overhead Line Equipment (OHLE). By the time of the TWAO decision, proposals for delivering part of the NGT route without wires were at an advanced stage.

3.4.4 In an attempt to address the concerns expressed at the Public Inquiry and to take into account emerging improvements in technology, the promoters wrote to the DfT in March 2016, prior to the TWAO decision, stating the intention to run part of the route without OHLE. (See Appendix I)

3.4.5 The Inspector was not convinced by the evidence put forward at the Inquiry that the NGT Benefits could not have been achieved by other technologies.

3.5 Lessons Learned: Timescales for developing and approving Major Local Authority Transport Schemes;

3.5.1 The DfT have a 3 stage process for approving Local Authority Major Schemes, each involving scrutiny of the Business Cases updated at each stage. These three stages are;

- Programme Entry – indicates that the DfT would be expected to (part) fund the scheme subject to certain conditions relating to; granting of powers, affordability and no significant changes to the scheme's costs/design/benefits.
- Conditional Approval – submitted once formal powers (e.g. TWAO) have been granted and before procurement has started. This would have been the next stage for NGT had the TWAO been granted
- Final Approval – Granted when firm prices have been obtained after the procurement has been completed.

Guidance states that decisions should be given by the DfT on the submissions of each of the Business Cases within 3 months of each submission.

3.5.2 Following four years of NGT scheme development and engagement with the DfT and sharing early drafts of an Outline Business Case through 2006-2008 the Programme Entry Business Case was submitted to the DfT in October 2009. Despite DfT indicating that a decision would be made by the end of 2009, approval was not given until March 2010 thus allowing the DfT to undertake 6 months of

rigorous technical scrutiny of the project. However the new Coalition Government suspended progress on all Local Authority Major Schemes in June 2010 as part of their comprehensive spending review. Eventually Programme Entry was re-granted in July 2012, around two and a half years after the decision was originally expected. Nevertheless the granting of this Programme Entry (PE) Approval provided WYCA/LCC with the necessary level of reassurance to commit around £25m of local funding to develop the project through to delivery.

- 3.5.3 The above scrutiny and assurance from the Gateway Review (see section 3.2) were critical factors in making the decision to move forward and submit the scheme for TWAO approval. Although the Supertram scheme had been granted TWAO approval (on a similar alignment and with similar scale impacts), the TWAO process was not viewed with any level of complacency. Instead meetings were held with promoters of tram and bus schemes from around the country to take on board their 'lessons learned' from going through the TWAO processes leading to the submission of what was believed to be a thorough and comprehensive TWAO in September 2013.
- 3.5.4 The Inquiry started in April 2014 and the original inquiry programme published by the Inspector showed it lasting 8 weeks (40 days) and finishing on June 27th 2014. It was considered that this was a reasonable estimate based on comparisons with similar schemes. It actually lasted for 72 days finishing on 31st October 2014.
- 3.5.5 The Inspector is allowed 3 days reporting writing time for every Inquiry sitting day so that any extension to the Public Inquiry timescales are magnified. Under the actual programme the NGT Inspector had up to August 2015 to complete his report. It is understood that the Inspector delivered his report in July 2015. Experience and guidance suggests that the SoS will announce a decision 6 months following the submission of the Inspector's report, except in complex cases, however the decision on NGT was not made until May 2016.
- 3.5.6 At the commencement of the Public Inquiry, it was assumed that the TWAO decision would be made in Spring 2015 whereas it was made around 1 year later. Furthermore in October 2009 at the time of the original PE submission it could have been reasonably expected that a TWAO decision could have been made in Spring 2013, three years earlier than actual. During the development of NGT following the submission of the Programme Entry Business Case, the DfT have been in control of the majority of time spent on the project as shown in the table below:

Milestone	Dates	Time in DfT control (months)	Time in Promoters Control (months)
Submit Programme Entry	Oct 2009		
		5	
Programme Entry Approval	March 2010		3
Project paused by DfT	June 2010		
		25	
Programme Entry confirmed	July 2012		14

Submit TWAO	Sept 2013		
		32	
TWAO Decision	May 2016		
Total Time (6 yrs 7months)		62 (5 years, 2 months)	17 (1 year 5 months)

3.5.7 Approval time based on DfT guidance were built into the NGT programme but these allowances proved to be inadequate. In future additional time should be built into project programmes to allow for the Scheme approvals when the funding is subject to subject to DfT oversight.

3.5.8 The TWAO process is lengthy and costly, particularly when a scheme is turned down and the following points should be considered when developing similar schemes;

- Whilst the DfT process of scrutiny was rigorous in respect of the business case, it is less clear how the process related to overall scheme deliverability, or the reasons why the Planning Inspector was able to have formed an 'expert' view on the business case without the detailed technical background.
- There appeared to be a disconnect between the Inspector and the DfT on the assessment of scheme benefits. This is despite the extensive technical rigour and scrutiny that had been applied by DfT and others through the course of the scheme's development.
- There were a number of contradictions between the project development phase, where there was DfT oversight, and statements made by the Inspector. By way of example, a view was expressed in the Inspector's report that the project did not serve areas of regeneration, which counted against the scheme. However, it was the DfT who indicated that the eastern leg, which had significant regeneration benefits, was unlikely to be supported. Following this strong steer from DfT, the project scope was amended. There needs to be a way of removing this disconnect from the process.
- In terms of the TWAO process itself, there is scope for it to be modernised. Trolleybus as a mode came under the badge of 'guided systems'. Yet with developments in technology such as battery life, increasing scope exists to deliver similar projects without the overhead wires in some locations. This is a grey area in the legislation which should be addressed.
- Whilst it is welcomed that large projects such as NGT should be subject to a public hearing, the process was however viewed by many as being highly inefficient, which resulted in a planned 6-8 week Public Inquiry lasting for around 6 months. The inquiry stage, and subsequent decision process, do need to be much quicker. To facilitate this, the process could move towards a more hearing-based approach, such as is the case with Development Consent Orders (DCO's) used for Nationally Significant Infrastructure Projects. These combine grant of planning permission with a range of other separate consents, such as listed building consent.
- The commercial objection to the scheme, as put forward by First West Yorkshire, had been given status by the Planning Inspector. This precedent may have ramifications for future public transport projects that go through the TWAO process.

- In respect of the process following the Inspector's report being submitted, the timescales for turnaround appear to be excessively long and go beyond stated guidance. We understand that this is largely a staffing/efficiency issue, yet for the scale of projects involved, the inflationary impacts of delay far outweigh any staff savings that the DfT may have made. There is clear scope to improve project delivery efficiency by ensuring that this bottleneck in the process is rectified.

4 Corporate Considerations

4.1 Consultation and Engagement

4.1.1 Extensive Consultation was carried out on both Supertram and NGT. In addition to the formal requirements of the TWAO process, consultation and engagement has been carried out on NGT including:

- Feasibility consultation in 2008
- Consultation carried out in 2009/2010 involving 21 days of exhibitions along the route – showed strong support for the proposals.
- Area Committee presentations.
- Briefing to the main political groups September-November 2012
- 26 Public Consultation events held October 2012 - July 2013: over 1,100 attendees
- 52,000 leaflets distributed
- Quarterly E-newsletter with circulation of around 450 people
- Meetings with Businesses, access groups, Tenant organisations, Civic Trust, Cycling Forum and the Universities
- Meetings with Councillors and MPs
- Engagement with officers from across the Council.
- Meetings with affected land and property owners along the route.
- City Plans Panel meetings devoted to the NGT proposals.

4.1.2 Currently the Council is carrying out a city-wide conversation about the future of transport in Leeds (See section 3.1).

4.2 Equality and Diversity / Cohesion and Integration

4.2.1 A full equality impact assessment was undertaken on the Project and accompanied the TWAO application. The assessment concluded by stating that the provision of a new and frequent public transport service in the form of a trolleybus network would improve access to a whole range of social and economic resources along the route including the City Centre, Leeds' two universities, a major hospital, and a whole range of other facilities from shops to places of worship. It also acknowledged however that the construction and implementation phases may have a negative effect on a range of local socio-demographic groups

and communities. The report contained a number of recommendations to mitigate the negative impacts.

4.3 Council policies and Best Council Plan

4.3.1 This inquiry will support objectives as defined in The Vision for Leeds 2011 – 2030 and the Best Council Plan 2015-20.

4.4 Resources and value for money

4.4.1 This report has no specific resource and value for money implications

4.5 Legal Implications, Access to Information and Call In

4.5.1 This report has no specific legal or access to information implications

4.6 Risk Management

4.6.1 This report has no risk management implications.

5 Conclusions

5.1 The Supertram and NGT proposals were developed over a period of around 25 years. At all stages the Department for Transport were fully engaged and awarded both schemes formal approvals at key stages of their development. Key decisions were taken by DfT throughout the process which led to fundamental changes to the scheme. Several led to adverse comments / criticisms in the Inspector's final report. The Council in conjunction with WYCA will consider writing to the DfT to outline these contradictions.

5.2 During this time period the schemes were supported by the major political parties at both national and local level.

5.2 The Department for Transport cancelled both Supertram and after 15 and 10 years respectively had been spent in development.

5.3 This report has presented an overview of the background to the development of both Supertram and NGT and explores some of the reasons behind the decision.

5.4 The Transport Conversation on the City's Transport Strategy is ongoing with the questionnaire now live.

6 Recommendations

6.1 Members are requested to note and comment on this report.

7 Background documents¹

¹ The background documents listed in this section are available to download from the Council's website,

7.1 Appendices

The Local Partnerships, Gateway Report, February 2013 and the DfT Rejection Letter from Martin Woods dated the 12th May 2016, (submitted at the 20 July 2016 Scrutiny meeting) is re-provided as appendix 1 and 2 to assist the Scrutiny Board in this session.

- Appendix A: Atkins Report: Study of High Quality Buses in Leeds
- Appendix B: Response from Metro on the Atkins Report
- Appendix C: Transport in Leeds, Consultation Questionnaire
- Appendix D: Gateway Review- Actions Undertaken
- Appendix E: Background to the Economic Impacts Assessment
- Appendix F :SDG Report (Jan 2014); Wider Economic Impacts
- Appendix G: Commentary on the individual decision points
- Appendix H: Sub – mode options report
- Appendix I: email from the Project Director to DfT