



Transport North East (Tyne and Wear) Sub-Committee

Thursday 25th January 2018 at 2.00 pm

Meeting to be held in the Saltwell Room, Gateshead Civic Centre, Regent Terrace,
Gateshead NE8 1HH

www.northeastca.gov.uk

AGENDA

Page No

1. **Apologies for Absence**

2. **Declarations of Interest**

Please remember to declare any personal interest where appropriate both verbally and by recording it on the relevant form (to be handed to the Democratic Services Officer).

Please also remember to leave the meeting where any personal interest requires this.

- | | | |
|----|---|----------------|
| 3. | Minutes of the Previous Meeting held on 21 November 2017 | 1 - 6 |
| 4. | Monitoring Nexus Performance | 7 - 20 |
| 5. | Metro Performance Update | 21 - 34 |
| 6. | Metro System Disruption on 29 October 2017 | 35 - 48 |
| 7. | Update on Nexus Corporate Risks | 49 - 72 |
| 8. | Nexus Corporate Plan 2018/19 to 2020/21 | 73 - 94 |
| 9. | Date and Time of Next Meeting | |

19 April 2018, 3.00pm at Sunderland Civic Centre

10. **Exclusion of Press and Public**

Under section 100A and Schedule 12A Local Government Act 1972
because exempt information is likely to be disclosed and the public interest
test against disclosure is satisfied.

- | | | |
|-----|---|-----------------|
| 11. | Confidential Minutes of the Meeting held on 21 November 2017 | 95 - 96 |
| 12. | Tyne Tunnels Update | 97 - 132 |

Contact Officer: Lynn Camsell Tel: 0191 211 6146 E-mail: lynn.camsell@northeastca.gov.uk

To All Members

North East Combined Authority, Transport North East (Tyne and Wear) Sub-Committee

21 November 2017

Meeting held Committee Room, Civic Centre, Newcastle upon Tyne, NE1 8QH

Present:

Councillor : J Harrison(Chair)

Councillors: J McCarty and M Mordey

23 APOLOGIES FOR ABSENCE

Apologies were received from Cllr Hobson (South Tyneside) and Cllr McElroy (Gateshead)

24 DECLARATIONS OF INTEREST

None

25 MINUTES OF THE PREVIOUS MEETING HELD ON 14 SEPTEMBER 2017

The minutes of the meeting held on 14 September 2017 were agreed as a correct record and signed by the Chair.

26 MONITORING NEXUS' PERFORMANCE AND METRO PERFORMANCE UPDATE 2017/18

Submitted: Reports of the Managing Director (Transport Operations) (previously circulated and copies attached to the Official Minutes).

Members agreed that they would consider agenda items 4 and 5 together.

The Sub Committee received a presentation which detailed the events of the incident which occurred on 29 October 2017. An interim review into the incident had subsequently been undertaken with findings on:

- The initial cause
- Factors that determined the longevity of the incident
- Operational contingency plans
- Service Recovery
- Ticketing

- Depot arrangements and outstabling

Members' questions/comments following the presentation included:

Will or has a detailed investigation taken place

Were compensation claims expected?

Possible risks during the time of the incident

What would happen if a similar incident happened tomorrow and is there a way to prevent it happening again.

Questions were raised regarding the battery packs, methods to move trains out of the depot and lessons learnt.

Moving to the two main reports Members were informed that Nexus was on target to deliver the majority of objectives set out in the Corporate Business Plan for 2017/18; customer service continued on a positive track and Metro's average punctuality was 90.3% exceeding the target of 87.2% and plans for the Metro extension were still in progress.

During discussion Members referred to the progress with the Ashington/Blyth and Tyne Line; were there any plans to halt the decline in metro patronage; persuading travellers to change from car use to bus/Metro use and was there any evidence to suggest an increase in the number of vehicles using the network around the Silverlink Interchange i.e. the Holystone roundabout and the Coast Road.

RESOLVED that –

The Monitoring Nexus' Performance report and the Metro Performance Update report be received and noted.

- 27 **METRO PERFORMANCE UPDATE –**
As Minute No. 26

- 28 **UPDATE ON NEXUS' CORPORATE RISKS**

Submitted: Report of the Managing Director (Transport Operations) (previously circulated and a copy attached to the Official Minutes).

Consideration was given to the report which demonstrated that Nexus continued to apply adequate and appropriate controls to its Corporate Risks as a result of which the status of risks has remained stable since the previous report in September and therefore remain contained within the risk appetite of the organisation.

Regarding the risk area 'Replacement of the Metrocar fleet and putting a new contract in place' it was noted that the risk status will change from Amber to Red if the funding request to Government is not successful.

RESOLVED – that the Sub Committee noted the report and the attached appendix providing an update on Nexus' Corporate Risk Register.

29 **REVISION TO METRO FARES AND FERRY FARES 2018**

Submitted: Report of the Managing Director (Transport Operations) (previously circulated and a copy attached to the Official Minutes.

Consideration was given to the report which proposed new affordable fares for young people plus a freeze in the price of Metro single and Daysaver fares bought with Pop smart cards, as a package that minimises the impact of price rises whilst generating additional revenue to offset increases in Metro's operating costs.

Questions/Comments

Members welcomed the proposals for young people under the age of 19 which brought Metro's fares into line with those offered by some bus operators.

Concerns were voiced regarding the limitations placed on fare changes by the need to re-programme ticket machines, leading to a proposed 10p increase in the cost of a standard adult day single and Transfares. Members recognised that there is a reluctance to swap to a pop card but were conscious of the need to move to a cashless system. A future report on smart ticketing was requested.

Increased use of park & ride sites and the provision of new sites for example in the vicinity of the Regent Centre.

A comment was made that tickets are good value especially as they are the cheapest in the UK however low income families still find the cost expensive.

Further points:

It was noted that work had already commenced on the possibility of increasing the number of park and ride sites.

Members were informed that pop cards are a cheaper option when compared to the price of day tickets and seasonal tickets were competitive and compared well with fuel costs.

The Sub Committee briefly discussed the costs of various tickets and how some low income families find them to be costly thereby prohibiting use of the Metro as a form of public transport. It was also acknowledged that more work needs to be undertaken in relation to the costs of pop cards compared to tickets.

RESOLVED – That:

- (i) The proposed Metro and Ferry fares as set out in the main body of the report be effective from 2 January 2018.

- (ii) The introduction of under 19 PAYG fares on Metro and Ferry £1 single and £2 capped all (day travel), to be introduced from 2 January 2018 be approved.
- (iii) Endorse Nexus' intention to freeze the price of the annual Gold Card at £12 as part of Nexus' annual budget proposals.

30 **NEXUS ANNUAL ACTIVITY AND EXPENDITURE ANALYSIS**

Submitted: report of the Managing Director (Transport Operations) (previously circulated and a copy attached to the Official Minutes)

Consideration was given to the report which provided members with financial and statistical information relating to Nexus' services as part of its annual reporting processes.

The main highlights to note included the operational surplus; Nexus Levy funded expenditure - Concessionary Fares the expenditure of which amounted to £37.2m; child patronage had increased by 1.3%; Concessionary Travel – the proportion of journeys has decreased across the 5 Tyne and Wear districts and, the number of Metro passengers also demonstrated a decline in performance when compared with 2015/16.

Comments/questions from Members included the following:-

Changes to bus timetables and the additional cost incurred by passengers when routes are taken out of service, most noticeable in the Sunderland area where Go North East had introduced significant service changes. It was felt that the costs should be met by bus operators. Members requested that a report be brought back to a future meeting.

Referring to bus infrastructure reference was made to the bus routes which provided access to hospitals but were then changed or withdrawn causing stress and numerous problems especially for those with out-patient appointments. Members were informed that the taxi card service was used by a small number of travellers and discussions were to take place which could reshape the services provided by the bus operators.

RESOLVED – that the report be noted

31 **NEXUS BUDGET PREPARATION 2018/19 TO 2020/21**

Submitted: Report of the Managing Director (Transport Operations), Nexus

The purpose of the report was to provide the Sub Committee with the timetable for the preparation, consultation and approval of the North East Combined Authority's 2018/19 budget and indicative medium term financial strategy for consideration and approval by the Leadership Board on 16 January 2018 where the Tyne and Wear transport levy for 2018/19 will be agreed. The timetable is appended to this report.

The report also set out for the Sub Committee's approval, Nexus' approach to the development of its 2018/19 budget and indicative medium term financial forecast (MTFF), an element of which is funded by the Tyne and Wear transport levy.

It was noted that Nexus' was not able to set a balanced budget in 2018/19 without placing reliance on reserves, however, it was possible to set a budget for 2018/19 that will allow for the preservation of service outcomes. A table summarising the anticipated pressures on next year's budget as provided in section 4.4 of this report.

It was further noted the position of the reserves including the £15.0m earmarked to provide a local contribution for the new Metrocar fleet; possible future reductions in frontline serves, possible challenging decisions facing the Sub Committee and previous outstanding pensions issues pertaining to DBTW, NEMOL and Nexus which have now been resolved.

RESOLVED that –

The Sub Committee agreed to the budget and service planning approach for nexus as set out in the report, which will need to be reflected within the North East Combined Authority's 2018/19 budget and indicative medium term financial strategy.

32 **DATE AND TIME OF NEXT MEETING**

25 January 2018, 2.00pm at Gateshead Civic Centre

33 **EXCLUSION OF PRESS AND PUBLIC**

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Transport North East (Tyne and Wear) Sub-Committee

Date: 25 January 2018

Subject: Monitoring Nexus' Performance

Report of: Managing Director (Transport Operations)

Executive Summary

With almost three quarters of the year completed, Nexus is on target to deliver the majority of the objectives in it's 2017/18 Corporate Plan.

In the quarter just ended, the Government announced that it will provide £337m of capital grant to Nexus for a new fleet of Metrocars and a replacement depot. In addition, Metro performance continues to improve despite some disruptions and the continued challenges of maintaining the ageing fleet. Financially, Nexus is expecting to report a budget surplus of £1.950m, despite a reduction in Metro patronage and fare revenue.

Recommendations

The Transport North East (Tyne and Wear) Sub-Committee is recommended to note the report and the attached appendix giving details of Nexus' corporate performance in delivering services and projects over the thirty-six weeks to 9 December.

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1. Background Information

- 1.1 This report provides a review of Nexus' performance against its Corporate Business Plan (CBP) targets and objectives over the thirty-six weeks from 1 April to 9 December 2017, with particular emphasis on the twelve weeks from 17 September to 9 December (Periods 7, 8 & 9). The prior twenty-four weeks (Periods 1 to 6) were covered in an update report to the meeting of the Sub Committee on 16 November.
- 1.2 The CBP for 2017/18 has three main themes and sixteen workstreams. These are used in the attached appendix to set out the key considerations when assigning the progress being made, applying a Red/Amber/Green (RAG) status analysis.
- 1.3 Of the 16 workstreams:-
- Thirteen are rated 'Green' in status, three from six in Theme 1 - 'Deliver public transport today'; all six in Theme 2 - 'Prepare for the future', and all four in Theme 3 - 'Focus on organisational effectiveness'.
 - All three 'Amber' workstreams relate to Theme 1 - 'Deliver public transport today': 'Improve Metro performance', 'Embed new technology' and 'Deliver non-ARP capital projects'.
 - The main change from the previous update is in Theme 2 - 'Prepare for the Future' where the workstream 'Obtain a new Fleet and prepare for the new Metro contract' that was previously 'Amber' has been set at 'Green' following the Government announcement of £337m funding for a new Metro train fleet made in the Chancellor's budget speech on 22 November and confirmed in the Treasury's Budget Report of that date. An agreed local contribution of an additional £25m is integral to this arrangement.
- 1.4 Metro's average punctuality over Periods 7, 8 & 9 was 79.59%, below the target of 87.2% but 3.14 percentage points better than the average of 76.45% over the same periods in the prior year. In the year to 9 December periodic charter punctuality averaged 85.85%, 3.68 percentage points better than the average of 82.13% to the same point last year.
- 1.5 On Sunday 29th October a Depot power supply issue resulted in the Metro service being suspended for a large part of the day. Nexus publicly apologised for the incident and provided a verbal update into the investigation then underway at the meeting of the Sub-Committee on 16 November. Following conclusion of the investigation a report with recommendations is presented for consideration elsewhere on the agenda.
- 1.6 At the end of P9 fleet reliability (km per 4+ Excess Headway Minute delay causing fault) Moving Annual Average had improved by 3.6% to 6704km compared to 6471km

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last year. The total of Excess Headway Minutes (a means of measuring delay) at 204,447 by the end of Period 9 was 17% better than the 246,864 accumulated at the same point in the prior year.

- 1.7 Total Metro ridership for the twelve weeks under review was 8.762m, 5.6% below the target of 9.285m. Cumulative ridership in the year to 9 December was 25.489m, 3.9% below the target of 26.536m and 3.2% below the 26.338m reported at the same point in the prior year.
- 1.8 Regarding Metro fare revenue, now that nine periods i.e. nearly three quarters of the year have elapsed, it is apparent that fare revenue will be lower than budget by the end of the financial year. A range of possible outcomes show that as at P9, the fare revenue shortfall for 2017/18 is expected to be between £0.8m and £1.2m below the budget set of £45.098m. This will be kept under close review during the remainder of the year.
- 1.9 As at the end of period 9 2017/18, a surplus of £1.950m is forecast.
- 1.10 Appendix 1 provides a fuller review of Nexus' performance against the business plan over the period from 1 April 2017 to 9 December 2017.

2. Proposals

- 2.1 There are no specific proposals for decision arising from this periodic performance monitoring update report.

3. Reasons for the Proposals

- 3.1 There are no proposals for decision arising from this periodic performance monitoring update report.

4. Alternative Options Available

- 4.1 There are no proposals on which to base alternative options arising from this periodic performance monitoring update report.

5. Next Steps and Timetable for Implementation

- 5.1 A report updating on Nexus' performance will be presented to each scheduled meeting of the Transport North East (Tyne and Wear) Sub-Committee in order to enable the required monitoring considerations and assurance activity to take place in accordance with the NECA's Constitution and the role and functions that are thereby delegated to the Transport North East (Tyne and Wear) Sub-Committee.

6. Potential Impact on Objectives

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- 6.1 Monitoring Nexus' performance helps to provide assurance that the NECA's policies and objectives are being implemented efficiently and effectively in accordance with the approved plan.

7. Financial and Other Resources Implications

- 7.1 There are no direct financial or resource considerations arising from this periodic performance monitoring update report.

8. Legal Implications

- 8.1 There are no direct legal considerations arising from this periodic performance monitoring update report.

9. Key Risks

- 9.1 There are no direct risk considerations arising directly from this report, though monitoring and reviewing performance information plays an important role in risk management. A separate review of Nexus' corporate risk register is provided to each meeting of the Transport North East (Tyne and Wear) Sub-Committee in parallel with this report.

10. Equality and Diversity

- 10.1 There are no specific equalities and diversity considerations arising from this periodic performance monitoring update report.

11. Crime and Disorder

- 11.1 There are no specific crime and disorder considerations arising from this periodic performance monitoring update report.

12. Consultation/Engagement

- 12.1 There are no specific consultation or engagement considerations arising from this periodic performance monitoring update report.

13. Other Impact of the Proposals

- 13.1 There are no direct proposals arising from this periodic performance monitoring update report, and therefore no consequential impacts.

14. Appendices

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14.1 Appendix 1 to this report shows the Red/Amber/Green (RAG) analysis pertaining to progress against the three theme/sixteen workstreams contained in Nexus' Corporate Business Plan for 2017/18 to 2019/20, as approved by Transport North East (Tyne and Wear) Sub-Committee meeting on 26 January 2017, and identifies key considerations taken into account by Nexus' Corporate Management Team in arriving at the ratings.

14.2 Appendix 2 contains the results of the November 2017 Metro Customer Service Satisfaction tracking survey.

15. Background Papers

15.1 Nexus' Corporate Business Plan 2017/18 to 2019/20 as considered and approved at the Transport North East (Tyne and Wear) Sub-Committee meeting held on 26 January 2017.

16. Contact Officers

16.1 Tobyn Hughes,
Managing Director (Transport Operations)
Email: tobyn.hughes@nexus.org.uk
Tel: 0191 203 3236

17. Sign off

- Head of Paid Service: ✓
- Monitoring Officer: ✓
- Chief Finance Officer: ✓

18. Glossary

The meaning of any abbreviations used is explained in the body of the report and the appendix.

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Theme 1: Deliver public transport today		
Workstream:	RAG Status	Key Considerations:
Improve Metro performance (Amber)	A	Metro punctuality averaged 79.59% over the twelve weeks ending 9 December, 3.14 percentage points better than the 76.45% achieved over the same period in the prior year but below the target of 87.2%. In the year to 9 December periodic charter punctuality has averaged 85.85%, 3.72 percentage points better than the 82.13% average to the same point last year.
		At the end of P9 fleet reliability (measured using km per 4+ Excess Headway Minute fault) Moving Annual Average had improved by 3.6%, from 6471km to 6704km year on year.
		In the year to 9 December total Excess Headway Minutes (a means of measuring train delay) was 204,447, 17% better than the 246,864 accumulated at the same point in the prior year.
		Peak fleet availability over the period saw the required 74 Metrocars being met on 103 (85.8%) of the 120 weekday morning/evening peaks.
		The latest Metro customer satisfaction tracking survey, from November 2017, resulted in an overall score of 7.7, lower than the score of 7.8 in May 2017 and the same as the score of 7.7 obtained in November 2016. The survey results are appended to this report.
		Total Metro ridership for the twelve weeks to 9 December was 8.762m, 5.6% below the target of 9.285m. Cumulative ridership in the year to date was 25.489m, 3.9% below the target of 26.536m and 3.2% below the 26.338m reported at this point in the prior year.
Enhance local and national rail services (Green)	G	A consultation draft of Rail North's Long Term Rail Strategy has been approved by the Rail North Board. A public consultation on the Strategy will be launched in January alongside Transport that for the North's Strategic Transport Plan.
		Rail North is also developing a draft Long Term Fares Strategy.
	A	Testing (in the live environment) of the Under 19 ticket (Pop blue) has been successfully completed and the product will

(Amber)		launch in January.
		Credit and Debit cards are now used in almost half of Ticket Vending Machine (TVM) sales on Metro. There has also been a significant increase in the use of POP PAYG to purchase bus tickets, with a year on year growth of some 300%, albeit from a low base.
		A series of upgrades to the ticketing and gating software will take place between January and March 2018, aimed at making transactions at TVMs easier and quicker.
		Work will complete on the installation of Real Time Information bus-stand displays at Haymarket and MetroCentre early in the New Year.
Deliver the Metro Asset Renewal Plan (Green)	G	The Metro Asset Renewal Plan financial forecast for 2017/18 is £29.657m. The forecast will be managed within targets set by the Department for Transport (DfT).
		The refurbishment of Tyne Dock station is now complete with works at Monkseaton, West Monkseaton, Cullercoats and stations on the Airport line either progressing or set to commence in the new year.
		Initial design is now complete for strengthening work to Burnside and Beach Road bridges in North Tyneside. A contract for these works will be let in early 2019.
		Minor remedial work to King Street Bridge in South Shields is planned to commence in February 2018.
		The Northumberland Park to South Gosforth track renewal will complete after the final weekend possession (13/14 January 2018).
		Initial design for the Gateshead Stadium to South Shields track renewals is now finalised. Detailed planning of the possessions and working interface with Network Rail infrastructure is in progress.
		Following Network Rail approval, installation of new radio equipment in the Tyneside Control Centre is planned for early January. Installation of equipment across the fleet of Metrocars is expected to be complete by May 2018.
		The Railway Traffic Management System (RTMS) is progressing to a revised programme because of delays in obtaining Network Rail approval for the new radio system.

Deliver non-ARP capital projects (Amber)	A	The Non Metro programme financial forecast for 2017/18 is £2.911m. The forecast is therefore £1.042m below the approved budget of £3.953m, largely because of a re-profiling of the cash-flows relating to the Metro Maintenance and Skills Centre (£454k), Ticketing and Gating (£279k) and NESTI (£201k).
Deliver and develop public transport services and facilities (Green)	G	Over the period, an average of 99.87% of secured bus service mileage was operated, with 1.509m passenger journeys against a total target for the period of 1.500m. In the year to 9 December there have been 4.203m passenger journeys on secured bus services, 6.3% below the target of 4.490m.
		Over the period there were 82,249 boardings on the Shields Ferry, 1.9% below the target of 83,865 but 4.1% above the 80,534 boardings in the prior year. In the year to 9 December, boardings were 4.2% below the cumulative target of 348,905 and 1.0% below the 337,554 recorded at the same point last year. Punctuality and reliability average at or near to 100%, better than the 99% target.
		There will be a bulk renewal of Concessionary Travel cards, effective from April 2018.
		All ticketing literature and digital content is being updated to prepare for the update to Metro fares in January, including the launch of the Under 19 ticket.
		Other marketing activity has recently included TV commercials, outdoor media and digital advertising as well as Christmas themed on-station activity.

Theme 2: Prepare for the future		
Workstream:	RAG Status	Key Considerations:
Obtain a new Fleet and prepare for the new Metro contract (Green)	G	Following extensive work and lobbying, the Government recently announced that it would provide Nexus with £337m of capital grant for a new fleet of Metrocars. Approval to commence procurement of a new fleet, a replacement depot and a long term maintenance contract for the new fleet will be sought from the Leadership Board on 16 January 2018.
Secure long term improvements to Metro's infrastructure (Green)	G	Approval for funding to support operations and to continue investment across the Metro network will be sought from DfT's Board Investment Committee during 2018.
Plan for the expansion of Metro and local rail networks (Green)	G	Various studies into the potential for route extensions e.g. pre-feasibility, financial, commercial and soft market consultation will commence in 2018.
		Extensive housing development in North Tyneside could provide the catalyst and funding for new stations on the existing network whilst the potential to bid for funding to introduce track dualling in South Tyneside is currently being evaluated.
Plan for local bus service improvements (Green)	G	Nexus is working with local partners to develop a Bus Strategy for the NECA area. Topic groups, with officer representation across the LA7 and the bus companies, have produced content that will feed into the draft strategy. It is intended that a final draft strategy will be prepared for consideration, prior to public consultation, at the same time as the Transport Plan.
		A preliminary review has taken place to understand the potential impacts, positive and negative, of 'New Mobility Services' such as on-demand transport links (which in time could be delivered by autonomous vehicles), travel and ticketing apps and zero emission vehicles. Consideration is being given to the practical ways such innovations could be delivered in the NECA area, to both benefit passengers and minimise risks to existing transport services.
		The Bus Services Act 2017 made provision for open data in relation to bus services, covering timetables, fares and real-time information on a single platform that

		web developers can use. Nexus and Urban Transport Group are represented on a DfT working group examining the rollout of this element of the Act, and also a national bus operator-led group.
Innovate through technology (Green)	G	Nexus is working with Transport for the North and partner authorities in the development of a specification for an Account Based Ticketing Back Office. This will allow the use bank cards to pay for journeys by touching-in at the point of entry and exit from the network. It is intended to form a partnership with the major bus operators, with each operator (including Nexus, for Tyne and Wear Metro) expected to sign “Heads of Terms”, indicating support for the project, in January 2018.
		Nexus is a partner in the regional 5G Consortium alongside the NECA and the NELEP whose aim is to improve Digital Connectivity across the region, recognising the importance of the Metro network.
		Nexus is supporting ITSO (the National Standards body for Smart Ticketing) in a Host Card Emulation (your phone becomes your POP Card) trial on Metro. Following a successful “Proof of Concept” system test, a competition has been launched by NESTI, together with Digital Catapult North East, to identify an innovative App Developer who can embed this functionality into a wider transport application.
Secure investment in public transport assets (Green)	G	Network Rail has now completed intrusive surveys at Sunderland station. Estimates for the preferred concept, and a larger scheme incorporating the full building into the design, have also been completed with an estimated cost of between £13.4m and £14.8m. This

Theme 3: Focus on organisational effectiveness		
Workstream:	RAG Status	Key Considerations:
Refine training and succession planning	G	A new phase of the Frontline Leadership Programme has commenced with a cohort of 59 staff (28 Nexus & 31

(Green)		NEMOL).
		Nexus is subject to the Apprenticeship Levy and proposals are being formulated to make appropriate use of the new funding system in 2018/19.
Ensure Nexus is an employer of choice (Green)	G	Nexus' Disciplinary, Wellbeing and Recruitment policies are currently under review.
Focus on health, safety and the environment (Green)	G	As at 9 December Nexus had experienced a continuous period of 176 RIDDOR (regulations relating to formal notification of accidents and incidents) free days.
		In the year to 9 December there have been 21 non-RIDDOR accidents to Nexus staff (20 x non-Lost Time; 1 x Lost Time).
		At the end of P9 the score for Nexus' Accident Frequency Rate (calculated over 13 periods) was low at 0.09.
		In the year to 9 December the 'Close Call' reporting system had received 74 submissions, providing potentially valuable learning opportunities.
		In total 39 accidents to customers had occurred on Nexus' infrastructure (2: Ferry, 37: Bus/Other) by the end of P9: slips, trips and falls represent the most common type.
Service review to balancing the budget (Green)	G	<p>Metro fare revenue for 2017/18 is expected to be between £0.8m and £1.2m below budget (£45.098m). This is equivalent to a -1.7% to -2.7%.</p> <p>As at the end of period 9, a budget surplus of £1.950m is forecast in Nexus' accounts.</p>

Appendix 2

Table Showing Metro Customer Satisfaction Tracking Survey Scores by Category since May 2013

Category	May-13	Nov-13	Mar-14	May-14	Nov-14	May-15	Nov-15	May-16	Nov-16	May-17	Nov-17
Station equipment	7.5	7.4	7.5	7.6	7.3	7.3	7.3	7.3	7.5	7.4	7.3
Information	7.7	7.5	8.0	7.8	7.2	7.1	7.2	7.2	7.3	7.4	7.3
Cleanliness	7.5	7.6	7.6	7.8	7.3	7.3	7.2	7.0	7.6	7.3	7.2
Security	7.3	7.3	7.4	7.4	7.1	7.1	7.1	7.0	7.2	7.2	7.1
Ticketing	7.1	6.9	7.2	7.0	6.3	6.5	5.8	6.1	6.1	6.6	6.8
Staff availability	5.3	5.1	5.8	5.5	5.4	5.6	5.7	5.3	5.9	6.1	6.6
Metro overall satisfaction	8.1	7.7	8.1	8.0	7.6	7.8	7.6	7.4	7.7	7.8	7.7

Market research into our customers' satisfaction is undertaken every six months. The research covers 23 areas of the Metro service and the questionnaires are carried out in face to face interviews amongst a sample of approximately 1000 passengers.

23 areas of Metro service are split into six categories:

- Station equipment
- Information
- Cleanliness
- Security
- Ticketing
- Staff availability

The results of the questionnaires are shown as a mean score out of ten for each of these categories. The level of overall customer satisfaction is also included in the survey.

Comparing November's scores year-on-year shows there has been an increase in satisfaction in two categories (Ticketing and Staff availability), a decrease in three categories (Station equipment, Cleanliness and Security), one service category has stayed the same (Information) and the overall satisfaction with Metro has also remained stable.

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Transport North East (Tyne and Wear) Sub-Committee

Date: 25 January 2018

Subject: Metro Performance Update

Report of: Managing Director (Transport Operations)

Executive Summary

The purpose of this report is to provide an update on Metro performance for the twelve weeks from 17 September to 9 December 2017 (Periods 7, 8 and 9 2017/18).

Recommendations

The Transport North East (Tyne and Wear) Sub-Committee is recommended to receive and consider the report and attached appendix giving details of Metro performance.

Transport North East (Tyne and Wear) Sub-Committee

1. Background Information

- 1.1 The Concession Agreement between Nexus and DB Regio Tyne and Wear Limited (DBTW) expired at 01:59 hours on 1 April 2017. Nexus began managing Metro operations “in-house” from 1 April 2017. This followed closer and more direct management of DBTW by Nexus in the final year of the Concession Agreement.
- 1.2 Nexus set up a programme management approach to facilitate the transition from DBTW to Nexus and members have considered updates on the transition at previous meetings of this Sub-Committee. At a policy seminar, held in January 2017, members noted that the transition between operators elsewhere in the UK rail industry has sometimes resulted in a decline in performance.
- 1.3 Based on the experience elsewhere in the UK, members identified the need for this Sub-Committee to closely monitor the performance of Metro operations up to and following the transition. At the meeting of the Sub-Committee on 27 February 2017 members agreed performance measures to be reported to the Sub-Committee, and the format of the performance update.
- 1.4 This report sets out the Metro performance update for the twelve weeks from 17 September to 9 December 2017 (Periods 7, 8 and 9 2017/18). Appendix 1 contains detailed commentary against the performance measures.
- 1.5 Now that around three quarters of the year has elapsed, operational performance trends are showing an improved and encouraging picture compared with 2016/17:
 - Charter Punctuality is 3.72 percentage points better, running at 85.85% compared with 82.13% at the same time last year.
 - Total Excess Headway Minutes have improved by 17%.
 - Fleet reliability (km per 4+ Excess Headway Minute fault) Moving Annual Average has improved by 3.6%.

2. Proposals

- 2.1 The Sub-Committee is invited to consider and comment upon the performance of Metro during the relevant period.

3. Reasons for the Proposals

- 3.1 The Sub-Committee’s comments will inform future actions to improve Metro performance.

4. Alternative Options Available

- 4.1 There are no alternative options as the report is for information only.

Transport North East (Tyne and Wear) Sub-Committee

5. Next Steps and Timetable for Implementation

- 5.1 The next performance update will be presented at the April 2018 meeting of the Sub-Committee.

6. Potential Impact on Objectives

- 6.1 Performance monitoring and review can help ensure the achievement of desired outcomes.

7. Financial and Other Resources Implications

- 7.1 There are no direct financial or resource considerations arising from this report.

8. Legal Implications

- 8.1 There are no direct legal considerations arising from this report.

9. Key Risks

- 9.1 There are no specific risk management considerations arising from this report. Applying performance management can help mitigate and avoid the occurrence of risks.

10. Equality and Diversity

- 10.1 There are no specific equalities and diversity considerations arising from this report.

11. Crime and Disorder

- 11.1 There are no specific crime and disorder considerations arising from this report.

12. Consultation/Engagement

- 12.1 There are no specific consultation/engagement considerations arising from this report.

13. Other Impact of the Proposals

- 13.1 There are no other specific impacts of the proposals.

14. Appendices

Transport North East (Tyne and Wear) Sub-Committee

14.1 Appendix 1 – Metro performance update report

15. Background Papers

15.1 None

16. Contact Officers

16.1 Tobyn Hughes
Managing Director (Transport Operations)
E-mail: tobyn.hughes@nexus.org.uk
Tel: 0191 203 3246

17. Sign off

- Head of Paid Service: ✓
- Monitoring Officer: ✓
- Chief Finance Officer: ✓

18. Glossary

See glossary within Appendix 1

Transport North East (Tyne and Wear) Sub-Committee

Appendix 1



Metro performance update

Periods 7, 8 & 9 2017/18

(17 September 2017 to 9 December 2017)

Punctuality: **79.6%**
76.4% Last year

Customer
Satisfaction: **7.7 / 10** November 2017
7.8 / 10 May 2017
7.7 / 10 November 2016

Transport North East (Tyne and Wear) Sub-Committee

Glossary of terms

EHWM - Excess Headway Minutes, the method by which delays experienced by passengers are measured. The total EHWM for any period is subject to an attribution process resulting to an agreed allocation across the Operator, Nexus Rail, Network Rail and Other/disputed depending on the identified causation.

LRA - Low Rail Adhesion - Leaves falling on tracks are compressed and become a slippery substance that is difficult to remove and creates greasy track conditions known as Low Rail Adhesion.

MAA – moving annual average - the average for the past 13 periods (i.e. 12 months) including the 4-week period being reported on.

Metrocar kilometres per 4+ Excess Headway Minute fault – is calculated as the total number of fleet failures affecting the Metro service by four minutes or more divided by the total fleet kilometres in the period being reviewed.

Metro Customer Satisfaction Score – the result of a tracking survey that is carried out in May and November each year.

Network Rail – the statutory infrastructure provider maintaining the railway and providing the power and signalling for the tracks and stations between Pelaw and South Hylton via Sunderland.

Nexus Rail – the division of Nexus responsible for providing and maintaining the Metro infrastructure including the track and stations owned by Nexus.

Patronage – the number of passenger boardings for a service, mode or area over a specified period normally arrived at by survey, the use of ticket machine data or some combination of both. Often used interchangeably with Ridership.

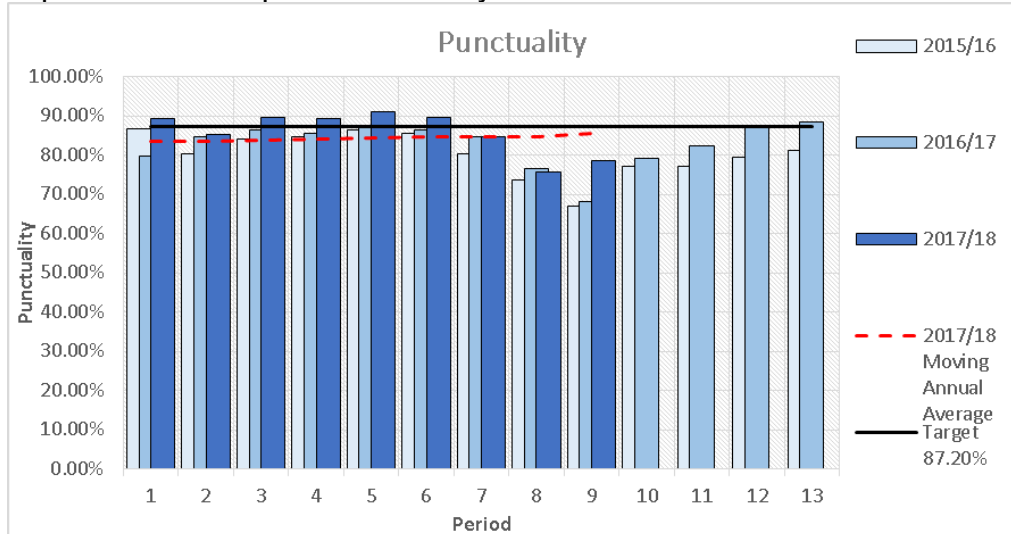
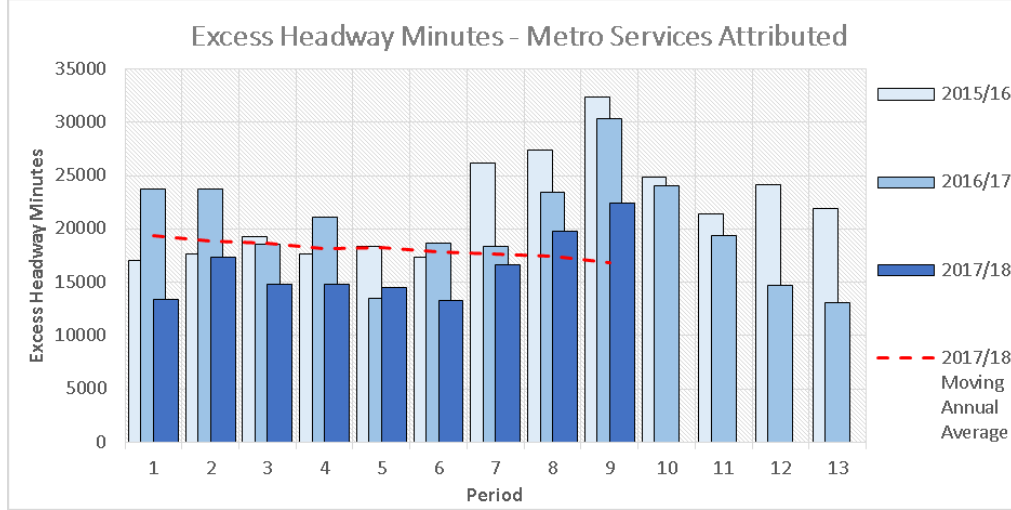
Period – 4-week periods (there are 13 in each financial year) used for financial, accounting and performance measurement purposes.

Punctuality – measurement of train punctuality as set out in the Metro Passenger Charter; measures the percentage of trains arriving within three minutes later or within 29 seconds earlier than scheduled.

RIDDOR – Reporting of Injuries, Diseases and Dangerous Occurrences Regulations – legislation which puts duties on employers, the self-employed and people in control of work premises to report certain serious workplace accidents, operational diseases and specified dangerous occurrences (near misses) to the Health and Safety Executive

SQR – Service Quality Regime - the means by which quality standards on stations and trains is measured

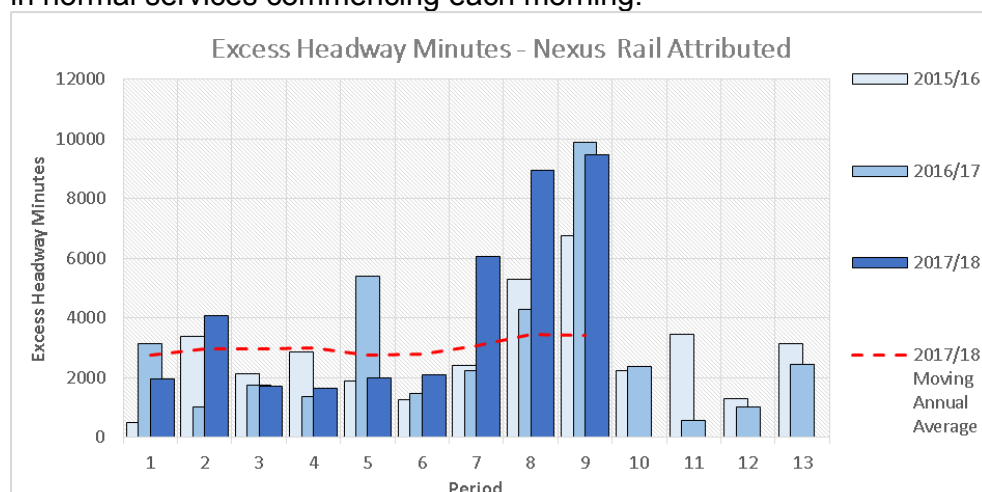
Transport North East (Tyne and Wear) Sub-Committee

Operational performance																																																									
Indicator:	Performance and Key Considerations:																																																								
Punctuality	<p>During the three periods leading up to 9 December a punctuality figure of 79.6% was achieved by Metro compared to 76.4% over the same twelve weeks last year, 3.2 percentage points better. LRA was experienced earlier in the autumn than the last two years, depressing punctuality in Periods 7 and 8. A better overall performance than the last two years is shown by the increase in Period 9 and the improvement compared with last year.</p>  <table><caption>Punctuality Data (Estimated %)</caption><thead><tr><th>Period</th><th>2015/16</th><th>2016/17</th><th>2017/18</th></tr></thead><tbody><tr><td>1</td><td>85.0</td><td>88.0</td><td>89.0</td></tr><tr><td>2</td><td>82.0</td><td>85.0</td><td>86.0</td></tr><tr><td>3</td><td>83.0</td><td>88.0</td><td>89.0</td></tr><tr><td>4</td><td>84.0</td><td>88.0</td><td>89.0</td></tr><tr><td>5</td><td>85.0</td><td>88.0</td><td>90.0</td></tr><tr><td>6</td><td>86.0</td><td>88.0</td><td>89.0</td></tr><tr><td>7</td><td>80.0</td><td>85.0</td><td>84.0</td></tr><tr><td>8</td><td>75.0</td><td>78.0</td><td>76.0</td></tr><tr><td>9</td><td>78.0</td><td>80.0</td><td>79.6</td></tr><tr><td>10</td><td>80.0</td><td>82.0</td><td>81.0</td></tr><tr><td>11</td><td>82.0</td><td>84.0</td><td>85.0</td></tr><tr><td>12</td><td>85.0</td><td>87.0</td><td>88.0</td></tr><tr><td>13</td><td>86.0</td><td>88.0</td><td>89.0</td></tr></tbody></table>	Period	2015/16	2016/17	2017/18	1	85.0	88.0	89.0	2	82.0	85.0	86.0	3	83.0	88.0	89.0	4	84.0	88.0	89.0	5	85.0	88.0	90.0	6	86.0	88.0	89.0	7	80.0	85.0	84.0	8	75.0	78.0	76.0	9	78.0	80.0	79.6	10	80.0	82.0	81.0	11	82.0	84.0	85.0	12	85.0	87.0	88.0	13	86.0	88.0	89.0
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Excess Headway Minutes (Metro Services)	<p>Just under 19,700 Excess Headway Minutes per four-week period was allocated to the Operator over the twelve weeks under review. This is a worsening compared with the previous two periods but follows industry expected seasonal trends and represents an improvement on performance for the same periods last year.</p>  <table><caption>Excess Headway Minutes Data (Estimated)</caption><thead><tr><th>Period</th><th>2015/16</th><th>2016/17</th><th>2017/18</th></tr></thead><tbody><tr><td>1</td><td>23,000</td><td>17,000</td><td>13,000</td></tr><tr><td>2</td><td>23,000</td><td>17,000</td><td>17,000</td></tr><tr><td>3</td><td>19,000</td><td>18,000</td><td>15,000</td></tr><tr><td>4</td><td>21,000</td><td>17,000</td><td>15,000</td></tr><tr><td>5</td><td>18,000</td><td>13,000</td><td>14,000</td></tr><tr><td>6</td><td>18,000</td><td>17,000</td><td>13,000</td></tr><tr><td>7</td><td>26,000</td><td>18,000</td><td>17,000</td></tr><tr><td>8</td><td>27,000</td><td>23,000</td><td>20,000</td></tr><tr><td>9</td><td>32,000</td><td>30,000</td><td>22,000</td></tr><tr><td>10</td><td>24,000</td><td>23,000</td><td>24,000</td></tr><tr><td>11</td><td>21,000</td><td>19,000</td><td>19,000</td></tr><tr><td>12</td><td>24,000</td><td>15,000</td><td>15,000</td></tr><tr><td>13</td><td>22,000</td><td>13,000</td><td>13,000</td></tr></tbody></table>	Period	2015/16	2016/17	2017/18	1	23,000	17,000	13,000	2	23,000	17,000	17,000	3	19,000	18,000	15,000	4	21,000	17,000	15,000	5	18,000	13,000	14,000	6	18,000	17,000	13,000	7	26,000	18,000	17,000	8	27,000	23,000	20,000	9	32,000	30,000	22,000	10	24,000	23,000	24,000	11	21,000	19,000	19,000	12	24,000	15,000	15,000	13	22,000	13,000	13,000
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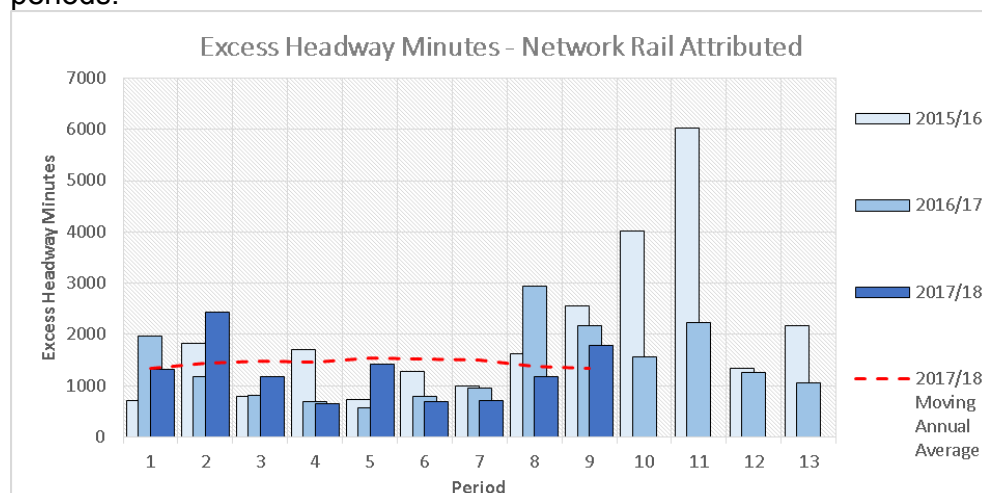
Excess Headway Minutes (Nexus Rail)

An average of just over 8,000 EHM per four-week period was allocated to Nexus Rail; this is a worsening of just over 6,000 EHM per four-week period compared with the previous two periods. In addition to LRA mainly experienced during Periods 7 and 8, there were a number of major disruptions during the three periods including the Depot power supply issue on Sunday 29 October which, whilst not generating a large volume of EHM, resulted in the Metro service being suspended for a large part of the day. Whilst not always being visible in the form of disruption a significant increase in numbers of cable theft event have occurred. Extensive and intense work by staff have on almost all occasions resulted in normal services commencing each morning.

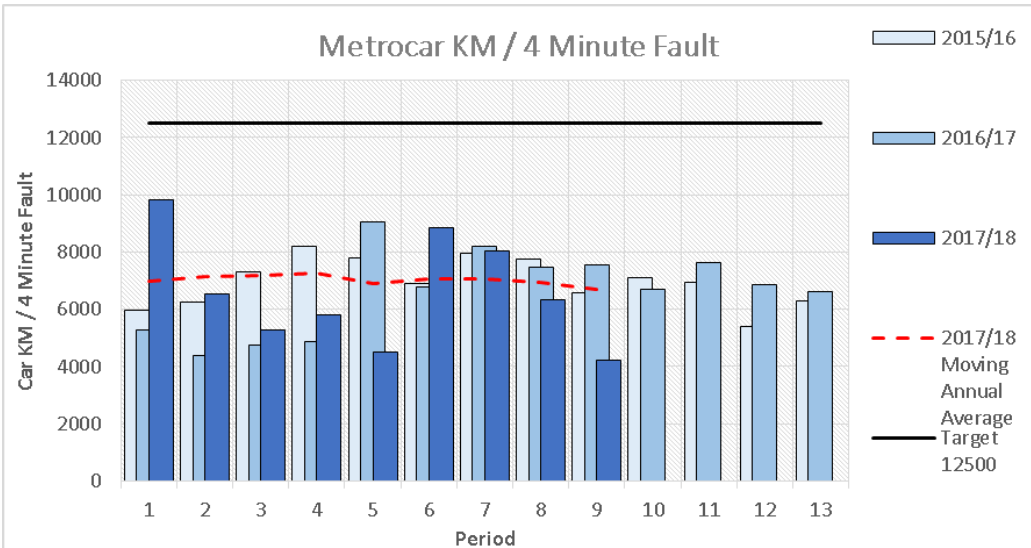
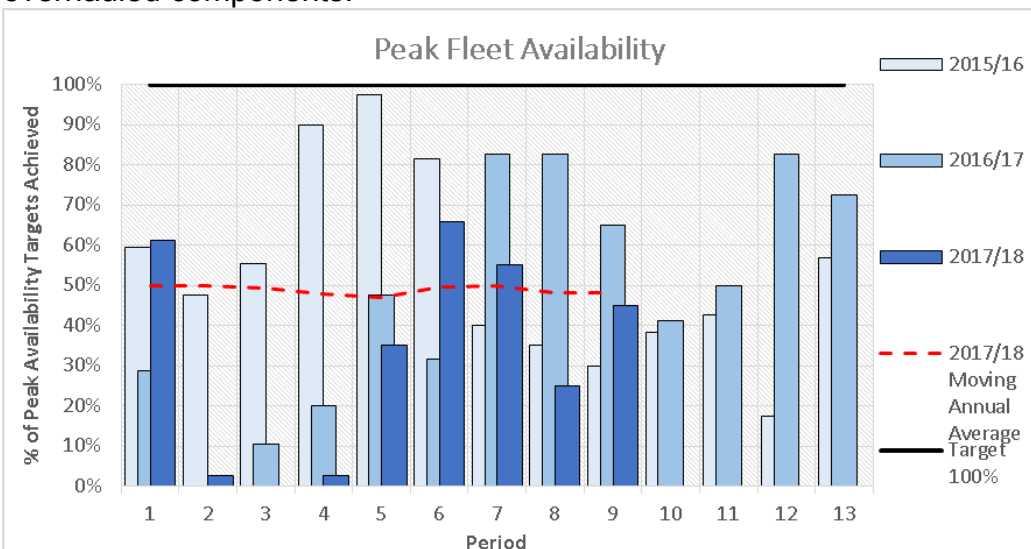


Excess Headway Minutes (Network Rail)

An average of just over 1,200 EHM per four-week period were allocated to Network Rail, this is a worsening of around 200 EHM per four-week period when compared with the previous two periods but an improvement of 800 EHM per four-week period when compared with the same time last year. A signalling fault between Fellgate and Brockley Whins on 8 December accounted for the increase in EHM in Period 9 compared with previous periods.



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Fleet performance																																																									
Indicator:	Performance and Key Considerations:																																																								
Metrocar kilometres per 4+ Excess Headway Minute fault	<p>Performance was an average of 6,197km per fault in the twelve weeks to 9 December. This is worse than the previous eight weeks which saw the average at 6,671km per fault, and poorer than the same twelve weeks last year.</p> <div><p>Metrocar KM / 4 Minute Fault</p><table><thead><tr><th>Period</th><th>2015/16</th><th>2016/17</th><th>2017/18</th></tr></thead><tbody><tr><td>1</td><td>6000</td><td>5500</td><td>9800</td></tr><tr><td>2</td><td>6200</td><td>4500</td><td>6500</td></tr><tr><td>3</td><td>7200</td><td>5000</td><td>5500</td></tr><tr><td>4</td><td>8200</td><td>5000</td><td>5800</td></tr><tr><td>5</td><td>7800</td><td>9000</td><td>4500</td></tr><tr><td>6</td><td>6800</td><td>6800</td><td>8800</td></tr><tr><td>7</td><td>8000</td><td>8000</td><td>8000</td></tr><tr><td>8</td><td>7800</td><td>7500</td><td>6200</td></tr><tr><td>9</td><td>7500</td><td>7500</td><td>4200</td></tr><tr><td>10</td><td>7000</td><td>6800</td><td></td></tr><tr><td>11</td><td>7000</td><td>7500</td><td></td></tr><tr><td>12</td><td>5500</td><td>6800</td><td></td></tr><tr><td>13</td><td>6200</td><td>6500</td><td></td></tr></tbody></table></div>	Period	2015/16	2016/17	2017/18	1	6000	5500	9800	2	6200	4500	6500	3	7200	5000	5500	4	8200	5000	5800	5	7800	9000	4500	6	6800	6800	8800	7	8000	8000	8000	8	7800	7500	6200	9	7500	7500	4200	10	7000	6800		11	7000	7500		12	5500	6800		13	6200	6500	
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Peak fleet availability	<p>Peak fleet availability in the twelve weeks ending 9 December saw the full peak fleet availability requirement being met on 42% (50/120) of the weekday morning and evening peaks. Availability has worsened mainly due to a problem with the overhaul of components by an external supplier, which has led to several Metrocars being stopped awaiting overhauled components.</p> <div><p>Peak Fleet Availability</p><table><thead><tr><th>Period</th><th>2015/16</th><th>2016/17</th><th>2017/18</th></tr></thead><tbody><tr><td>1</td><td>60%</td><td>28%</td><td>62%</td></tr><tr><td>2</td><td>48%</td><td>0%</td><td>2%</td></tr><tr><td>3</td><td>55%</td><td>10%</td><td>0%</td></tr><tr><td>4</td><td>90%</td><td>20%</td><td>2%</td></tr><tr><td>5</td><td>98%</td><td>48%</td><td>35%</td></tr><tr><td>6</td><td>82%</td><td>30%</td><td>65%</td></tr><tr><td>7</td><td>40%</td><td>83%</td><td>55%</td></tr><tr><td>8</td><td>35%</td><td>83%</td><td>25%</td></tr><tr><td>9</td><td>30%</td><td>65%</td><td>45%</td></tr><tr><td>10</td><td>38%</td><td>42%</td><td>0%</td></tr><tr><td>11</td><td>42%</td><td>50%</td><td>0%</td></tr><tr><td>12</td><td>18%</td><td>83%</td><td>0%</td></tr><tr><td>13</td><td>58%</td><td>72%</td><td>0%</td></tr></tbody></table></div>	Period	2015/16	2016/17	2017/18	1	60%	28%	62%	2	48%	0%	2%	3	55%	10%	0%	4	90%	20%	2%	5	98%	48%	35%	6	82%	30%	65%	7	40%	83%	55%	8	35%	83%	25%	9	30%	65%	45%	10	38%	42%	0%	11	42%	50%	0%	12	18%	83%	0%	13	58%	72%	0%
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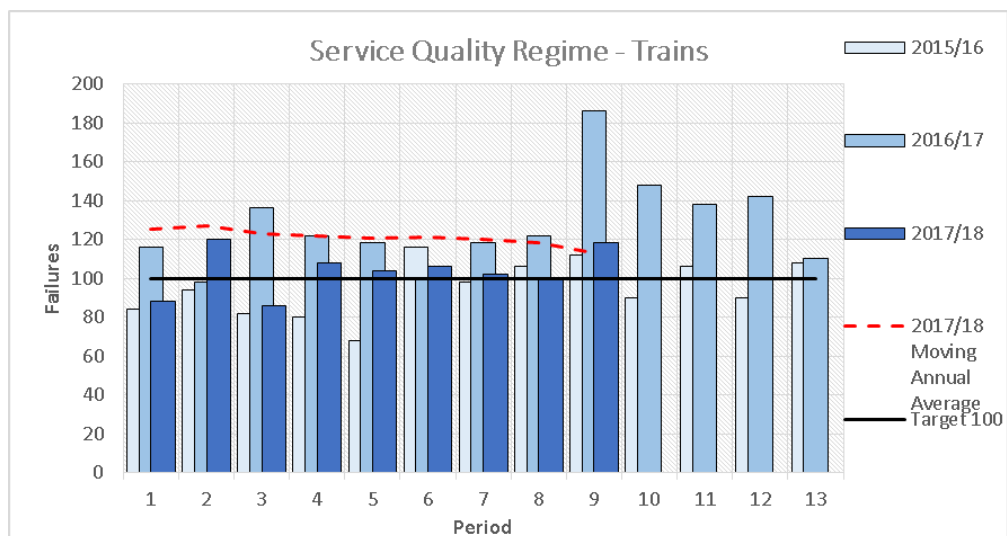
Transport North East (Tyne and Wear) Sub-Committee

Customer experience																																																									
Indicator:	Performance and Key Considerations:																																																								
Customer Satisfaction Survey	<p>The November 2017 Metro Customer Satisfaction Survey (CSS) score fell slightly to 7.7, remaining short of the 8.3 target. Despite this headline reduction some areas show encouraging results especially where specific actions have been undertaken.</p> <div><p>Customer Satisfaction Survey - Overall Satisfaction</p><table border="1"><thead><tr><th>Year</th><th>May</th><th>Nov</th></tr></thead><tbody><tr><td>2010</td><td>7.9</td><td>8.0</td></tr><tr><td>2011</td><td>8.0</td><td>8.0</td></tr><tr><td>2012</td><td>8.0</td><td>7.8</td></tr><tr><td>2013</td><td>8.1</td><td>7.7</td></tr><tr><td>2014</td><td>8.0</td><td>7.6</td></tr><tr><td>2015</td><td>7.8</td><td>7.6</td></tr><tr><td>2016</td><td>7.4</td><td>7.7</td></tr><tr><td>2017</td><td>7.8</td><td>7.7</td></tr></tbody></table></div>	Year	May	Nov	2010	7.9	8.0	2011	8.0	8.0	2012	8.0	7.8	2013	8.1	7.7	2014	8.0	7.6	2015	7.8	7.6	2016	7.4	7.7	2017	7.8	7.7																													
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Service Quality Regime – Stations	<p>An average of 59 fails were recorded per 4-week period, in the twelve weeks to 9 December. This is an improvement on the previous eight weeks which saw an average of 63 fails per 4-week period but worse than the same twelve weeks last year with performance remaining above the target of 55. Graffiti levels continue to be the main reason for fails, with resources being directed to identify and then remove graffiti as quickly as possible.</p> <div><p>Service Quality Regime - Stations</p><table border="1"><thead><tr><th>Period</th><th>2015/16</th><th>2016/17</th><th>2017/18</th></tr></thead><tbody><tr><td>1</td><td>65</td><td>48</td><td>55</td></tr><tr><td>2</td><td>60</td><td>45</td><td>65</td></tr><tr><td>3</td><td>60</td><td>55</td><td>55</td></tr><tr><td>4</td><td>82</td><td>52</td><td>60</td></tr><tr><td>5</td><td>72</td><td>65</td><td>65</td></tr><tr><td>6</td><td>75</td><td>58</td><td>58</td></tr><tr><td>7</td><td>75</td><td>55</td><td>60</td></tr><tr><td>8</td><td>65</td><td>45</td><td>60</td></tr><tr><td>9</td><td>65</td><td>50</td><td>55</td></tr><tr><td>10</td><td>68</td><td>55</td><td>55</td></tr><tr><td>11</td><td>72</td><td>55</td><td>55</td></tr><tr><td>12</td><td>65</td><td>65</td><td>55</td></tr><tr><td>13</td><td>58</td><td>55</td><td>55</td></tr></tbody></table></div>	Period	2015/16	2016/17	2017/18	1	65	48	55	2	60	45	65	3	60	55	55	4	82	52	60	5	72	65	65	6	75	58	58	7	75	55	60	8	65	45	60	9	65	50	55	10	68	55	55	11	72	55	55	12	65	65	55	13	58	55	55
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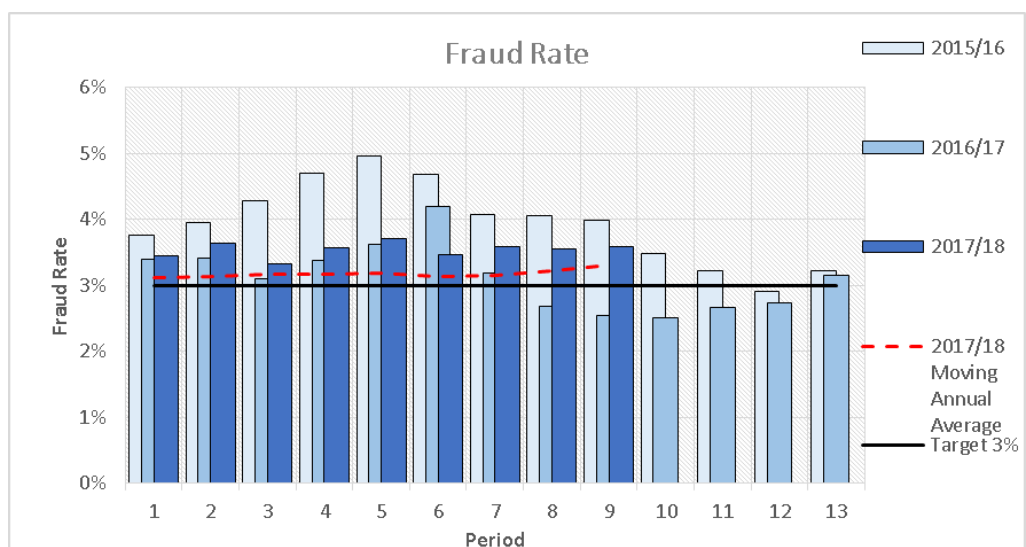
Service Quality Regime – Metrocars

An average of 107 fails per 4-week period were recorded in the twelve weeks to 9 December. This is worse than the 105 fails per 4-week period recorded in the previous eight weeks, but an improvement compared with the same twelve weeks last year. Unlike Stations, there is no dominant indicator making up the failures so the focus remains on ensuring issues are identified and addressed quickly.



Fraud rate

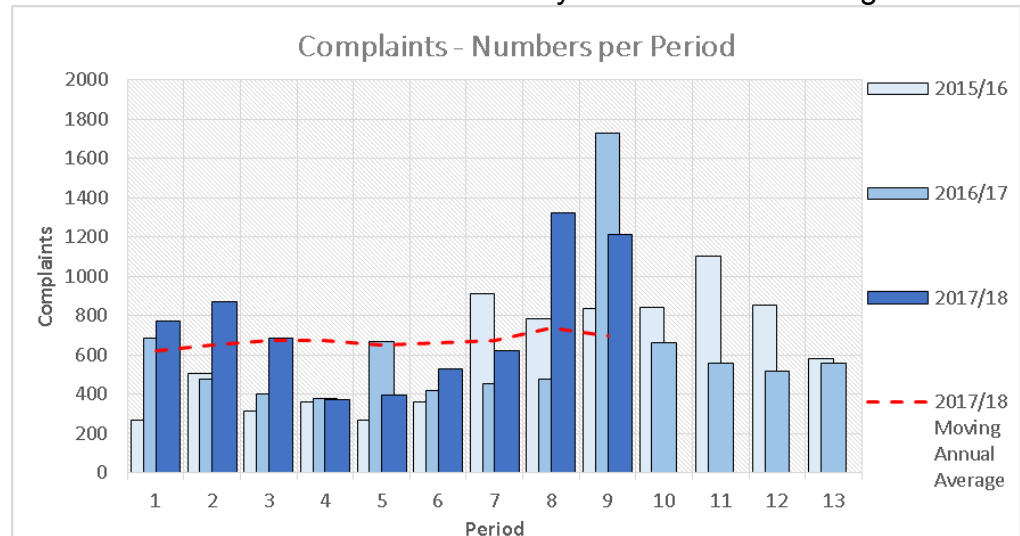
The fraud rate was an average of 3.57% over the twelve weeks to 9 December. This is only 0.01% different from the previous eight weeks, but worse than the same twelve weeks last year, which had a fraud rate of 2.80%. Actions have been put in place to reduce the fraud rate.



Transport North East (Tyne and Wear) Sub-Committee

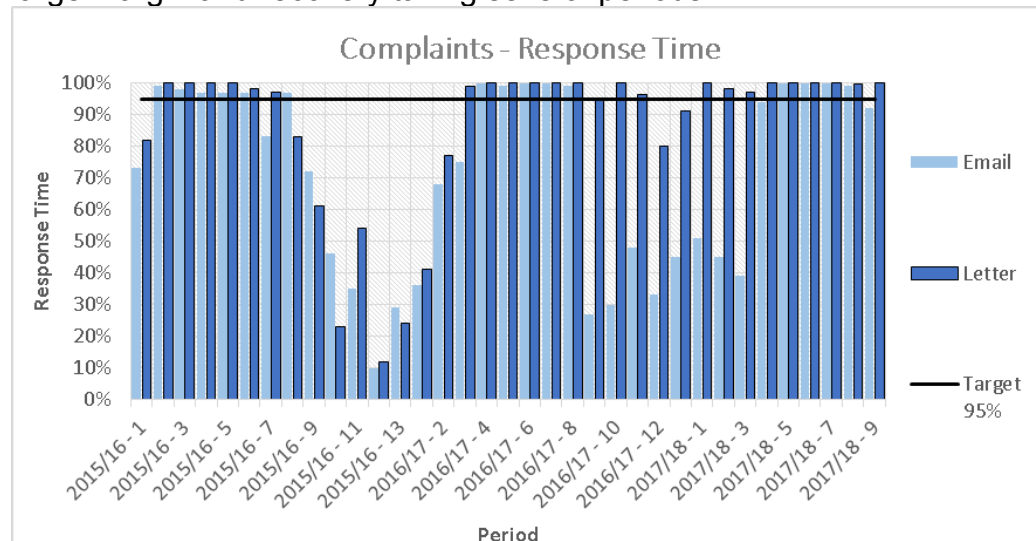
Complaints numbers

Complaints numbers increased over the twelve weeks to 9 December, with an average of 1,050 per 4-week period. The increases were mainly down to two significant disruptions; the Depot power supply issue on 29 October 2017 (in Period 8) which resulted in no service across the system for most of the day, and the cable theft incident on 4 December 2017 (in Period 9) which led to a service suspension between Monument and South Shields/South Hylton until mid-morning.

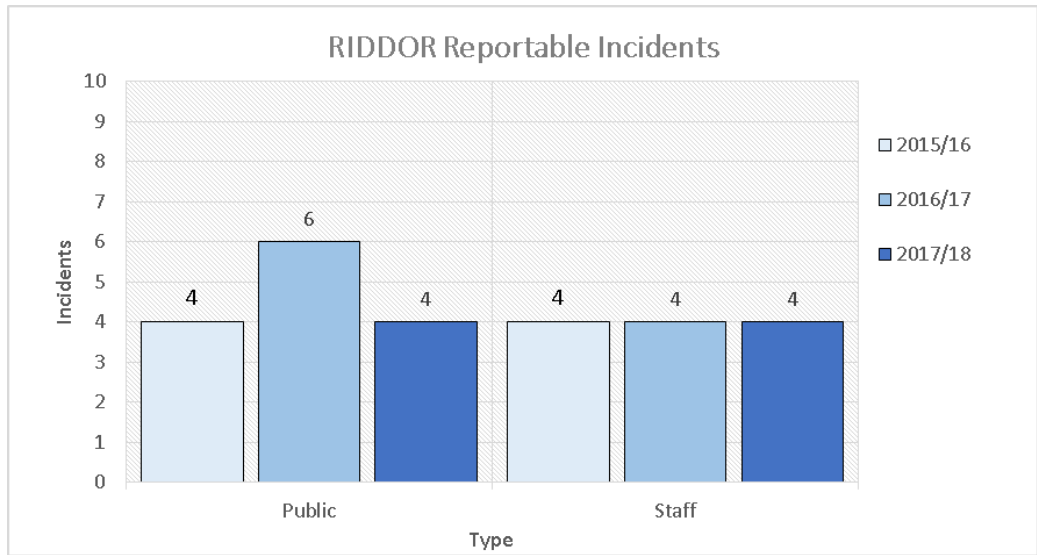


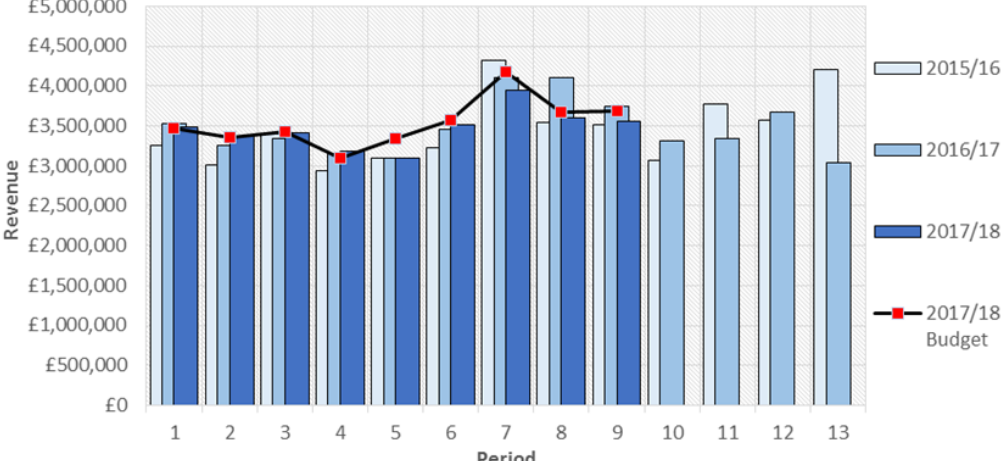
Complaints response time

Despite the increase in complaints numbers, response times have been better than target other than email complaints in Period 9. Despite this, an average response time of 3 days for emails was still achieved in the Period. These results have reversed the trend seen in recent years, where an increase in complaints resulted in targets being missed by a large margin and recovery taking several periods.

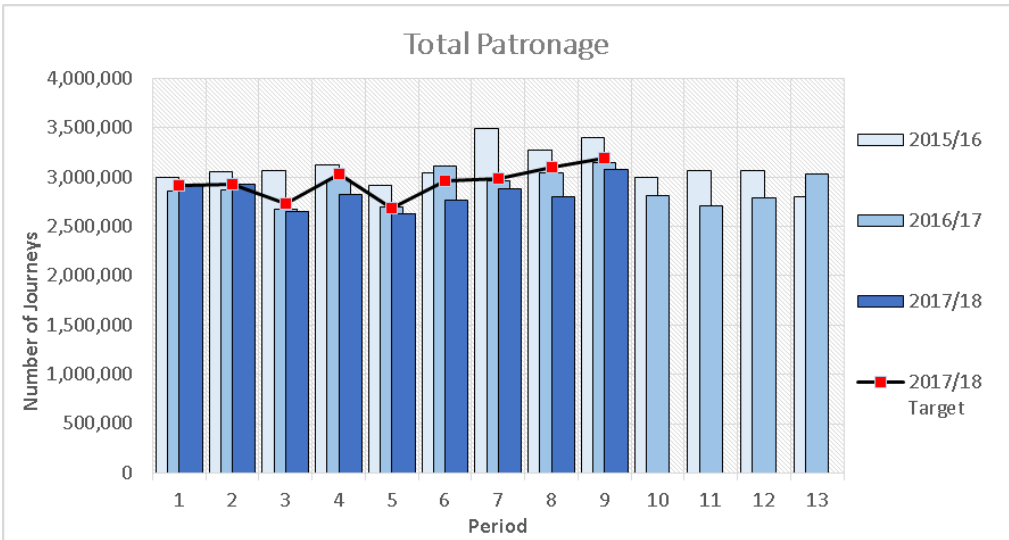


Transport North East (Tyne and Wear) Sub-Committee

Safety													
Indicator:	Performance and Key Considerations:												
Number of accidents	<p>There have been four staff RIDDOR reportable accidents in 2017/18 to date and four public RIDDOR reportable accidents.</p> <div><p>RIDDOR Reportable Incidents</p><table><thead><tr><th>Type</th><th>2015/16</th><th>2016/17</th><th>2017/18</th></tr></thead><tbody><tr><td>Public</td><td>4</td><td>6</td><td>4</td></tr><tr><td>Staff</td><td>4</td><td>4</td><td>4</td></tr></tbody></table></div>	Type	2015/16	2016/17	2017/18	Public	4	6	4	Staff	4	4	4
Type	2015/16	2016/17	2017/18										
Public	4	6	4										
Staff	4	4	4										

Farebox																																																																							
Indicator:	Performance and Key Considerations:																																																																						
Total Farebox revenue	<p>As at period 9 the Metro fare revenue shortfall for 2017/18 is expected to be between £0.8m and £1.2m below the budget set of £45.098m. This is equivalent to a -1.7% to -2.7% variation from the base budget.</p> <div><p>Total Revenue</p><table><thead><tr><th>Period</th><th>2015/16 (£)</th><th>2016/17 (£)</th><th>2017/18 (£)</th><th>2017/18 Budget (£)</th></tr></thead><tbody><tr><td>1</td><td>3,200,000</td><td>3,500,000</td><td>3,400,000</td><td>3,500,000</td></tr><tr><td>2</td><td>3,000,000</td><td>3,300,000</td><td>3,300,000</td><td>3,400,000</td></tr><tr><td>3</td><td>3,300,000</td><td>3,400,000</td><td>3,400,000</td><td>3,500,000</td></tr><tr><td>4</td><td>2,900,000</td><td>3,100,000</td><td>3,100,000</td><td>3,200,000</td></tr><tr><td>5</td><td>3,100,000</td><td>3,100,000</td><td>3,100,000</td><td>3,400,000</td></tr><tr><td>6</td><td>3,200,000</td><td>3,500,000</td><td>3,500,000</td><td>3,600,000</td></tr><tr><td>7</td><td>4,300,000</td><td>4,000,000</td><td>3,900,000</td><td>4,200,000</td></tr><tr><td>8</td><td>3,500,000</td><td>4,100,000</td><td>3,600,000</td><td>3,700,000</td></tr><tr><td>9</td><td>3,500,000</td><td>3,600,000</td><td>3,500,000</td><td>3,700,000</td></tr><tr><td>10</td><td>3,100,000</td><td>3,300,000</td><td>-</td><td>-</td></tr><tr><td>11</td><td>3,800,000</td><td>3,300,000</td><td>-</td><td>-</td></tr><tr><td>12</td><td>3,600,000</td><td>3,600,000</td><td>-</td><td>-</td></tr><tr><td>13</td><td>4,200,000</td><td>3,000,000</td><td>-</td><td>-</td></tr></tbody></table></div>	Period	2015/16 (£)	2016/17 (£)	2017/18 (£)	2017/18 Budget (£)	1	3,200,000	3,500,000	3,400,000	3,500,000	2	3,000,000	3,300,000	3,300,000	3,400,000	3	3,300,000	3,400,000	3,400,000	3,500,000	4	2,900,000	3,100,000	3,100,000	3,200,000	5	3,100,000	3,100,000	3,100,000	3,400,000	6	3,200,000	3,500,000	3,500,000	3,600,000	7	4,300,000	4,000,000	3,900,000	4,200,000	8	3,500,000	4,100,000	3,600,000	3,700,000	9	3,500,000	3,600,000	3,500,000	3,700,000	10	3,100,000	3,300,000	-	-	11	3,800,000	3,300,000	-	-	12	3,600,000	3,600,000	-	-	13	4,200,000	3,000,000	-	-
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Transport North East (Tyne and Wear) Sub-Committee

Patronage																																																																							
Indicator:	Performance and Key Considerations:																																																																						
Total Patronage	<p>Total patronage for the year as at Period 9 stands at 25.49m v target of 26.54m (-3.9%). This position is reflective of the farebox revenue. The Periodic performance versus the previous two years and versus target is shown below.</p> <div><p>Total Patronage</p><table><caption>Estimated Total Patronage Data (Number of Journeys)</caption><thead><tr><th>Period</th><th>2015/16</th><th>2016/17</th><th>2017/18</th><th>2017/18 Target</th></tr></thead><tbody><tr><td>1</td><td>2,900,000</td><td>2,850,000</td><td>2,900,000</td><td>2,900,000</td></tr><tr><td>2</td><td>3,000,000</td><td>2,900,000</td><td>2,900,000</td><td>2,900,000</td></tr><tr><td>3</td><td>3,000,000</td><td>2,700,000</td><td>2,700,000</td><td>2,750,000</td></tr><tr><td>4</td><td>3,100,000</td><td>2,800,000</td><td>2,800,000</td><td>3,000,000</td></tr><tr><td>5</td><td>2,900,000</td><td>2,600,000</td><td>2,600,000</td><td>2,700,000</td></tr><tr><td>6</td><td>3,100,000</td><td>2,700,000</td><td>2,700,000</td><td>2,900,000</td></tr><tr><td>7</td><td>3,500,000</td><td>2,800,000</td><td>2,800,000</td><td>2,900,000</td></tr><tr><td>8</td><td>3,200,000</td><td>2,700,000</td><td>2,700,000</td><td>3,100,000</td></tr><tr><td>9</td><td>3,400,000</td><td>3,100,000</td><td>3,100,000</td><td>3,200,000</td></tr><tr><td>10</td><td>2,900,000</td><td>2,800,000</td><td>-</td><td>-</td></tr><tr><td>11</td><td>3,000,000</td><td>2,700,000</td><td>-</td><td>-</td></tr><tr><td>12</td><td>3,000,000</td><td>2,800,000</td><td>-</td><td>-</td></tr><tr><td>13</td><td>2,800,000</td><td>3,000,000</td><td>-</td><td>-</td></tr></tbody></table></div>	Period	2015/16	2016/17	2017/18	2017/18 Target	1	2,900,000	2,850,000	2,900,000	2,900,000	2	3,000,000	2,900,000	2,900,000	2,900,000	3	3,000,000	2,700,000	2,700,000	2,750,000	4	3,100,000	2,800,000	2,800,000	3,000,000	5	2,900,000	2,600,000	2,600,000	2,700,000	6	3,100,000	2,700,000	2,700,000	2,900,000	7	3,500,000	2,800,000	2,800,000	2,900,000	8	3,200,000	2,700,000	2,700,000	3,100,000	9	3,400,000	3,100,000	3,100,000	3,200,000	10	2,900,000	2,800,000	-	-	11	3,000,000	2,700,000	-	-	12	3,000,000	2,800,000	-	-	13	2,800,000	3,000,000	-	-
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Transport North East (Tyne and Wear) Sub-Committee

Date: 25 January 2018

Subject: Metro system disruption on 29 October 2017

Report of: Managing Director (Transport Operations)

Executive Summary

The purpose of this report is to provide members with an update on the review of Metro system disruption on 29 October 2017.

Recommendations

The Transport North East (Tyne and Wear) Sub-Committee is recommended to receive and consider the findings of the report.

Transport North East (Tyne and Wear) Sub-Committee

1. Background Information

- 1.1 On Sunday 29 October 2017, a power supply problem at a substation led to the Metro service being suspended systemwide for most of the day.
- 1.2 In response to this, the Chair of the Transport North East (Tyne and Wear) Sub-Committee requested that a review be undertaken of the disruption.
- 1.3 The review has been completed and a copy of the report is attached as Appendix 1.

2. Proposals

- 2.1 The Sub-Committee is invited to receive and consider the findings of the report.

3. Reasons for the Proposals

- 3.1 The Sub-Committee's comments will inform future actions to prevent future disruptions and reduce the impact of such disruptions on Metro customers.

4. Alternative Options Available

- 4.1 There are no alternative options as the report is for information only.

5. Next Steps and Timetable for Implementation

- 5.1 The recommendations contained within the report will be implemented.

6. Potential Impact on Objectives

- 6.1 Implementation of the recommendations will help ensure the achievement of desired outcomes.

7. Financial and Other Resources Implications

- 7.1 There are no direct financial or resource considerations arising from this report.

8. Legal Implications

- 8.1 There are no direct legal considerations arising from this report.

9. Key Risks

- 9.1 There are no specific risk management considerations arising from this report.

Transport North East (Tyne and Wear) Sub-Committee

10. Equality and Diversity

- 10.1 There are no specific equalities and diversity considerations arising from this report.

11. Crime and Disorder

- 11.1 There are no specific crime and disorder considerations arising from this report.

12. Consultation/Engagement

- 12.1 There are no specific consultation/engagement considerations arising from this report.

13. Other Impact of the Proposals

- 13.1 There are no other specific impacts of the proposals.

14. Appendices

- 14.1 Appendix 1 – Report into Metro system disruption on Sunday 29 October 2017

15. Background Papers

- 15.1 None

16. Contact Officers

- 16.1 Tobyn Hughes
Managing Director (Transport Operations)
E-mail: tobyn.hughes@nexus.org.uk
Tel: 0191 203 3246

17. Sign off

- Head of Paid Service: ✓
- Monitoring Officer: ✓
- Chief Finance Officer: ✓

18. Glossary

Transport North East (Tyne and Wear) Sub-Committee

N/A



REPORT INTO METRO SYSTEM DISRUPTION ON SUNDAY 29 OCTOBER 2017



1. EXECUTIVE SUMMARY

- 1.1 Just before 05:00 on Sunday 29 October 2017, a fault occurred at the substation supplying overheadline power to the Gosforth Depot, leaving the Metro trains in the Depot without power and meaning that no Metro trains could leave the Depot. As a result, the Metro service was suspended for a large part of the day, resuming in the evening.
- 1.2 Efforts to restore service relied on two workstreams; shunting Metrocars out of the Depot using battery-powered engineering vehicles and modifying/installing an alternative overheadline power supply to the Depot.
- 1.3 Due to the unique nature of the disruption, no alternative transport was provided by Metro. Whilst a range of methods were used to inform customers of the disruption, the message did not reach around 18% of customers, who purchased tickets before finding out about the disruption.
- 1.4 This report contains seven recommendations. These recommendations aim to both prevent a recurrence, and reduce the impact on customers should the highly unusual situation of no Metro service across all or a large part of the network occur.

2. PURPOSE

- 2.1 As a result of the request made by the North East Combined Authority's Tyne & Wear Sub-Committee, a review of the disruption on the Tyne & Wear Metro system on Sunday 29 October 2017 was carried out.
- 2.2 The main purposes of the review is to:
 - Identify causal factors for the disruption on 29 October 2017
 - Identify actions to prevent a recurrence
 - Identify actions to reduce the impact of any similar disruption in the future on Metro customers

3. METHODOLOGY

- 3.1 A number of information sources have been used to compile this report.
- 3.2 The main sources of this information can be summarised as:
 - Customer feedback
 - Control Room logs from the day
 - Written documentation such as plans and procedures
 - Information obtained from relevant staff
 - Feedback obtained following internal reviews of individual elements of 29 October 2017

4. BACKGROUND

- 4.1 A substation at Gosforth is one of 12 around the Metro system which supplies power to the overhead line system, used by the Metro trains for power. Gosforth substation, in addition to supplying power to the overhead line system on the main network, supplies the Depot overhead line.
- 4.2 At 04:52 on Sunday 29 October 2017, various electrical protection systems at Gosforth substation activated, with the remote monitoring systems making Control Room staff aware. The fire alarm at the substation also activated.
- 4.3 Staff were called to the substation, arriving at 04:58, and at 05:22 attempts were made to reset the electrical protection systems. Whilst protection could be reset for the overhead line supply to the mainline Metro system, attempts to reset the supply to the Depot were unsuccessful. It was later found that this was due to failure of the transformer which is used to supply the Depot.
- 4.4 Without an overhead line power supply to the Depot, there was no traction supply power available to trains and no trains could leave the Depot. As all trains were in the Depot at the time of the power loss, the service was suspended across the whole Metro system.
- 4.5 Customers were advised of the service suspension through several routes of communication. No ticket acceptance or bus replacement services were provided, with customers advised to make alternative travel arrangements.
- 4.6 Efforts during the day to restore the Metro service relied on two streams of work. Firstly, in the substation, works took place to implement a modified and alternative electrical supply to the Depot. Secondly, engineering trains powered by batteries, known as Battery Locomotives, were used to shunt trains out of the Depot onto the mainline Metro system.
- 4.7 Sufficient trains were shunted out of the Depot by around the time the electrical supply to the Depot overhead line was restored. The first trains started to run through South Gosforth and Pelaw at around 18:30, with service resuming from all parts of the network shortly after 22:00.

5. FACTORS FOR CONSIDERATION

- 5.1 Depot overhead line power supply
 - 5.1.1 Overhead line power to the Metro system is supplied through 12 substations around the Metro system, of which 9 are on Nexus infrastructure and 3 between Pelaw and South Hylton are on Network Rail infrastructure. The substation at Gosforth supplies overhead line power to the Depot and the mainline Metro system in and around this area. It also supplies power to various other Metro facilities and systems.
 - 5.1.2 The substations contain various pieces of electrical equipment, one of which are transformers which reduces the voltage of the current from 11,000 Volts which is supplied from the national grid, to the 1,500 Volts supplied to the overhead line used by Metro trains.

- 5.1.3 There are 36 such transformers across the Metro system, with only one failure occurring in the 37 years of Metro operation prior to 29 October 2017. The mean time between failures for this type of asset was therefore 1 in 1,332 years.
- 5.1.4 The transformer which failed on 29 October was designed in 2009 and installed in July 2014 at a cost of approximately £1m. The transformer was specified to be fault free for 30 years and it operated for 3.4 years before the failure.
- 5.1.5 The work to install the transformer formed part of the wider Asset Renewal Plan (ARP) and was in response to a statutory obligation on Nexus to minimise an effect known as “stray currents”, which can arise in a Direct Current (DC) electrical system such as the Metro.
- 5.1.6 In order to meet this obligation, the Depot had to be electrically separated from the mainline Metro network. Prior to the ARP project, there were three transformers in Gosforth substation supplying power to the overhead line for both the Depot and mainline Metro network. The project installed a fourth (additional) transformer and associated equipment to supply the Depot, achieving the electrical separation and leaving the three existing transformers to solely supply the mainline.
- 5.1.7 Prior to the installation, had one of the three transformers failed at Gosforth substation then the Depot or service would not have been affected, as the transformers operated in parallel. On 29 October, because the transformer was the standalone supply to the Depot, there was no alternative Depot supply available. The solution adopted on the day was to obtain a high voltage supply from the other three transformers i.e. temporarily restore the arrangement that had existed prior to the ARP project taking place.
- 5.1.8 The project to electrically separate the Depot was initiated in 2009 and a feasibility study at that time identified the consequence in the highly unlikely event of the failure of the transformer. However by the time of the options report being produced in 2010, there were no references to the issue. It has not been possible to locate any records which outline how the matter was considered and a decision made between these two dates.
- 5.1.9 Installing a second transformer would not have been value for money given the reliability of transformers and the cost of doing so which would have nearly doubled the project cost of £1m. However, installing alternative switching arrangements could have been included in the project, at a cost of around £50,000. Whilst the transformer failure would have caused some disruption, supplies could be switched over to the other transformers relatively quickly.
- 5.1.10 The work in 2009 was at the infancy of the Asset Renewal Plan programme. Since 2009, project control and governance arrangements have developed substantially in order to ensure risks and potential consequences are fully explored and addressed or mitigated. This is through a thorough set of programme management controls which includes as the Stage Gate process, and a process to identify the implications of changes to assets known as the Engineering Change process.
- 5.1.11 The timing of the transformer failure also had a major impact on the disruption. Had the transformer failed a few hours later, there would have been little or no impact on

customers as all trains for service would have left the Depot. Furthermore, the failure occurring just before service was due to start meant that there was no time to begin repairs or make alternative arrangements as would have been the case if it had failed earlier in the night.

5.2 Battery Locomotives

- 5.2.1 In parallel with the work in the substation to restore the overhead line supply to the Depot, other work took place to move trains from the Depot to the mainline.
- 5.2.2 This work involved use of Battery Locomotives. Battery Locomotives are engineering trains which, in addition to being able to be powered by the overhead line, have battery packs meaning they can propel themselves without an electrical supply from the overhead line. These Battery Locomotives were used to shunt Metrocars from the Depot onto the mainline, where the Metrocars could be supplied with overhead line power.
- 5.2.3 Progress with the Battery Locomotive was much slower than expected. Whilst by 10:00 five trains had been moved onto the mainline network by this method, at this point the Battery Locomotives were flat and required charging. Further compounding this factor, the Battery Locomotives experienced their flat batteries remote from the charging facilities. Following the consequential delays in charging a further three trains were moved onto the mainline network by 16:30, but the Battery Locomotives again needed charging.
- 5.2.4 This performance of the Battery Locomotives was poorer than expected. It is expected that a Battery Locomotive charge should be able to last for 4-5 hours, in this case they lasted for less than 50% of this time.
- 5.2.5 The battery packs on each Battery Locomotive are specified to be refurbished every five years. Whilst these refurbishments had taken place as required, the way the Battery Locomotives had been used on a day-to-day basis over many years meant that the battery life had been affected. This Battery Locomotives being used around the Depot on battery power, rather than overhead line power. This continued depletion and charging of the batteries had affected their capacity.
- 5.2.6 Prior to the 29 October the issue of the depleted battery life had been recognised, and a procurement exercise had already taken place to purchase new batteries for the Battery Locomotives. At the time of the incident, the procurement process had just closed with tenders received for evaluation.
- 5.2.7 Whilst Battery Locomotives are used on a day-to-day basis to shunt Metrocar around the Depot, there are other engineering vehicles not powered by the overhead line including a tamper and Rail Road Vehicles (RRVs). Whilst these do not couple to Metrocars, it may be possible for adaptors to be made to allow them to shunt Metrocars if required. This would provide additional means to shunt Metrocars in the event of a loss of overheadline supply.

5.3 Contingency plans

- 5.3.1 Nexus has operational contingency plans in place for disruption to the Metro, but these primarily focus on disruption to specific sections of the network rather than the whole system.
- 5.3.2 The operational contingency plans include use of buses in two ways; Metro ticket acceptance on local bus services and provision of a dedicated bus replacement service.
- 5.3.3 On 29 October, it was felt that to have network-wide ticket acceptance would have raised customer expectations that buses would be a straightforward swap for Metro.
- 5.3.4 This decision was partly influenced by a “rolling deadline” for the Metro service to be restarted, due to the issues experienced with the Battery Locomotives. Early on in the day, it was not expected that it would be a prolonged process to shunt the Metrocars onto the mainline. As the day progressed, and issues with the Battery Locomotives became apparent, the time the service was expected to restart got later and later.
- 5.3.5 The provision of ticket acceptance and bus replacement services is considered in more detail in the next section of this report.
- 5.3.6 In terms of restarting the train service, it was concluded that a minimum of eight trains were required to run a reduced service. This compares to the requirement of 22 trains which are needed to provide a normal Sunday service of a 15 minute frequency on both the yellow and green lines.
- 5.3.7 Whilst service could have started with fewer trains, there were two major public events running in the area that day. Had a service been started with fewer trains, it was concluded that this had the potential to generate issues in managing public safety.
- 5.3.8 This safety concern was focused around two elements. First would have been crowd control at stations, particularly those which would have been affected by the two major public events. Separate but related to this is managing the platform train interface which is more challenging when platforms are crowded. In the event of severe crowding on the platform, the driver may not be able to dispatch the train safely and this then causes further delays whilst this is dealt with. Other platform crowding issues could also lead to people falling between the platform and the train, or onto the track.
- 5.3.9 In addition to operational contingency plans, Nexus has business continuity plan arrangements involving the most senior decision makers. These were put into place on 29 October with four Directors involved during the day.
- 5.3.10 Whilst the business continuity plan arrangements were put into place on 29 October, the situations when they should be implemented are not referenced from the operational contingency plans. An appropriate reference in the operational contingency plans would ensure the business continuity plans are implemented on a consistent basis, when circumstances dictate.
- 5.4 Ticket acceptance and bus replacement services
- 5.4.1 During Metro disruption, buses are used in two ways; Metro ticket acceptance on local bus services and provision of a dedicated bus replacement service.

- 5.4.2 During Metro ticket acceptance, Metro tickets are accepted on local bus services in the area affected by the disruption. This works well in several circumstances; the early stages of a disruption (before a dedicated bus replacement service can be organised); for disruptions which are short in duration; or for disruptions where no or insufficient replacement buses can be obtained. The suitability of this does vary across Tyne and Wear, depending on the commercial bus services that serve areas close to Metro lines and stations.
- 5.4.3 On 29 October, it was felt that to have network-wide ticket acceptance would have raised customer expectations that buses would be a straightforward swap for Metro. This was also influenced by the “rolling deadline” for Metro services recommencing, as referred to in the previous section.
- 5.4.4 The second use of buses is a dedicated replacement bus service. Nexus has ‘call off’ contracts with bus providers and therefore it can take an hour or more to initiate a replacement bus service. The provision depends on availability of buses and drivers, and in more major or prolonged disruptions it is common that multiple companies have to be called on in order to be able to provide sufficient buses. It can also be the case that bus companies cannot provide replacement buses, which is more common during weekday morning and evening peaks when all buses are in use to provide commercial services.
- 5.4.5 Whilst 22 Metro trains are required to provide a 15 minute service frequency on the yellow and green lines, a greater number of buses would be required. This reflects the fact that road routes between each Metro station are not as direct or as fast as the Metro line. To replicate a 15 minute service would require a minimum of 43 buses. This would only provide one bus per Metro, a capacity which is not comparable given a fully laden Metro train can transport over 500 people.
- 5.4.6 Arranging a replacement bus service on an unplanned basis to cover the whole Metro system would be hugely complex, even if sufficient buses could be obtained:
- Provision of Customer Service staff to ‘regulate’ the buses at termini and intermediate stations
 - Traffic congestion, which can have a major impact even during a planned bus replacement service covering a small part of the network.
 - Managing the deployment of buses from multiple bus companies, with differing requirements such as when drivers need to finish shifts.
 - Managing capacity issues, as in planned disruption when greater passenger numbers are expected more buses are put on.
 - Bus driver route knowledge of replacement bus stops and routes.
- 5.4.7 The combination of the factors outlined in the paragraph above means that it is considered that arranging a replacement bus service to cover the whole Metro system on a short notice and unplanned basis is not practical.
- 5.4.8 However, following review of the day there are alternative options available and in any future instance of unplanned disruption affecting the whole or most of the Metro network alternative travel would be provide through the whole range of options – bus replacement, ticket acceptance and the Sunderland to Newcastle mainline rail service.

- 5.4.9 The approach would not replicate a standard Metro service, but would provide an alternative and lower standard to meet the requirements of those greatest in need, whose journeys were essential. It is expected the approach would not appeal to the majority of passengers – and if it did, this would generate issues in managing the passenger demand.
- 5.4.10 The approach would target replacement buses where there is poor provision of local bus services running alongside the Metro network, and also to maintain connectivity between transport interchanges and town centres. Ticket acceptance would be provided on other parts of the Metro network where the bus routes are better. Whilst this approach may be suitable on a weekend, on weekdays it would likely result in crowding and passengers being left behind at stops due to the volume of passengers dispersed from Metro.
- 5.4.11 This approach, whilst providing some replacement for the Metro service, would be complex and likely require several changes between buses by passengers depending on their journey length. It would also rely on provision of travel information by digital means to passengers (web site, Facebook, Twitter) and due to the volume of requests it would be unlikely that all individual passenger queries could be responded to.
- 5.4.12 A general framework for this can be built up, but the detailed design would have to be ‘on the spot’ based on factors including the area of disruption, availability of buses, day of the week, and events taking place. It is therefore likely it would take several hours to fully introduce the arrangements from the time of a disruption starting.
- 5.4.13 Should the disruption last for more than one day, a review of the replacement service could be undertaken aimed at considering the longevity of any special arrangements.

5.5 Ticketing

- 5.5.1 There are 225 Ticket Vending Machines (TVMs), 90 gateline validators and 188 standalone platform validators on the Metro system. TVMs sell paper tickets for use on the system and validators allow customers with smart cards to tap in and tap out for their journey. Of particular relevance for the validators is that the use of Pop Pay As You Go (PAYG) means that if a customer taps in for their journey and does not tap out, the maximum cost of a single journey is deducted from their balance.
- 5.5.2 There were complaints from passengers who paid for their journeys (either at TVMs or validators) before being aware of the disruption, as these items of equipment were still in operation throughout the day despite service being suspended systemwide. Records show that approximately between 6am and 6pm on 29 October 2017, the level of ticket sales was around 18% of that on an average Sunday.
- 5.5.3 Whilst there is an ability to switch TVMs off remotely, this has solely been used to turn off one or a small number of TVMs. When turning on, it takes about 10 minutes for a TVM to come back on following the command being sent. As TVMs do not all come back on at the same time once the command is sent, switching a large number of TVMs back on would take a prolonged period of time.
- 5.5.4 One of the improvements from the previous generation of ticket machines is that they allow customers to buy tickets in advance, including topping up smart cards with season ticket products. Ticket machines remain on overnight and also on Christmas Day and

New Year's Day when there is no Metro service, allowing passengers to purchase advance tickets.

5.5.5 A number of methods were used to inform passengers of the service suspension. These included:

- Announcements on the PA system every three minutes
- Displays on the passenger information boards on platforms
- Deployment of staff to the busiest stations
- Use of "A boards" at stations
- Information on the Nexus web site
- Social media including Twitter and Facebook
- Email alerts to those subscribed via the Nexus web site

5.5.6 In addition to direct communication by Metro, the service suspension was widely reported by local media.

5.5.7 Experience is that customers still attempt to use the Metro service when the lack of a service has been subject to extensive pre-publicity. This includes during Major Line Closures and also on Christmas Day and New Years Day, where there have never been any Metro services.

5.5.8 Options to improve the communication of service to passengers includes:

- Staffing of stations
- More information at stations – including freestanding A-boards, posters and vinyl stickers
- More frequent PA announcements

These options are explored in the following paragraphs.

5.5.9 The most reliable method to prevent customers from entering stations is by staffing stations. With 60 stations around the network, to provide two members of staff at each station would require 120 staff. Allowing for the approximate 18 hour length of an operational day, two shifts would be required so 240 staff would be needed. There are around 100 Customer Service Advisors employed by Metro with around 40 rostered in on Sunday, covering shifts from the start of service until the end of service. This rostering reflects that it is the quietest day of the week for Metro. To staff all stations would clearly be impractical; as happened on 29 October staff would be focused on the busiest interchange stations.

5.5.10 Provision of further information at all stations, to supplement the passenger information displays and PA announcements could be considered. However whatever the mechanism – posters, vinyls or A-boards – this would require production and then resource to travel round to put them up, generating a time lag in posting the information and also distracting from other customer service duties. Such a time lag would also be present when service restarted, generating misleading information to customers.

5.5.11 On 29 October, PA announcements were made every 3 minutes. An alternative would be to have a short message every 30 seconds, with a longer message with more information every 3 minutes.

5.5.12 As outlined in the previous section, it is intended that a mixture of alternative service provision would be provided in any similar future disruption. In such instances, passengers would need to buy a ticket in order to use the bus service and therefore switching off the ticket machines would not be appropriate. However there may be passengers who would choose not to travel and therefore reaching as many passengers as possible before they purchase a ticket would remain important.

5.6 Depot arrangements and outstabling

5.6.1 This section considers the wider Depot contingency arrangements and provisions for stabling of Metro trains on other parts of the network, referred to as outstabling.

5.6.2 The Depot at South Gosforth is nearly 100 years old and as part of the construction of the Metro system was converted for use by Metro trains. All Metro trains return to the Depot at the end of service for maintenance, repairs and cleaning.

5.6.3 The layout and configuration of the Depot is such that, whilst all Metro trains are stabled in one location, there is operational redundancy for most situations. There are entrances and exits to the mainline Metro network at both the west end of the Depot (between South Gosforth and Regent Centre Metro stations) and the east end of the Depot (between South Gosforth and Longbenton Metro stations). This dual entry/exit arrangement provides redundancy, for example in the event of a track or points failure that renders one entrance unusable. This redundancy is also reflected in the overhead line configuration, which is split into east and west sections so that in the event of a problem on one half of the Depot, the other half is unaffected.

5.6.4 The incident on 29 October was therefore unique in that it was the point of supply to the Depot which failed, upstream of the split of the overhead line into east and west.

5.6.5 The specification for the new Metrocar fleet contains a priced option for the Metrocars to contain batteries to allow them to operate for 3.5km without traction power. This is the maximum distance between stations on the Metro network and therefore in the event of power failure would allow trains to reach a station. It also means that in the event of a complete loss of Depot power, the trains would be able to use the batteries to self-propel onto the mainline network.

5.6.6 As referred to above, Metro trains return to the Depot each night for maintenance, repairs and cleaning. The only exception to this is during engineering works which result in the Depot being cut off from part of the Metro system. In such cases Metro trains are outstabled in sidings and stations on a temporary basis but this is not ideal as there are no facilities for maintenance or cleaning, and vandalism can be a problem.

5.6.7 However, plans are in place for more permanent outstabling arrangements:

- a) The Metro Maintenance and Renewals Skills Centre, to be built in South Shields, will contain provision for outstabling two trains inside and a further three trains outside. The centre is scheduled for completion in early 2019.
- b) As part of the Metro Futures project to procure new Metro trains, an outstabling facility will be required to allow construction of new Depot facilities at South Gosforth whilst these are ongoing. Therefore, it can be concluded that in most for the vast majority of asset failures, the Depot has good operational redundancy. The combination of shunting current Metrocars and potential battery-power of the new

fleet will mitigate the impact of any Depot-wide overhead line power failure. Future outstabling plans would also provide further resilience.

6. CONCLUSIONS

- 6.1 The disruption on 29 October 2017 caused major inconvenience to Metro passengers.
- 6.2 This report has identified the factors which led to the disruption and its duration, and considered other aspects relating to the information and service provided to customers during disruption.
- 6.3 It should be noted that on 29 October 2017, across all aspects of the disruption, numerous employees who were not rostered for duty or on call came in to assist. Along with others who started shifts earlier and remained later than required, this was not required and these good will efforts greatly assisted in managing the disruption.

7. RECOMMENDATIONS

- 7.1 This section contains recommendations aimed at avoiding a similar situation arising in the future, and in the highly unusual event of there being no service systemwide reducing the impact of this on Metro customers.
- 7.2 Recommendation 1 – An electrical switching arrangement should be introduced in Gosforth substation, such that in the event of one transformer failing supply to the Depot can be restored by using other transformers.
- 7.3 Recommendation 2 – The rules and procedures relating to the use of the Battery Locomotives around the depot should be reviewed, in order to minimise the damage to batteries caused by day-to-day use.
- 7.4 Recommendation 3 – The suitability of engineering vehicles such as tampers and Road Rail Vehicles (RRVs) for hauling Metrocars should be explored, to consider if an adaptor would allow these vehicles to be coupled.
- 7.5 Recommendation 4 – The framework for provision of alternative travel in the event of all or the majority of the Metro network being suspended, as described in paragraphs 5.4.8 to 5.4.13, should be developed and included in operational contingency plans.
- 7.6 Recommendation 5 – The operational contingency plans should be updated to include PA announcement frequency in the event of all or the majority of the Metro network being suspended, and the criteria for the implementation of the business continuity plan.
- 7.7 Recommendation 6 – The new Metrocar fleet specification should retain the priced option for the Metrocars to self-propel through use of batteries, with a decision on whether to proceed with the priced option being made at the point of tender evaluation.



Transport North East (Tyne and Wear) Sub-Committee

Date: 25 January 2018

Subject: Update on Nexus' Corporate Risk Register 2017/18

Report of: Managing Director (Transport Operations)

Executive Summary

The report shows that Nexus continues to apply adequate and appropriate risk controls. As a result the status of the Corporate Risks has either remained stable or improved (para 1.6 refers) since the previous report in November. One risk has been closed (see para 1.3), and one risk has been substantially re-written following announcement of the 'minded to' deal to form a North of Tyne Combined Authority (para 1.6 refers). The status of the fourteen remaining risks remain contained within the risk appetite of the organisation i.e. either Amber (seven) or Green (seven).

Recommendations

The Transport North East (Tyne and Wear) Sub-Committee is recommended to note the report and the attached appendix providing an update on Nexus' Corporate Risk Register (CRR), and that a report on Nexus Corporate Risk Register for 2018/19 will be presented to the meeting of the Sub-Committee in April 2018 subject to approval of Nexus Corporate Plan 2018/19 to 2020/21.

Transport North East (Tyne and Wear) Sub-Committee

1. Background Information

- 1.1 This report provides an update on Nexus' Corporate Risk Register (CRR) for 2017/18 as submitted to the Transport North East (Tyne and Wear) Sub-Committee meeting on 20 April 2017 with updates to all subsequent meetings.
- 1.2 In preparing this update each risk is reviewed, in liaison with the risk owner/actionee, to assess whether there has been any change to the risk score and ensure that the risk control processes remain adequate and appropriate. If there is an alteration to the status of a risk the reasons for the change are explained in this update report.
- 1.3 This process has identified that the DfT's recently published guidance on how to apply the new powers and opportunities provided by the Bus Services Act 2017 confirms the new legislation potentially provides the means to deliver the NECA's Bus Strategy, by enabling a range of interventions that are a matter for local determination. Therefore the risk pertaining to Bus Strategy delivery arrangements is considered to be closed.
- 1.4 The following table identifies each of the risks in turn, the links to workstreams in Nexus' Corporate Business Plan (CBP) for 2017/18 to 2019/20, the current Red/Amber/Green (RAG) status and the direction of travel (comparing the current RAG status with the previous one). A detailed explanation of the nature of each risk, together with controls and milestones, is set out in Appendix 1 to the report. A copy of the scoring matrix that has been applied is also appended for information.

Risk area/CBP workstream link(s):	RAG Status/Score	Direction of travel
Metro performance deterioration Improve Metro performance	Amber 8	↔ (static)
Catastrophic Safety event on Metro Metro performance & Focus on Health and Safety	Amber 8	↔ (static)
Rail North working arrangements Enhance local and national rail services	Green 6	↔ (static)
Payment and customer information systems Embed new technology & Innovate through technology	Green 6	↔ (static)
Metro Asset Renewal Programme fails to deliver intended outcomes Deliver the Asset Renewal Programme	Green 6	↔ (static)

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Non-ARP capital projects fail to deliver intended outcomes Deliver the non-ARP capital projects	Green 6	↔ (static)
Provision of public transport services and facilities does not meet customer expectations. Deliver and develop public transport services and facilities	Amber 9	↔ (static)
Replacement of the Metrocar fleet and putting a new contract in place Obtain a new fleet and prepare for the new Metro contract	Green 4	↑ (improving)
Long-term funding for Metro Secure long term improvements to Metro infrastructure	Amber 9	↔ (static)
Work to expand the Metro and local rail network does not progress. Plan for expansion of Metro and local rail networks	Amber 9	↔ (static)
Bus Strategy delivery arrangements Plan for local bus service improvements.	CLOSED	
Business cases for external funding Secure investment in local public transport assets	Amber 9	↔ (static)
Future retention of key skills and abilities Refine training and succession planning & Ensure Nexus is an employer of choice	Green 6	↔ (static)
Nexus' service review fails to deliver the necessary savings Service review to balancing the budget	Green 6	↔ (static)
Changes to local political governance Focus on organisational effectiveness	Amber 8	↔ (static)

- 1.5 In the fourteen current risks in the above table there has been one change in risk status from the update presented to the meeting of the Sub-Committee in November. This is with regard to the risk 'Replacement of the Metrocar fleet and putting a new contract in place' for which the score was reduced to 4 (Green), from 8 (Amber), following the announcement of funding for a new Metro train fleet, in the form of a commitment to provide £337 million made in the Chancellor's budget speech on 22nd November, and confirmed in the Budget Report of the same date.

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- 1.6 In the same speech the Chancellor announced the next steps for the North of Tyne devolution deal. The government has agreed a 'minded to' deal with the North of Tyne authorities, which will be subject to the consent of local partners. This will create a new North of Tyne Combined Authority in summer 2018 with a mayor elected in 2019 with powers over important economic levers including planning and skills. The intention is by summer 2018 to establish a Joint Committee to exercise transport functions on behalf of both the North of Tyne and the North East combined authorities. These proposals have been used to review and update the Corporate Risk in this matter.
- 1.7 This is the last time that an update on Nexus' Corporate Risk Register for 2017/18 will be presented to the Sub-Committee. Nexus' proposed Corporate Plan 2018/19 to 2020/21 is being presented for approval elsewhere on the agenda. Subject to this approval being received Nexus will use the Plan to review and revise the Risk Register for submission to the Sub-Committee at its meeting in April 2018 which will form the basis for reporting on Corporate Risk updates to the Sub-Committee in 2018/19.
- 2. Proposals**
- 2.1 It is proposed that, once approved, Nexus will use the Corporate Plan 2018/19 to 2020/21 to draw up a corresponding Corporate Risk Register for presentation to the Sub-Committee's meeting in April 2018 that will form the basis for subsequent updates to each meeting.
- 3. Reasons for the Proposals**
- 3.1 To fulfil the requirement to keep the Sub-Committee informed about the status of risks in Nexus' Corporate Risk Register.
- 4. Alternative Options Available**
- 4.1 There are no proposals for alternative options as the reporting requirements were for the periodic update to be a standing item on the Committee's agenda.
- 5. Next Steps and Timetable for Implementation**
- 5.1 A report on Nexus' CRR for 2018/19 will be presented to the April 2018 meeting with an update to each scheduled meeting of the Transport North East (Tyne and Wear) Sub-Committee.
- 6. Potential Impact on Objectives**
- 6.1 Monitoring Nexus' CRR helps to provide assurance that the NECA's policies and

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objectives are being implemented efficiently and effectively in accordance with the approved Corporate Plan and that those corporate risks which, if they occurred, could negate achievement of the plan are explicitly recognised and appropriately managed.

7. Financial and Other Resources Implications

- 7.1 There are no direct financial or resource considerations arising from this periodic update report on Nexus' corporate risk register.

8. Legal Implications

- 8.1 There are no direct legal considerations arising from this periodic update on Nexus' corporate risk register.

9. Key Risks

- 9.1 There are no direct risk considerations arising directly from this report, though monitoring and reviewing corporate risk plays an important role in risk management and mitigation. A separate review of Nexus' performance against its Corporate Plan is provided to each meeting of the Transport North East (Tyne and Wear) Sub-Committee in parallel with this report.

10. Equality and Diversity

- 10.1 There are no specific equalities and diversity considerations arising from this periodic update on Nexus' corporate risks.

11. Crime and Disorder

- 11.1 There are no specific crime and disorder considerations arising from this periodic update on Nexus' corporate risk register.

12. Consultation/Engagement

- 12.1 There are no specific consultation or engagement considerations arising from this periodic update on Nexus' corporate risk register.

13. Other Impact of the Proposals

- 13.1 There are no direct proposals arising from this periodic update on Nexus' CRR, and therefore no consequential impacts other than applying risk management processes and procedures tends to help avoid or lessen the likelihood of the risk or hazard arising.

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14. Appendices

- 14.1 Appendix 1 to this report provides a detailed explanation of the nature of each of the risk in Nexus' CRR, together with controls and milestones. A copy of the scoring matrix that has been applied is also appended for information.

15. Background Papers

- 15.1 Nexus' Corporate Business Plan 2017/18 to 2019/20 as considered and approved at the Transport North East (Tyne and Wear) Sub-Committee meeting held on 26 January 2017.
- 15.2 Nexus' Corporate Risk Register as reported to the Transport North East (Tyne and Wear) Sub-Committee on 20 April 2017 with updates to all subsequent meetings.

16. Contact Officers

- 16.1 Tobyn Hughes,
Managing Director (Transport Operations)
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17. Sign off

- Head of Paid Service: ✓
- Monitoring Officer: ✓
- Chief Finance Officer: ✓

18. Glossary

Corporate Risk - relates to those factors that might have a significant effect on the achievement of workstreams in Nexus' Corporate Business Plan and therefore the successful delivery of the NECA's policies and priorities.

Risk - A probability or threat of damage, injury, liability, loss, or any other negative occurrence that is caused by external or internal vulnerabilities, and that may be avoided through pre-emptive action.

Risk appetite - The level of risk that an organisation is prepared to accept in pursuit of its objectives, and before action is deemed necessary to reduce the risk.

Risk Controls or control processes - are those pre-emptive actions which are specifically identified to be taken to lower the impact of the risk or reduce the likelihood

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of the risk materialising, or both of these.

Risk Matrix - a graphical representation of the Risk Severity and the extent to which the Controls mitigate it.

Risk Owner - has overall responsibility for the management and reporting of the risk.

Risk Actionee – has delegated responsibility from the Risk Owner to take action and manage the risk through application of the appropriate risk controls and processes.

Risk Impact - indicates the potential seriousness should the risk materialise.

Risk Likelihood - indicates the chance of a risk materialising in the time period under consideration.

Risk Score - the product of the Impact score multiplied by the Likelihood score.


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Nexus' Corporate Risk Register:

CBP Theme: Deliver public transport today		
CBP Workstream: Improve Metro performance		
Risk Owner: Director of Rail and Infrastructure Risk Area: Performance deterioration	RAG Status (Amber)	Direction of Travel
	8 (2x4) ¹	↔ (static)
Risk: That the transition from Metro being operated by DBTW to operation by Nexus' wholly owned subsidiary, North East Metro Operations Ltd. (NEMOL), results in a decline in performance.		
Impact/Consequence(s): If Metro's operational performance were to decline for an extended period following the transition on 1 April 2017 this could have an adverse impact on Nexus' reputation with regard to service delivery and possible consequences for future funding arrangements that are being negotiated with external stakeholders.		
Control(s): <ul style="list-style-type: none"> • Close monitoring of key business results. • Extending greater support from Nexus to NEMOL. • Establishing a set of quality assurance processes. • Development of long term plans for all NEMOL activities. 		
Next Steps/Key Milestones: <ul style="list-style-type: none"> • Continuing to embed the routine performance management and business reporting cycle. 		

¹ Risk Score = Likelihood Score x Impact Score

CBP Theme: Deliver public transport today		
CBP Workstream: Metro performance/Focus on Health & Safety		
Risk Owner: Director of Rail and Infrastructure Risk Area: Catastrophic safety related event	RAG Status (Amber)	Direction of Travel
	8 (2x4)	↔ (static)
Risk: In running any operational railway there is an inherent risk that a catastrophic safety related event may occur.		
Impact/Consequence(s): The impact and consequences should a catastrophic safety related event occur on the Metro system could potentially be very significant, including the possibility for multiple loss of life, lengthy loss of service, protracted legal issues to resolve, fines to pay, impact on insurance, other cost increases and likely loss of business.		
Control(s): <ul style="list-style-type: none"> • A well-developed safety management system (SMS) which is independently accredited by the Office of Rail and Road (ORR) as a prerequisite to granting legal authority to operate a railway. • Robust arrangements for the selection and management of contractors working on Metro infrastructure. • Maintaining a comprehensive suite of engineering standards in all relevant railway safety disciplines based on industry best practice • The identification of the top 3 potentially catastrophic safety events we aim to avoid and strive to control: collision, derailment, and fire. • Continuously monitoring & controlling the precursors of these events resulting in the ability to exploit lessons learnt from them (e.g. by reducing the risk of broken rails we can reduce the likelihood of derailments; reducing the amount of flammable material around the system reduces the likelihood of fire; applying strict signalling protocols reduces the likelihood of collision). • Regular safety reporting to Nexus' Senior Leadership Team, on a 4 weekly basis, on each of these top 3 events, with a short summary of any identified precursors. • Undertaking a very significant volume of safety assurance activity in-house as part of everyday practice in the management of safety (e.g., audit, inspection, monitoring and checking). • Participating in joint emergency preparedness exercises with the blue-light services and other interested parties. • Continuation of the Safety Cultural Work started in 2015. 		
Next Steps/Key Milestones: <ul style="list-style-type: none"> • Periodic safety reporting to Nexus' Senior Leadership Team meetings. 		

CBP Theme: Deliver public transport today		
CBP Workstream: Enhance local and national rail services		
Risk Owner: Transport Strategy Director	RAG Status (Green)	Direction of Travel
Risk Actionee: Head of Heavy Rail	6 (2x3)	 (static)
Risk Area: Rail North working arrangements		
Risk: Rail North working arrangements may fail to deliver the NECA’s ambitions for improvements in rail services.		
Impact/Consequence(s): The NECA is seeking to achieve transformational improvements in rail services for the area. Failure to secure these improvements could leave the NECA area isolated in terms of rail connectivity and thereby limit delivery of the Strategic Economic Plan.		
Control(s): <ul style="list-style-type: none">• Active participation in Rail North.• Ensuring that the NECA Lead Member for Transport is fully briefed.• Formation of the North East Rail Management Unit (NERMU).• Appointment of NERMU Manager.• Close working relationships developed with Rail North Partnership Directors.• Close working relationships developed with senior managers of newly appointed local rail franchise operators.• Close working relationships developed with senior managers of existing rail franchises that serve the North East.• Transport for the North – of which Rail North is a part – becoming a statutory sub-national body in 2017.		
Next Steps/Key Milestones: <ul style="list-style-type: none">• Continue with the newly developed framework for engaging and managing the new North East Rail Franchises.		

CBP Theme: Deliver public transport today/Plan for tomorrow		
CBP Workstream: Embed new technology/ Innovate through technology		
Risk Owner: Director of Finance and Resources Risk Actionee: Corporate Manager Business Change and Technology Risk Area: Payment and customer information systems	RAG Status (Green)	Direction of Travel
	6 (3x2)	↔ (static)
Risk: Payment and customer information systems do not meet the rate of change in customer expectations.		
Impact/Consequence(s): Customer facing technologies being implemented by Nexus could be overtaken by technological developments and customer experience elsewhere leading to the offer being perceived as inadequate or outdated and unable to deliver the intended benefits for customers and stakeholders.		
Control(s): <ul style="list-style-type: none"> Emerging technology roadmap covering a 10 year timeframe Embedding technology roadmap within NECA's Transport Plan for the North East Updating and refreshing the technology roadmap and related plans on a six-monthly basis Setting timescales and milestones and working to a plan Aligning with Transport for the North developments Engaging with ITSO, Innovate UK and the Catapult organisation to accelerate technology delivery timescales Workshop held 15 August on a Host Card Emulation (your phone becomes your ticket) solution. 		
Next Steps/Key Milestones: <ul style="list-style-type: none"> Providing input to the Transport Plan for the North East Providing input to the plans being developed through Transport for the North Working with the Digital Catapult organisation to run a competition for the provision of a 'Next Generation' App. 		

CBP Theme: Deliver public transport today		
CBP Workstream: Deliver the Metro Asset Renewal Programme		
Risk Owner: Director of Finance and Resources Risk Area: Metro Asset Renewal Plan	RAG Status (Green)	Direction of Travel
	6 (2x3)	↔ (static)
Risk: DfT has confirmed £120m for the final years of the Metro Asset Renewal Plan (ARP), through to 2020/21. Securing funding for the remainder of the ARP Phase 2 and keeping within budget remains a key concern.		
Impact/Consequence(s): Increased pressure on the funding for and affordability of ARP Phase 2 could mean a further scaling back of the work programme through to 2020/21 and compromise delivery of key elements.		
Control(s): <ul style="list-style-type: none"> • Bids are being made for additional funding e.g. through the Single Local Growth Fund (SLGF) in relation to the station investment programme. • Effective programme management, project delivery and budget control processes. • Value engineering, technology choice, option analysis, specification and scope. • Active stakeholder engagement to obtain involvement and co-operation of third/interested parties e.g. NEMOL, highway authorities, utility companies etc. • Providing sufficient programme/project management resource. • Close and proficient management of all contracts relating to ARP works. • Re-phasing of capital grant funding 2017/18 to 2020/21 agreed by DfT. 		
Next Steps/Key Milestones: Periodic Affordability Review meetings: <ul style="list-style-type: none"> • January 2018 • April 2018 • June 2018 		

CBP Theme: Deliver public transport today		
CBP Workstream: Deliver non-Metro capital projects		
Risk Owner: Director of Finance and Resources	RAG Status (Green)	Direction of Travel
Risk Actionee: Corporate Manager Business Change and Technology	6 (2x3)	↔
Risk Area: Non-ARP capital projects		(static)
Risk: Non-ARP capital programme fails to deliver intended outcomes.		
Impact/Consequence(s): There is a risk that projects are not delivered to time, cost and quality requirements.		
Control(s): <ul style="list-style-type: none">• Effective programme management, project delivery and budget control processes.• Value engineering, technology choice, option analysis, specification and scope.• Active stakeholder engagement to obtain involvement and co-operation of third/interested parties e.g. NEMOL, highway authorities, utility companies etc.• Providing sufficient programme/project management resource.• Close and proficient management of all contracts relating to non-ARP works.		
Next Steps/Key Milestones: <ul style="list-style-type: none">• Periodic Affordability Review meetings:<ul style="list-style-type: none">○ January 2018○ April 2018○ June 2018		

CBP Theme: Deliver public transport today		
CBP Workstream: Deliver and develop public transport services and facilities		
Risk Owner: Customer Services Director Risk Area: Social exclusion	RAG Status (Amber)	Direction of Travel
	9 (3x3)	↔ (static)
Risk: That the need to review Nexus' services to meet required budget reductions could result in increased social exclusion.		
Impact/Consequence(s): Increased social exclusion could manifest itself in particularly older and vulnerable people being less able to access essential local services and healthcare facilities potentially contributing to increased health problems and reduced social cohesion.		
Control(s): <ul style="list-style-type: none"> • Prioritisation of key services as part of the review process • Engagement and consultation to help identify practical mitigations • Signposting of alternative service provision 		
Key Milestones/Next Steps: <ul style="list-style-type: none"> • Depending on the outcome of the Nexus service review and budget setting processes through to 2019/20: <ul style="list-style-type: none"> ○ Preparation of an engagement plan ○ Preparation of consultation documentation ○ Preparation of a communications plan ○ Forward planning of meetings with ward councillors ○ Forward planning of meetings with user representative groups 		

CBP Theme: Prepare for the Future		
CBP Workstream: Obtain a new fleet and prepare for the new Metro contract		
Risk Owner: Director of Finance and Resources Risk Area: Arrangements for obtaining a new fleet and forming a new contract not delivered to time.	RAG Status (Green)	Direction of Travel
	4 (1x4)	↑ (improving)
Risk: That the final business cases for new Metro rolling stock and essential renewals are not delivered on time for DfT's decision making processes.		
Impact/Consequence(s): The proposed replacement of the current fleet and the investment in essential renewals are key elements in the Metrofutures programme. Non-delivery of the business cases to the required DfT deadlines could compromise achievement of the programme.		
Control(s): <ul style="list-style-type: none"> • Metro Business Development team established with external support commissioned. • Outline business cases submitted to DfT. • Economic consultants have determined the BCR at 3.55:1 for the new fleet. • Positive outcomes in relation to external validations from the Office of Government Commerce in December 2016 and the Gleeds Review in March 2017. • On-going dialogue through DfT's Board Investment and Commercial Committee (BICC). • BICC slot in September 2017. • Stakeholder engagement and communications plan dissemination. • In the Budget 2017 on 22 November the Chancellor confirmed that the government will invest £337 million from the National Productivity Investment Fund to replace the Metro's rolling stock. 		
Key Milestones/Next Steps: <ul style="list-style-type: none"> • Contract strategy for procurement process to be agreed and implemented. 		

CBP Theme: Prepare for the future		
CBP Workstream: Secure long term improvements to Metro's infrastructure		
Risk Owner: Director of Finance and Resources Risk Area: Long term funding for Metro	RAG Status (Amber)	Direction of Travel
	9 (3x3)	← → (static)
Risk: There is no long-term funding agreement in place to sustain Metro's current operations, replace life expired capital assets and allow future expansion.		
Impact/Consequence(s): Any reduction in Metro external funding will lead to a diminution in service and failing infrastructure.		
Control(s): <ul style="list-style-type: none"> • Effective liaison with DfT including 4-weekly progress reporting on the current Asset Renewal Plan and quarterly reviews. • Procurement strategy & contractual arrangements that minimise risk and deliver VFM. • Value engineering, technology choice, option analysis, specification and scope. • Engaging NECA members in prioritisation processes. • Active stakeholder engagement/increasing public awareness. • Engaging with national government, local councillors & MPs and building public support. • Ensuring that the long term plan Metro forms an integral part of the NECA's Transport Plan for the North East. • Linking Metro to the long term development aspirations of the NECA, local Councils and the North East LEP's Strategic Economic Plan. • Engaging with national government. • Engaging with local councillors and MPs. • Leading in development of the business case. • Identifying and investigating potential funding streams. • DfT Business Investment & Commercial Committee slot in September 2017. • DfT/Nexus Programme Board met in November 2017 to consider future grant funding for both essential renewals and operational subsidy. 		
Key Milestones/Next Steps: <ul style="list-style-type: none"> • DfT Rail Investment Board meeting to consider revenue support grant to Nexus in 2019/20 in January 2018. • Development of a business case for extensions will now commence, following confirmation of funding for the new fleet. 		

CBP Theme: Prepare for the future		
CBP Workstream: Plan for the expansion of Metro and local rail networks		
Risk Owner: Transport Strategy Director Risk Actionee: Head of Network Extensions Risk Area: Metro and local rail strategy	RAG Status (Amber)	Direction of Travel
	9 (3x3)	↔ (static)
Risk: Expansion of the metro and local rail network does not progress.		
<p>Impact/Consequence(s):</p> <p>Should the project be unable to identify suitable options for expansion of the Metro and local rail systems this could have adverse implications for the local economy and the environment. The growth in housing and employment that is anticipated for the area may not materialise or would be more reliant on the car for accessing work, leisure and shopping activities leading to an increase in traffic congestion with the air quality implications involved. Overall, this may limit the potential for economic growth and prosperity across the NECA area.</p>		
<p>Control(s):</p> <ul style="list-style-type: none"> • Delivery of a new Metro fleet. • Embed expansion of the Metro and local rail network within the SEP and the NECA's Transport Plan for the North East. • Establish strong contacts and working relationships with relevant stakeholders. • Develop an appropriate communications strategy to ensure key decision makers are kept informed. • Undertake an extensive market consultation to improve the understanding of the appetite for such schemes in the wider market. • Establish effective programme management disciplines to identify and manage cost and risk. • Identify and utilise suitable frameworks to develop and progress the project including Nexus Stage Gate project control process and the development of an Outline Business Case. • Identify and adopt best practice in the delivery of extensions, establishing a peer review framework. 		
<p>Key Milestones/Next Steps</p> <p>By 31 March 2018:</p> <ul style="list-style-type: none"> • Establish a programme management structure and process. • Establish a stakeholder map. • Completion or progression of an initial programme of works to inform the business case development including a market consultation, identification of best practice and a study to establish the economic value of the Metro and Local Network to the region. 		

CBP Theme: Prepare for the future		
CBP Workstream: Secure investment in local public transport assets		
Risk Owner: Transport Strategy Director Risk Actionee: Head of Corporate Planning Risk Area: Securing external funding	RAG Status (Amber)	Direction of Travel
	9 (3x3)	↔ (static)
Risk: External funding opportunities are not identified or Nexus is not in a position to exploit opportunities		
Impact/Consequence(s): Nexus is unable to attract the greatest potential of external grant funding to enable		
CBP Theme: Prepare for the future		
CBP Workstream: Plan for local bus service improvements		
Risk Owner: Transport Strategy Director Risk Actionee: Corporate Manager Bus Services Risk Area: Bus strategy delivery arrangements	CLOSED	
Risk: That new legislation does not provide the necessary means to deliver the Bus Strategy.		
Impact/Consequence(s): The 2017 Bus Services Act (the Act) received Royal Assent in May 2017. It provides new means for the NECA to deliver its bus strategies, through improved access to bus information, new forms of bus partnerships and bus franchising (the latter is subject to Secretary of State approval for a non-mayoral combined authority such as NECA). The detailed requirements to implement these new options have been set out in statutory guidance and secondary legislation published by the DfT.		
Control(s): <ul style="list-style-type: none">Guidance published by DfT in November 2017 confirms that means to deliver NECA's Bus Strategy objectives are available under the provisions of the new legislation, and their use is subject to local determination.		
Next Steps/Key Milestones: <ul style="list-style-type: none">Review risk register in the light of Nexus' Corporate Plan for 2018/19 to 2020/21 once confirmed by TWSC at its meeting on 25 January 2018.		

<p>the delivery of our aspirations for public transport.</p> <p>Nexus is unable to make the step change in quality which reduces our ability to grow patronage and revenue.</p> <p>Nexus is less able to meet the aspirations of its partners, customers and stakeholders for public transport services</p> <p>Nexus is less able to help meet the objectives of the Combined Authority</p>
<p>Control(s):</p> <ul style="list-style-type: none"> • Dedicated resources in Corporate Planning section scanning for funding opportunities and able to develop business cases. • Projects suitable for external funding have programmes which include relevant tasks and milestones associated with the funding call. • Budgets are established so that Nexus is committed to ensuring resources are in place to develop speculative projects, to maximise readiness for funding calls. • Liaison is undertaken with stakeholders, including DfT, LEP and Universities to help identify funding opportunities. • A pipeline of potential schemes has been identified.
<p>Next Steps/Key Milestones:</p> <ul style="list-style-type: none"> • Establish resources, including staff and budgets to develop 'pipeline' schemes that are shovel ready (to Outline Business Case / Stagegate 3). • Develop possible shovel ready (to Outline Business Case / Stagegate 3) schemes and establish a Nexus' pipeline. • Develop pipeline business cases for all potential funding opportunities.

<p>CBP Themes: Focus on organisational effectiveness.</p> <p>CBP Workstream: Refine training and succession planning/Ensure Nexus is an employer of choice</p>		
<p>Risk Owner: Group Head of Human Resources</p> <p>Risk Area: Future retention of key skills and abilities.</p>	RAG Status (Green)	Direction of Travel
	6 (2x3)	↔ (static)
<p>Risk: Nexus may be unable to recruit and retain key personnel because of public sector pay restraint and competition from more buoyant employers.</p>		
<p>Impact/Consequence(s):</p>		

This could adversely impact on Nexus' ability to deliver key projects on behalf of the NECA. Placing reliance on third party resources (e.g. external consultants) to provide the required skills and expertise could result in increased costs and/or delays.

Control(s):

- Keeping the "person spec" for key posts under review to optimise the potential size of the application base.
- Monitoring key activities within Nexus recruitment process to ensure optimal outputs are achieved.
- Continuing to develop employees through education and training.
- Exploring the use of the Apprentice Levy to recruit new apprentices and re-skill existing staff to develop into other areas of the business.
- Having succession plans for key business areas.
- Developing training and succession planning to ensure we are fit to meet changing business requirements.
- Launching another phase of the front line leadership development programme.

Next Steps/Key Milestones:

- Review future organisational requirements in key parts of Nexus.
- Resource planning with managers to recruit new and re-train existing staff to deliver future organisational requirements.
- Fully utilising the Apprenticeship Levy once the organisational requirements have been determined.

CBP Theme: Focus on organisational effectiveness

CBP Workstream: Balancing the budget

Risk Owner: Director of Finance and Resources Risk Area: Nexus' budget	RAG Status (Green)	Direction of Travel
	6 (2x3) Green	↔ (static)

Risk: Nexus fails to deliver a balanced budget.

Impact/Consequence(s):

There is a risk that Nexus' corporate plan might not align with the planned reduction in funding available from the levy, together with the requirement to

eliminate reliance on use of reserves by 2019/20.

Control(s):

- TWSC endorsement of budget strategy to inform NECA leaders.
- Budget managers remitted to prepare service plans.
- Consultation with public and key stakeholders was undertaken over June and July 2016.
- Base budget review carried out.
- Balance sheet review undertaken.
- Budget proposals and savings targets agreed.
- NECA Leadership Board approved budget proposal, the transport levy for Tyne and Wear and grant to Nexus at its meeting on 17 January 2017.
- Nexus' strategic budget position and corporate planning priorities discussed with LA Treasurers and TWSC during late summer 2017.

Next Steps/Key Milestones:

- Detailed budget proposals will be developed and consulted upon in accordance with the NECA constitution through to the approval of the 2018/19 transport levy at the Leadership Board meeting in January 2018.

CBP Theme: **Focus on organisational effectiveness**

CBP Workstream: **Service review to balancing the budget**

Risk Owner: **Managing Director Transport Operations**

**RAG Status
(Amber)**

**Direction
of Travel**

Risk Area: **Changes to local political governance**

8 (2x4)



(static)

Risk: A 'minded to' devolution deal has been announced between the government and Newcastle, Northumberland and North Tyneside Councils (known as the 'North of Tyne Authorities'). Although transport is not part of the deal, it is also proposed that governance arrangements for transport will

change in the area through the creation of a ‘Joint Committee’. Any new arrangement must provide Nexus with an appropriate structure for it to be able to exercise its duties, functions and powers so as to deliver effective public transport in the area it is responsible for.

Impact/Consequence(s):

New governance arrangements for transport need to provide for both effective political decision-making, and scrutiny of delivery and performance. Slow or ineffective decision-making could limit Nexus’ ability to make transport improvements, and limit access to the necessary resources to deliver effective transport. This could also give rise to the potential for increased complexity and cost, and poorer outcomes for public transport users.

Ineffective scrutiny could lead to reduced public assurance over value for money, and loss of accountability for project and operational performance.

Control(s):

- The new proposals for governance have been drawn up by the North of Tyne Authorities and the government taking into account the aim for Nexus to remain the Passenger Transport Executive for the Tyne and Wear area.
- A governance review has been initiated by the North of Tyne Authorities, and Nexus will be a consultee in this – and any subsequent – review.
- Nexus’ powers, functions and duties largely arise from a range of government Acts, including the Transport Act 1968 (as amended) and the Tyneside Metropolitan Railway Act 1973, and there is no current proposal to amend these.
- Nexus’ Managing Director, supported by the Group Head of Legal and Director of Finance and Resources, will work closely with Chief Executives and Legal officers from all North East Authorities, the North East Combined Authority, and the government to ensure that Nexus’ powers, duties and functions along with associated political governance requirements are fully understood and taken into account as new structures are developed.

Next Steps/Key Milestones:

- Engagement with the Authorities involved, and DfT, to identify legal and financial considerations and possible working approaches.
- Work with the Chief Executives’ Group to identify issues and mitigations.
- Responding as a statutory consultee to the governance review that will take place between December 2017 and February 2018, as part of the formal processes leading up to the establishment of a new North of Tyne Combined Authority.
- Proposed establishment of the North of Tyne Combined Authority and the Joint Committee for Transport in summer 2018.



Transport North East (Tyne and Wear) Sub-Committee

Date: 25 January 2018

Subject: Nexus' Corporate Plan 2018/19 to 2020/21

Report of: Managing Director (Transport Operations)

Executive Summary

Nexus' proposed Corporate Plan for 2018/19 to 2020/21 (attached) provides a framework for the delivery of services and preparing for the future during what will be an important period of change.

The Plan is built around three themes and twelve key priorities summarised below:

1. Deliver public transport today:
 - Improve the Metro customer journey experience.
 - Introduce a more affordable and sustainable fares offer for Under 19s.
 - Protect levy funded frontline services.
 - Deliver technological improvements.
2. Prepare for the future:
 - Procure a new fleet of trains and their ongoing maintenance requirements.
 - Develop proposals for the further devolution of the Northern rail franchise.
 - Develop plans to expand Metro and local rail services.
 - Develop plans to improve the local bus network.
3. Focus on organisational effectiveness:
 - Implement change and pursue continuous improvement.
 - Continue with the Metro Asset Renewal Programme (ARP).
 - Make Nexus an employer of choice.
 - Facilitate change in local political governance structures.

The content of the Corporate Plan sets out in more detail how Nexus will achieve this.

Recommendations

The Transport North East (Tyne and Wear) Sub-Committee is recommended to approve Nexus' Corporate Plan for 2018/19 to 2020/21.

Transport North East (Tyne and Wear) Sub-Committee

1. Background Information

- 1.1 Nexus' proposed Corporate Plan for 2018/19 to 2020/21 (attached) will continuously be adjusted to align with the emerging Transport Plan for the North East as it develops to replace the current Local Transport Plans in the area, including that for Tyne and Wear.
- 1.2 Individual departments/sections deliver projects and work programmes that are aligned to the themes and priorities previously identified (see Executive Summary on previous page).
- 1.3 Progress against achievement of the key priorities, together with information about service provision, forms the basis for the summary updates that are reported periodically to review performance and monitor delivery against the Corporate Plan.

2. Proposals

- 2.1 It is proposed that Transport North East (Tyne and Wear) Sub-Committee approves Nexus' Corporate Plan for 2018/19 to 2020/21.

3. Reasons for the Proposals

- 3.1 To provide a reference point against which the Sub-Committee can carry out its function of monitoring and overseeing the activities and performance of Nexus.

4. Alternative Options Available

- 4.1 Alternative options are not being proposed as the activity set out in the Corporate Plan is aligned with the budgets approved by the Leadership Board.

5. Next Steps and Timetable for Implementation

- 5.1 The plan is updated on an annual basis to align with the revenue and capital budgets set for Nexus by the Leadership Board as part of the formal transport budget and levy setting process.
- 5.2 Progress on the implementation and delivery of Nexus Corporate Plan is updated to each meeting of the Transport North East (Tyne and Wear) Sub-Committee to help fulfil the requirement to monitor Nexus' performance as delegated by the Leadership Board (NECA Constitution Part 3.3 TWSC Responsibility for Functions 6. Monitoring and overseeing the activities and performance of Nexus).

6. Potential Impact on Objectives

Transport North East (Tyne and Wear) Sub-Committee

- 6.1 Business planning and performance monitoring helps to ensure the achievement of policy objectives and delivery of desired service outcomes as described in the NECA's 'Our Journey' 20 year Transport Manifesto which, amongst other things, identifies that transport needs to work for everybody by being:

- Accessible,
- Affordable,
- Reliable,
- Easy to use,
- Safe,
- Sustainable, and
- Integrated.

7. Financial and Other Resources Implications

- 7.1 There are no direct financial or resource considerations arising from this report and confirmation is given that the financial implications of Nexus' Corporate Plan are reflected in NECA's annual revenue Budget and Capital Programme and that any additional funding secured will be reported as part of the regular updating of the revenue budget and capital programme and the medium term financial plan.

8. Legal Implications

- 8.1 There are no direct legal considerations arising from this report.

9. Key Risks

- 9.1 There are no specific risk management considerations arising from this report. Performance management and reporting supports good risk management practice. Upon approval of the Corporate Plan Nexus will review and revise its Corporate Risk Register to form the basis for future update reports in this matter.

10. Equality and Diversity

- 10.1 There are no specific equalities and diversity considerations arising from this report. Where equality and diversity considerations arise as part of the planning or delivery of Nexus services they will be duly considered in accordance with the requirements of the public sector equality duty.

11. Crime and Disorder

- 11.1 There are no specific crime and disorder considerations arising from this report.

Transport North East (Tyne and Wear) Sub-Committee

12. Consultation/Engagement

- 12.1 There are no specific consultation or engagement requirements arising from this report.

13. Other Impact of the Proposals

- 13.1 The majority of our activities are focused on developing and delivering sustainable transport networks. Approving Nexus Corporate Plan will therefore further the delivery of the Authority's policy objectives, vision and guiding principles as set out in 'Our Journey' the NECA's 20-year Transport Manifesto. The following guiding principles, taken from the Transport Manifesto, are applied in developing and implementing the Corporate Plan:

- Good access to workplaces, services, shops and leisure.
- Well-maintained, climate-resilient and safe transport networks.
- Less road congestion.
- More sustainable travel.
- Growth in economic activity.
- Better air quality and lower carbon emissions.
- Healthy, active lifestyles.
- Efficient use of transport assets.
- Land use planning that favours sustainable travel.
- Equality of opportunity.
- Better cycling network.
- Better connectivity across the UK.
- Expand the public transport network.

14. Appendices

- 14.1 Nexus Corporate Plan 2018/19 to 2020/21.

15. Background Papers

- 15.1 Nexus Corporate Plan 2017/18 to 2019/20 as approved by the Sub-Committee at its meeting on 26th January 2017.

16. Contact Officers

- 16.1 Tobyn Hughes
Managing Director (Transport Operations)

Transport North East (Tyne and Wear) Sub-Committee

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Tel: 0191 203 3246

17. Sign off

- Head of Paid Service: ✓
- Monitoring Officer: ✓
- Chief Finance Officer: ✓

18. Glossary

Abbreviations are explained in the text of the report,

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Nexus Corporate Plan

2018/19 to 2020/21

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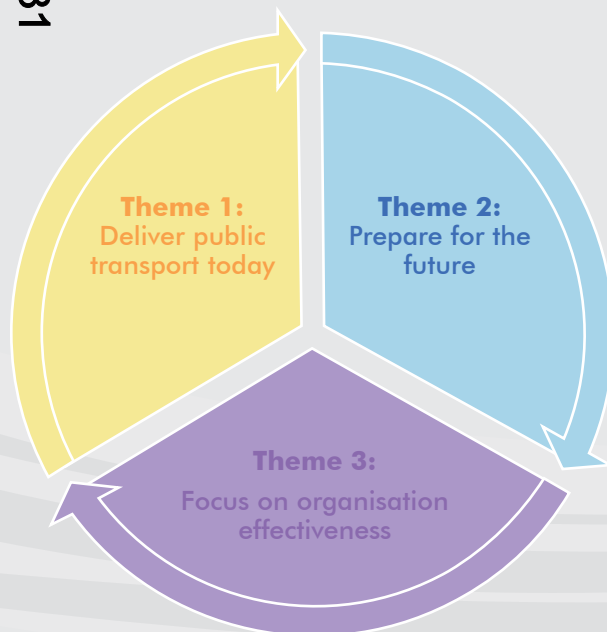
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Executive Summary

Our Corporate Plan for 2018/19 to 2020/21 provides the framework for us to deliver our services and prepare for the future during what will be an important period of change.

The Plan has three key themes, derived from the objectives set for us by the North East Combined Authority:

- Deliver public transport today,
- Prepare for the future, and
- Focus on organisational effectiveness.



Our key priorities are to:

- 1 Procure a new fleet of trains and their ongoing maintenance requirements, including the letting of a depot construction contract in order to provide maintenance facilities, for the Tyne and Wear Metro.
- 2 Build on the smooth and successful transition of Metro service delivery in 2017 by improving our customers' journey experience.
- 3 Introduce a more affordable and sustainable fares offer for Under 19s.
- 4 Advance the successful programme to modernise the Metro with track renewal in Gateshead and South Tyneside, finalise the new digital radio and rail traffic management systems (RTMS), and continue replacement of overhead power lines and construction of South Shields' transport interchange.
- 5 Construct a new training and maintenance centre in South Shields helping to improve operations and make Nexus an employer of choice.
- 6 Develop proposals for further devolution of the Northern rail franchise while ensuring partners' aspirations for rail are embedded in Transport for the North's (TfN) long term rail strategy.
- 7 Develop plans to expand Metro and local rail services.
- 8 Implement change and pursue continuous improvement, aimed at ensuring Nexus provides value for money in everything we do.
- 9 Protect levy funded frontline services.
- 10 Develop plans to improve the local bus network.
- 11 Deliver technological improvements for the benefit of our customers and the wider use of public transport.
- 12 Work with the Authorities involved to facilitate arrangements needed to reflect changes in local political governance structures.

The content of our Corporate Plan sets out in more detail how we will achieve this.

1 Nexus' business planning framework

Nexus is the Passenger Transport Executive for Tyne and Wear, a public body with powers provided by the Transport Act 1968 (as amended). Originally formed under The Tyneside Passenger Transport Area (Designation) Order 1969 the geographic area was extended by the Tyneside Passenger Transport (Designation of Additional Area) Order 1973 to align with formation of the then metropolitan county of Tyne and Wear.

More recently from April 2014 the arrangements made to establish the North East Combined Authority under the Local Transport Act 2008 and the Local Democracy, Economic Development and Construction Act 2009 define our coverage as consisting of the areas of the constituent councils Gateshead, Newcastle upon Tyne, North Tyneside, South Tyneside and Sunderland.

Our primary business remit is to deliver the policy aims and objectives set for us by the Leadership Board of the North East Combined Authority (NECA, the Authority) and as guided by the Transport North East Committee (TNEC) and its Transport North East (Tyne and Wear) Sub Committee (TWSC).

A 'minded to' devolution deal has been announced between the government and Newcastle upon Tyne, Northumberland and North Tyneside Councils (known as the 'North of Tyne Authorities'). Although transport is not part of the deal, it is also proposed that governance arrangements for transport will change in the area through the creation of a 'Joint Committee'. We will therefore engage with the Authorities involved, and DfT, to identify legal and financial considerations and possible working approaches leading up to the intended establishment of the new Joint Committee in summer 2018.

Nexus owns and operates the Tyne and Wear Metro and the Shields Ferry service as well as procuring socially necessary bus services. We manage the English National Concessionary Travel Scheme for the area, provide information about local public transport, promote the use and convenience of local public transport services and facilities and oversee various discretionary concessionary travel schemes, which are locally funded.

1.1 Our business mandate

The Authority's Regional Transport Team has developed a 20-year Transport Manifesto with the intention to develop a Transport Plan for the North East (the Transport Plan).



‘Sustainable means taking transport decisions now that will reduce carbon emissions from transport, minimise local air pollution and won’t create problems for the future’

1.2 ‘Our Journey’: a 20-year Transport Manifesto for the North East

The Transport Manifesto, ‘Our Journey’, sets out the Authority’s high level ambitions to be built upon in the Transport Plan which will be a comprehensive, statutory document.

The Manifesto’s vision is that transport needs to work for everyone by being:

- Accessible,
- Affordable,
- Reliable,
- Easy to use,
- Safe and Secure
- Sustainable, and,
- Integrated.

Achievement of this vision is informed by a set of thirteen guiding principles:

- 1 Good access to workplaces, services, shops and leisure.
- 2 Well-maintained, climate-resilient and safe transport networks.
- 3 Less road congestion.
- 4 More sustainable travel.
- 5 Growth in economic activity.
- 6 Better air quality and lower carbon emissions.
- 7 Healthy, active lifestyles.
- 8 Efficient use of transport assets.
- 9 Land use planning that favours sustainable travel.
- 10 Equality of opportunity.
- 11 Better cycling network.
- 12 Better connectivity across the UK.
- 13 Expand the public transport network.

1.3 Implications for our corporate planning processes

Over the three years 2018/19 to 2020/21 our Corporate Plan will be continuously updated to align with the policies, aims and objectives being set through the development of a new Transport Plan for the area.

These revisions will be supported by our internal business planning processes which are updated annually, having due regard to reporting duties and responsibilities set by the transport governance arrangements.

In addition we will continue to develop a suite of strategies and policies together with supporting evidence, to guide and drive the services and facilities which Nexus delivers. These documents, such as the Metro and Local Rail Strategy and the Concessionary Travel Policy for Tyne and Wear, will develop over time to reflect emerging policy aims, objectives and priorities through formulation of the new Transport Plan.



2 Corporate Plan

'Supporting the economy and the environment through better public transport services'

Nexus' mission statement

Our Corporate Plan for 2018/19 to 2020/21 is assembled around the themes and priorities previously identified:

Deliver public transport today:

- Improve the Metro customer journey experience.
- Introduce a more affordable and sustainable fares offer for Under 19s.
- Protect levy funded frontline services.
- Deliver technological improvements for the benefit our customers and the wider user of public transport.

Prepare for the future:

- Procure a new fleet of trains and their ongoing maintenance requirements, including the letting of a depot construction contract in order to provide maintenance facilities, for the Tyne and Wear Metro.

- Develop proposals for the further devolution of the Northern rail franchise while ensuring aspirations for rail are embedded in the Transport for the North's (TfN) long term rail strategy.
- Develop plans to expand Metro and local rail services.
- Develop plans to improve the local bus network.

Focus on organisational effectiveness:

- Implement change and pursue continuous improvement, to ensure we provide value for money in everything we do.
- Continue with our Asset Renewal Programme (ARP) to modernise the Metro.
- Construct a new training and maintenance centre in South Shields helping to improve operations and make Nexus an employer of choice.

- Work with the Authorities involved to facilitate arrangements needed to reflect changes in local political governance structures.

Individual departments/sections deliver projects and work programmes that are aligned to these priorities (see organisational diagram on following page).

Nexus' performance management framework, which monitors progress in achieving agreed milestones and targets, includes reporting every four weeks to our Senior Leadership Team. This ultimately fulfils the required governance arrangements for monitoring delivery of our Corporate Plan.



Diagram of our organisational structure:

Managing Director

Rail & Infrastructure

- Health, Safety, Training and Environment
- Non-Metro Infrastructure: estate management
- Heavy Rail: current delivery matters
- Day to day operation of trains and stations
- Station presentation
- Train maintenance & delivery
- Infrastructure maintainer and provider
- Delivery of ARP

Customer Services

- Public Relations
- Marketing
- Fares & Revenue
- Customer Information
- TravelShops
- One Stop Shop
- Shields Ferry
- Bus Station Management

Finance & Resources

- Finance, Payroll and Procurement
- Internal Audit
- Business Change and Technology
- Legal Services, Property and Secretariat
- Human Resources
- Programme Assurance and Corporate Planning
- New Train Fleet Procurement

Transport Strategy

- Business Development
- Network Extensions
- Bus Services
- Metro Futures
- Business Intelligence
- Heavy Rail: forward planning & future strategy



2.1 Deliver public transport today

This theme is about improving public transport as currently provided. We cannot aim to do better tomorrow if we haven't first got right what we do today.

2.1.1 Improve the Metro customer journey experience

Punctuality and reliability of service is a high priority for Metro customers. Since taking back control of Metro operations we have delivered:

- A 20% reduction in Excess Headway Minutes (a way of measuring service delays)
- A 14% improvement in fleet reliability, and
- A 24% increase in punctuality

We aim to achieve and exceed a moving annual average of 87.2% Charter Punctuality in 2018/19.

A Train Performance Improvement Plan includes initiatives to reduce mechanical faults on the Metrocars together with an investment of £350,000 which is in addition to the budget for planned and reactive maintenance of the fleet.

A further injection of investment is intended to deliver a package of reliability centred work on the fleet aimed at building further resilience into our operations.

Operational safety is a crucial consideration for Nexus and the Metro; keeping Signals Passed at Danger (SPaDs) to a minimum, reducing as far as reasonably practicable operational risks, improving the safety and security of passengers and staff and further reducing the overall level of incidents at the Platform Train Interface.

This will be supported through a combination of actions including assurance activities, audit and safety tours, safety training and reporting key safety matters to the Senior Leadership Team. We will continue to embed a safety culture in everything we do.

Customer satisfaction is of paramount importance and we will strive to achieve the target score of 8.3 in the November 2018 Customer Satisfaction Survey, whilst also attaining and then maintaining Station and Train Service Quality Regime Targets. The elements contributing to this include improved train performance, increased safety audits/checks, and working with stakeholders, including the Police, to develop and implement a Security Plan.

We will work to ensure that the required infrastructure is available at a specified standard to run the Metro service, including control of external third party works which interface with our infrastructure.



2.1.2 Introduce a more affordable fares offer for under 19s.

In 2017, Transport North East (Tyne and Wear) Sub-Committee asked Nexus to bring forward proposals for a better value fares offer for passengers under the age of 19, reflecting the age at which young people now leave mandatory education or training. This will reduce Metro and Ferry fares for this age group, through the introduction of new single and day fares, mirroring similar schemes implemented on the bus networks.

An under 19 ticketing product for Metro and the Ferry was subsequently introduced in early 2018 and we will monitor and review the uptake of this new ticketing product, to ensure its success.

2.1.3 Protect levy funded frontline services.

Whilst experiencing ongoing cuts to the grant we receive through local transport levy, we will do whatever is reasonably practicable to preserve the following frontline services that are dependent on such funding:

- The Shields Ferry operation between North and South Shields.
- Socially necessary bus services secured under contract by Nexus.
- TravelShops selling ticketing products and providing travel information.
- Online provision of information, journey planning and ticketing facilities online at www.nexus.org.uk

- Information and customer support through our One Stop Shop.
- Tailored bus service timetable information at around 6,000 bus stops throughout Tyne and Wear.
- Management of around 2,000 bus shelters in the area.
- Management of bus stations and public transport interchanges.
- Administration of various local discretionary concessionary travel Schemes including Metro Gold Card, Companion Card, TaxiCard and Under 16 travel.



2.1.4 Deliver technological improvements for the benefit of our customers and the wider use of public transport.

We will apply technology to make the use of public transport simple and attractive for customers:

- Improving digital connectivity.
- Improving ticketing systems.
- Exploiting bus Real Time Passenger Information.
- Increase uptake of the POP pay-as-you-go smart ticketing product.

We will also strive to provide information for customers in new and innovative ways. Alongside this development we will examine and develop ways to incorporate pricing into the passenger information systems.

These developments complement the local aspiration for the delivery of a fully multi-modal smart ticketing and transport information network across the North East, and align with the plans of Transport for the North on the implementation of integrated smart ticketing across the North.

Working with the North East Local Enterprise Partnership and others we will establish a fibre optic network around the Tyne and Wear Metro system that will test the next generation of mobile and wireless technology. This will be achieved with funding provided by the Department for Digital, Culture, Media and Sport, opening up a range of opportunities for local business to engage with 5G development and see new services developed in the region. We aim to be at the heart of this project, using the Metro infrastructure in a very different way.

We will also engage with Transport for the North's (TfN) smart initiative by participating in a consortium with other transport operators to exploit contactless payment systems.

We are also exploring the potential for New Mobility Services (NMS) which uses online connectivity and smartphone technology to deliver a comprehensive travel service that can satisfy total travel needs, not just individual journeys. Together with local partners we will assess the circumstances that would make a NMS scheme succeed in the North East and understand the regulatory framework that may be needed to ensure the travelling public receive fair and accurate information when planning and paying for their travel.



2.2 Prepare for the future

2.2.1 Procure a new fleet of trains and their ongoing maintenance requirements, including the letting of a depot construction contract in order to provide maintenance facilities, for the Tyne and Wear Metro.

We will begin procuring our new Metrocar fleet which we expect to be introduced from 2021. In addition to enhancing energy efficiency, the new fleet will increase the reliability of the Metro service, offer a range of other passenger improvements and be able to operate on the local rail network as well as the existing Metro infrastructure.

We will also let a depot construction contract in order to provide appropriate maintenance facilities for the new fleet. Its modern design will offer an opportunity to improve the depot's environmental credentials.

2.2.2 Develop further devolution proposals for the Northern rail franchise while ensuring local aspirations for rail are embedded in the Transport for the North (TfN) long term rail strategy.

Working through Rail North Limited and the North East Rail Management Unit (NEMU), we will engage with regional partners, train operating companies and Network Rail to maximise the benefits of planned investment in the Northern and TransPennine franchises, ensuring that local ambitions for heavy rail are achieved.

We will also seek to establish the Pay As You Go smart ticketing product on Northern rail services, working with the franchisee on this and other initiatives.

Through the NEMU, we will continue to work with colleagues from across the North East of England to monitor the Northern rail franchise operator and help it develop and promote services, in particular through the adoption of integrated ticketing and timetabling.

Further afield, we will continue to pursue the following:

- Invest and work with Network Rail, HS2 limited and Transport for the North, to grow capacity, resilience and reliability of services including for our main line to London and Scotland.
- Improvement in long-distance connections from market towns in the region.
- Reducing journey times and increase the number of trains to core cities from the region, including Leeds, Manchester, Edinburgh and Birmingham.
- Lobbying to ensure the North East is part of the High Speed Rail network.
- Further devolution of the Northern rail franchise.

We will do this by representing the local interests in Transport for the North (Rail) to Network Rail and HS2 Limited.



2.2.3 Develop plans to expand local rail services

We intend to develop the Metro network, the local rail network and the passenger trains that operate on both of them as a single local rail system when developing expansion plans for the future. The intention is to create a locally-managed network of passenger services that is integrated and provides a high standard of service to passengers.

Aspirations for Metro and Local Rail as set out in the Transport Manifesto include:

- Simple, good value and integrated fares backed up by smart payment technology.
- Creating a regional express network, with high quality, faster trains and more routes electrified.
- Opening new local stations on current lines, re-open key disused lines, consider more Park and Ride stations, upgrade freight-only sections to passenger use and build new routes.

- Devolving greater control to the region, so local rail and Metro can be managed together to deliver a higher standard for stations, information and customer service.
- Working with rail industry partners to address overcrowding and improve cycle access on trains.
- Addressing reliability and punctuality issues.
- Improving access for everyone, including disabled people.
- Tackling crime and fear of crime so it is not a deterrent, particularly late at night.

To begin this journey, we will carry out a feasibility study on rail route extensions which will ultimately lead to the development of business cases for initiatives to support the aspirations contained in the Metro and Local Rail Strategy.

We will also work with Northumberland County Council to pursue the introduction of passenger services on the Northumberland to Newcastle (N2N) line.

2.2.4 Develop plans to improve the local bus network

We will work collaboratively with local authorities and bus companies to develop a new Bus Strategy for the area. The strategy will set out ways in which the quality and attractiveness of buses can be improved and growth in bus usage can be achieved. It will also consider how buses can generally contribute to the improvement of the environment, particularly in respect of air quality.

We plan to prepare a strategic outline business case that considers a long list of options for delivering the strategy (which include new provisions available through the Bus Services Act 2017). We will engage with the public and local businesses to help shape our thinking.



2.3 Focus on organisational effectiveness

As revenue spending in the public sector will continue to be constrained, we must focus on being an economic, effective and efficient organisation that delivers value for money to our customers and stakeholders.

2.3.1 Implement change and pursue continuous improvement, to ensure Nexus provides value for money in everything we do.

We will improve our organisational structures to further enhance efficiency and prepare for the necessary changes required to maintain our new Metrocar fleet.

We must also adapt our organisational structure in order to accommodate future reductions in our grant through the local transport levy.

An organisational aim is for the make-up of our workforce to reflect the diversity in the communities that we serve. We will actively work to increase the number of people working for us from under-represented groups through effective recruitment, appropriate reward and personal development. In particular we will develop and take forward a programme of activities to encourage women into our business, both attracting women to apply for jobs at Nexus and to support women as they progress in their careers

A key priority has been for us to negotiate local grant support from the transport levy throughout the medium term. Our financial objective in the medium term is to set a balanced budget without placing reliance on reserves.

All our capital projects, ARP and non-ARP, will be overseen by our Programme Management Office and delivered through our established and effective stage-gate control processes to ensure that time, cost and quality objectives are met.

We will progress the development of pipeline schemes to attract external funding by being in a position to respond immediately to any future competitive bidding opportunities. This will include working with others to identify external funding to meet local aspirations in regard to housing, regeneration, economic growth, environmental improvement and air quality initiatives.

We are 'greening' our ancillary vehicle fleet, specifying Euro 6 engines for replacements, working with the Energy Saving Trust to baseline carbon emissions and testing electric vehicles in 2018/19 to determine options for future development.

We purchase many millions of pounds' worth of goods and services each year and will therefore ensure that we continue to obtain value for money through robust processes including adherence to public procurement regulations and our own standing orders, procurement processes & financial regulations.

2.3.2 Construct a new training and maintenance centre in South Shields helping to improve operations and make Nexus an employer of choice.

We will construct a new £9.5m Metro Maintenance, Renewals and Skills Centre in South Shields, with £7m of the funding having been secured through the Local Growth Fund.

It is intended that the facility will:

- Improve maintenance facilities for the Metro fleet.
- Improve the Metro service, allowing us to start services earlier and finish later by stabling some trains at the facility overnight.
- Allow for more comprehensive training, apprenticeships and skills opportunities for all our staff with everything located on a single, dedicated and accessible site.
- Enhance the economic vitality of South Shields town centre and support the regeneration objectives of the South Shields 365 masterplan.

Training and development of staff will be progressed through initiatives such as our Frontline Leadership Programme and well enhancing technical skills and encouraging professional development.

2.3.3 Continue the planned Asset Renewal Programme to modernise the Metro

Financial year 2018/19 is Year 9 of our eleven year ARP to upgrade and replace many of the assets across the Metro system. We have so far spent over £275m in pursuing this objective in accordance with the criteria set out in the Department for Transport (DfT) grant offer letter of February 2010.

We plan to spend a further £71.1m over the next three years as follows:

- 2018/19 - £25.6m
- 2019/20 - £23.3m
- 2020/21 - £22.2m

There are a number of significant projects in 2018/19 including:-

Civils:

- Activity will focus on structural works to Beach Road and Burnside Road bridges. Structural assessments and designs will continue to be progressed for prioritisation and delivery of bridge works in later years.

Track:

- Major track works (including earthworks, drainage and switches & crossings works) will be undertaken from Gateshead Stadium to South Shields. Recycling of rail and ballast takes place as part of contractual arrangements.

Overhead Line:

- Works in 2018/19 will concentrate on the completion of Chillingham Road to Tynemouth and South Gosforth to Jesmond stretches of overhead line equipment.

Stations:

- We will commence construction of the new transport interchange in South Shields town centre, working in partnership with South Tyneside Council and our development partner, Muse.
- We will also continue our work with Sunderland City Council in order to progress the redevelopment of the above ground part of Sunderland Station, focusing on the concourse area with improved access, retail offering and passenger information.

Communications:

- We will complete the installation of a new radio system across the network.
- We will also improve our system of CCTV cameras across the Metro network.

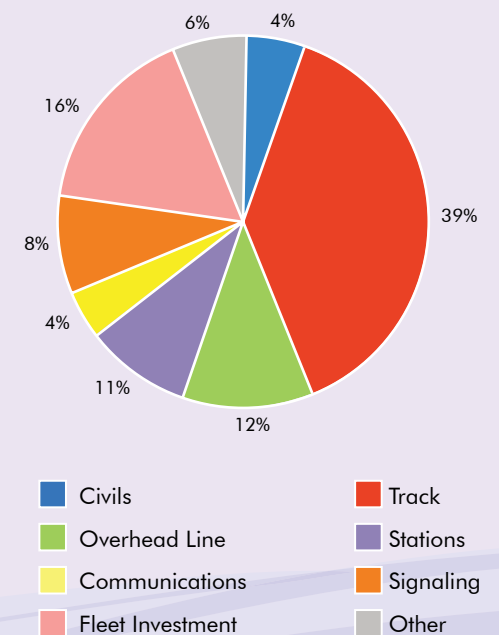
Signalling:

- We will complete the replacement of our automatic route setting system with a new Rail Traffic Management System (RTMS) to route trains, setting signals and measure train performance.
- Other signalling works in 2018/19 include replacement of track circuits, location case rewiring, and replacement of critical point motors across the network. Useable components are recycled to extend the life of original equipment.

Fleet Investment:

- The ARP includes a provision to ensure that our aging fleet maintains adequate levels of performance. This will be kept under review during the remaining life of the fleet, which will be over 40 years of age before it is eventually replaced .

Split of ARP Expenditure (%)



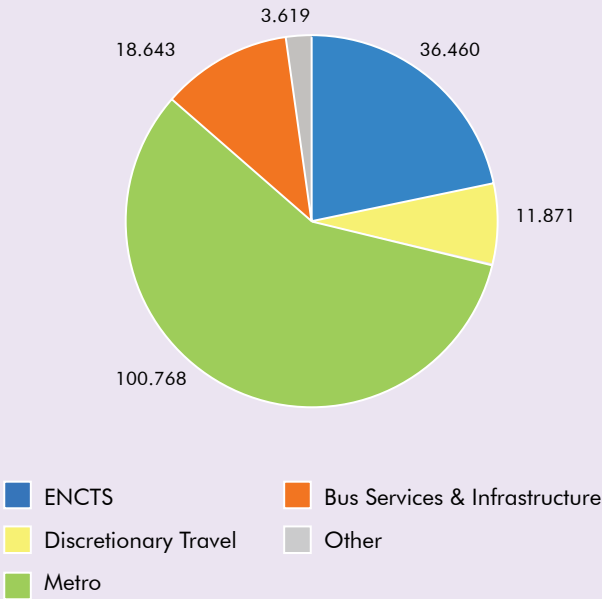
2.3.4 Work with the Authorities involved to facilitate arrangements needed to reflect changes in local political governance structures.

Along with the 'minded to' devolution deal announced between government and the 'North of Tyne' authorities, comprising Newcastle upon Tyne, North Tyneside and Northumberland, it is proposed that local political governance arrangements for transport will change in the area through the creation of a 'Joint Committee' to cover the area of both the North of Tyne and the North East combined authorities.

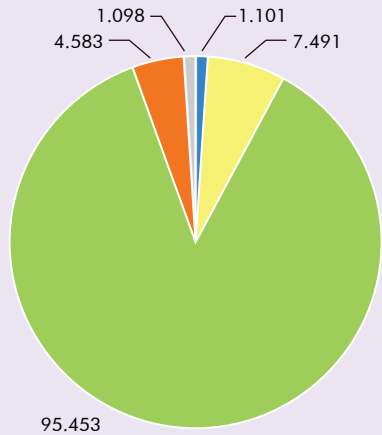
Any new governance arrangements must provide us with an appropriate structure for us to be able to exercise our duties functions and powers in order to deliver effective public transport for the benefit of local people and businesses.

We will engage with the Authorities involved, and DfT, to identify legal and financial implications and possible working approaches leading up to the proposed establishment of the Joint Committee in summer 2018.

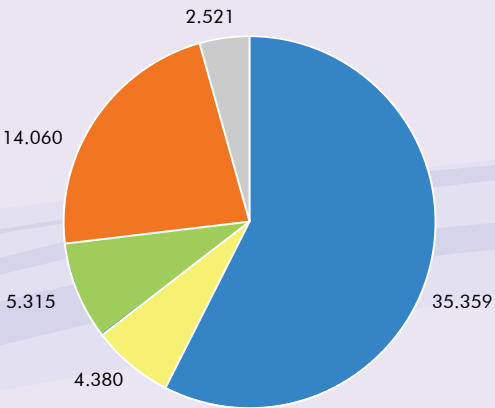
Gross Expenditure 2018/19 (£m)



Gross Income including Grants from Central Government 2018/19 (£m)



NECA Funded Grant Expenditure 2018/19 (£m)





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Nexus is the public body delivering local transport services for
Tyne and Wear, on behalf of the North East Combined Authority.

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