

## North East Joint Transport Committee

Tuesday, 18th January, 2022 at 2.30 pm

Meeting to be held in the Council Chamber, Gateshead Civic Centre, Regent Street,  
Gateshead, NE8 1HH

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## AGENDA

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12. Date of next meeting	

The next meeting will take place on Tuesday 15 March at 2.30pm, venue to be confirmed.

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**NORTH EAST JOINT TRANSPORT COMMITTEE**

**DRAFT MINUTES FOR APPROVAL**

**DATE:** 20 December 2021 (Reconvened from 14 December 2021)

Meeting held: Committee Room 1, County Hall, Morpeth

**COMMITTEE MEMBERS PRESENT:**

Councillor: M Gannon (Chair)

Councillors: J Foreman, C Johnson, K Kilgour and R Wearmouth

**IN ATTENDANCE:**

Statutory Officers: M Barker (Monitoring Officer - Transport)  
E Goodman (NECA Finance Manager)  
T Hughes (Managing Director, Transport North East)  
S Ramsey (Lead Chief Executive – Transport)

Officers: G Armstrong, P Dowling, P Fleming, M Jackson and E Reynard

**64. APOLOGIES FOR ABSENCE**

Apologies were received from Councillors T Dixon, N Forbes, C Rowntree and Cllr G Sanderson.

**65. DECLARATIONS OF INTEREST**

There were no declarations of interest.

**66. NORTH EAST ENHANCED PARTNERSHIP**

The Committee considered a report which outlined the process for consultation on the establishment of an Enhanced Bus Partnership on 1 April 2022.

The draft Enhanced Partnership must be presented to the region's bus operators to give them time to consider the scheme and have the opportunity to object. Following the objection period, a period of statutory public consultation will commence.

The Committee were advised of the timeline for the consultation:

- **22 December 2021 – 19 January 2022**  
Operator objection period
- **21 January 2022 – 18 February 2022**  
Statutory consultation period
- **15 March 2022**  
Meeting of the North East Joint Transport Committee to approve the Enhanced Partnership
- **1 April 2022**  
Commencement of the Enhanced Partnership

The report also sought approval for the recruitment of four members of staff to oversee and administer the development of the bus partnership, along with approval to access legal and bus technical expertise. The funding for this in 2022/23 will be met from residual funds available from the LTA Bus Capacity (Revenue) Funding allocation awarded to the region.

**RESOLVED:** The North East Joint Transport Committee:

- (i) agreed the content of the draft Enhanced Partnership Plan and Scheme for presentation to bus operators for the objection period, and for statutory public consultation;
- (ii) agreed to delegate authority to the Managing Director, Transport North East following consultation with the Chair of the JTC and such other persons as the Managing Director considers relevant to make amendments to the plan and scheme following the operator objection period and prior to the statutory consultation if required;
- (iii) agreed to the recruitment of four members of staff to oversee the administration and development of the bus partnership as well as enhanced legal provision and access to bus planning expertise, in accordance with the financial and other resources implications described in the report; and
- (iv) noted the reference to governance in the EP scheme, specifically around an Enhanced Bus Partnership Board and Local Bus Boards and agreed to further detailed development of the governance model.

## **67. INTEGRATED RAIL PLAN AND LEAMSIDE LINE UPDATE**

The Committee considered a report which provided an outline of the Government's Integrated Rail Plan (IRP) which was published on 18 November 2021 and the impact of it on future rail connectivity in the North East. The report also summarised the latest position on a study covering the East Coast Main Line (ECML) and the Leamside Line.

The outcome for the North East from the IRP was very disappointing. The IRP confirmed that the North East will not benefit from the HS2 development. It also ruled out Government investment for the reinstatement of the Leamside Line which would add capacity to the East Coast Main Line. However, it was suggested in the IRP that the Leamside Line could be part of any future City Region Settlement, should governance arrangements for the North East change to a Mayoral Combined Authority.

The IRP does suggest more limited potential improvements to the existing ECML route in the region, as well as committing to a £96bn package of major investments to upgraded and new railway routes elsewhere in the North and Midlands.

The Committee also noted that the Union Connectivity Review was published on 26 November 2021 which did contain some positive news for the region regarding an assessment of the ECML corridor.

Councillor Gannon commented that at a recent meeting of the Transport for the North Board, all of the Leaders, Elected Mayors and Mayors within the North including Manchester and Liverpool, had been very disappointed with the Government's decision to scrap the HS2 north of the Midlands, and that the proposed updates to the ECML would be very disruptive. He added that the continued congestion and lack of capacity on the ECML still must be resolved.

Councillor Gannon added that he would hold the Government to its suggestion that the reopening of the Leamside Line would be included in a future City Region deal.

**RESOLVED:** The North East Joint Transport Committee agreed to continue to work with local and regional stakeholders to provide strong evidence (through business case development) of the need to significantly invest in rail connectivity within and between the North East and the other main economic and social hubs across the north and the rest of the UK.

## **68. EXCLUSION OF THE PRESS AND PUBLIC**

**RESOLVED:** The North East Joint Transport Committee agreed to exclude the press and public during item 7 by virtue of paragraphs 1,2,3, 4 and 5 of Parts 1 and 3 of Schedule 12A of the Local Government Act.

## **69. MINUTES OF THE CONFIDENTIAL MEETING HELD ON 16 NOVEMBER 2021**

The minutes were agreed as a correct record.

## **70. DATE OF NEXT MEETING**

The next meeting will be held on Tuesday 18 January 2022 at 2.30pm, venue to be confirmed.

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## North East Joint Transport Committee

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**Date:** 18 January 2022  
**Subject:** Transport Budget and Levies 2022/23  
**Report of:** Chief Finance Officer

### Executive Summary

This report sets out the 2022/23 Transport Revenue Budget and associated Transport Levies for the North East Joint Transport Committee (JTC) together with indicative forecasts for future years also exemplified for consideration and approval. The budget proposals contained in this report take into account comments received during consultation on the outline proposals presented to this committee in November 2021 and input from members of the JTC Overview and Scrutiny Committee.

The two Combined Authorities in the JTC area are required to set the Transport Levies before 15 February 2022 to enable their constituent councils to take the levies and other contributions into account in setting their own budgets. The two Combined Authorities will formally determine to issue the levies that are agreed by the JTC at their meetings on 1 February 2022 (NECA) and 25 January 2022 (NTCA).

The report provides an update on the Revenue Budget outturn for 2021/22 and sets out the revenue resources planned to be used in 2022/23 to deliver the objectives of the JTC. A separate report on this agenda sets out the 2022/23 Transport Capital Programme and provides an update on the delivery of the 2021/22 Transport Capital Programme.

The proposed budget and levy for public passenger transport activity in County Durham is £15.619m for 2022/23, of which £15.609m will be payable as a grant to Durham County Council and £10,000 retained to contribute to the central costs of the JTC. This compares with a levy for 2021/22 of £15.467m, of which £15.457m was payable as transport grant.

The proposed budget and levy for public transport activity in Northumberland is £6.357m for 2022/23, of which £6.347m will be payable as a grant to Northumberland County Council and £10,000 retained to contribute to the central costs of the JTC. This compares with a levy of £6.328m for 2021/22, of which £6.318m was payable as transport grant.

The proposed budget and levy for public transport activity in Tyne and Wear is £65.225m for 2022/23, of which £63.125m will be payable as a grant to Nexus. This represents a year on year increase of £4.125m (6.75%) in the levy compared with 2021/22 when the Tyne and Wear Levy was £61.100m. As in previous years, £2.100m of the Tyne and Wear levy will be retained and used to help fund central costs of the JTC, primarily relating to the former Tyne and Wear Integrated Transport Authority (TWITA) functions.

The gross expenditure budget for Transport North East (TNE) is £3.922m in 2022/23, funded through a range of sources, including a contribution from the Local Transport Plan Integrated Transport Block grant of £500,000 (equating to £62,500 for each of the seven local authorities and Nexus), contribution from Transforming Cities Fund (TCF) grant to meet programme management costs relating to the TCF programme, a contribution from the Retained Levy Budget and other specific revenue grants received from central government, which includes funding towards the Enhanced Partnership / Bus Service Improvement Plan next year.

The Tyne Tunnels revenue account forecast for 2021/22 is a breakeven position. The budget estimates for 2022/23 have been prepared on the basis that increases in the Retail Price Index (RPI) measure of inflation will trigger an increase in the toll for Class 3 vehicles (HGVs). This is a decision for the Tyne and Wear Sub Committee, who will be recommended to agree the increase at their meeting on 13 January 2022.

## **Recommendations**

The North East Joint Transport Committee is recommended to receive this report for consideration and, taking into account the comments from consultation, to:

- i) Note the position of the Transport budget in 2021/22 and approve the revised estimates for the year;
- ii) Agree a Transport net revenue budget for 2022/23 of £87.201m, as set out in section 2.5 of this report;
- iii) Agree the following Transport Levies for 2022/23:

a. Durham County Council	£15,619,000
b. Northumberland County Council	£6,357,000
c. Tyne and Wear councils (detailed in Table 6)	£65,225,000
- iv) Agree a transport revenue grant to Durham County Council for the delivery of transport services of £15,609,000, as outlined in section 2.7;
- v) Agree a transport revenue grant to Northumberland County Council for the delivery of transport services of £6,347,000, as outlined in section 2.9;
- vi) Agree a transport revenue grant to Nexus for the delivery of transport services in Tyne and Wear of £63,125,000 as outlined from section 2.37;
- vii) Note that a fare increase for Metro and the Ferry service which is slightly in excess of RPI is included in Nexus' budget estimates, pending agreement from the Tyne and Wear Sub-Committee when it meets on 13 January 2022;
- viii) Approve the budget for the Tyne Tunnels set out in section 2.69, which includes a recommended increase in the Tyne Tunnels tolls for inflation to be considered for approval by the Tyne and Wear Sub Committee on 13 January 2022;

- ix) Approve the budget for Transport North East as set out in section 2.61;
- x) Agree to make permanent three posts within the Transport North East team, funded by a top slice of EP / BSIP grant funding to be received from 2022/23, as set out in section 2.60;
- xi) Agree the forecast level and use of reserves at section 2.71.

## 1. Background Information

- 1.1 The draft budget proposals were presented to this committee for consideration on 21 September 2021 and 16 November 2021 and have been the subject of consultation with officer groups, members of the JTC Overview and Scrutiny Committee and the Tyne and Wear Sub-Committee (for proposals relating to Tyne and Wear).
- 1.2 This report sets out the final budget proposals, taking into account the comments received during the budget setting process and the latest available information.
- 1.3 The report outlines the proposed Transport revenue budget and levies for 2022/23, together with indicative forecasts for future years also exemplified for consideration and approval. The report also provides an updated forecast for the current year.
- 1.4 The proposals in this report are presented on the basis of no continuation of Covid-grant support to Nexus to offset the reduction in patronage on the Metro from April 2022.

## 2. Proposals

### Transport Revenue Budgets 2021/22 Forecast

- 2.1 The main area of income and expenditure in the JTC revenue budget is the Transport Levies and the revenue grants paid to Durham County Council, Northumberland County Council and Nexus for the delivery of public transport services.
- 2.2 As the Transport Levies and revenue grants are normally fixed for the year, there is no change in the Levies payable and minimal change in the Joint Transport Committee revenue budget itself in year.
- 2.3 Any surplus or deficit against the budgets for the three main delivery agencies (Durham County Council, Northumberland County Council and Nexus) is retained or managed within the reserves of those organisations.
- 2.4 *Table 1: 2021/22 Transport Levies and Grants:*

	<b>2021/22 Original Budget</b>	<b>Spend to date (to 31 Oct 2021)</b>	<b>2021/22 Forecast Outturn</b>	<b>2021/22 Forecast Variance</b>
	<b>£m</b>	<b>£m</b>	<b>£m</b>	<b>£m</b>
<b>Total Transport Levies</b>	<b>(82.895)</b>	<b>(48.355)</b>	<b>(82.895)</b>	<b>0.000</b>
Grant to Durham	15.457	9.017	15.457	0.000
Grant to Northumberland	6.318	3.686	6.318	0.000
Grant to Nexus	57.813	33.724	57.813	0.000
Nexus Contribution to Metro Futures Planning Studies budget (21/22 only)	1.187	1.187	1.187	0.000
Tyne and Wear Levy rebate (2021/22 only)	1.200	1.200	1.200	0.000
Retained Transport Levy budget (to meet central	2.120	1.236	2.120	0.000

costs)				
<b>Net</b>	<b>84.095</b>	<b>50.050</b>	<b>84.095</b>	<b>0.000</b>
	<b>2021/22 Original Budget</b>	<b>Spend to date (to 31 October 2021)</b>	<b>2021/22 Forecast Outturn</b>	<b>2021/22 Forecast Variance</b>
	<b>£m</b>	<b>£m</b>	<b>£m</b>	<b>£m</b>
<b>Contributions (to)/from Nexus Reserves held by NECA</b>	<b>1.200</b>	<b>1.200</b>	<b>1.200</b>	<b>0.000</b>
<b>Contribution to/ (from) JTC unearmarked reserves</b>	<b>0.000</b>	<b>0.495</b>	<b>0.000</b>	<b>0.000</b>

### Budget and Levy Proposals for 2022/23

- 2.5 The overall total proposed net revenue budget for transport levies in 2022/23 is £87.201m, as summarised in Table 2 below. This represents a net increase of £4.286m when compared to 2021/22.

Table 2: Transport Levies 2021/22:

	<b>2022/23 Proposed Levy</b>	<b>Change from 2021/22</b>	<b>Levy per person<sup>1</sup></b>
	<b>£m</b>	<b>£m</b>	<b>£</b>
Durham	15.619	0.152	29.30
Northumberland	6.357	0.029	19.63
Tyne and Wear	65.225	4.125	56.88
<b>Total</b>	<b>87.201</b>	<b>4.286</b>	

- 2.6 The variation in the figures for the levy per person reflects the higher costs of concessionary travel demand and capital financing costs in the Tyne and Wear area and demonstrates why three separate levies are required. The following table sets out a summary of the transport net revenue spending planned for 2022/23. Circa £48.221m (55%) is planned to be spent on concessionary travel and £19.145m (22%) on subsidised bus services. It should be noted that these figures do not include the costs of home to school transport for children and young people as these are within the budgets of the relevant local authorities.

Table 3: Summary of the 2022/23 Transport Budget:

	<b>Durham</b>	<b>N'Land</b>	<b>Tyne &amp; Wear</b>	<b>Total</b>
	<b>£m</b>	<b>£m</b>	<b>£m</b>	<b>£m</b>
Statutory Concessionary Travel	12.205	4.931	28.262	45.398

<sup>1</sup> ONS mid-2020 Population estimates, <https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationestimates/bulletins/annualmidyearpopulationestimates/mid2020>

Discretionary Concessionary Travel	-	-	2.823	2.823
Subsidised Bus Services	2.688	1.230	15.227	19.145
Bus Stations/Infrastructure	(0.092)	0.028	2.128	2.064
	<b>Durham</b>	<b>N'Land</b>	<b>Tyne &amp; Wear</b>	<b>Total</b>
	<b>£m</b>	<b>£m</b>	<b>£m</b>	<b>£m</b>
Public Transport Information	0.089	0.025	1.287	1.401
Metro (incl. Discretionary Travel)	-	-	17.396	17.396
Local Rail	-	-	0.279	0.279
Ferry	-	-	1.293	1.293
Staffing in Durham/Northumberland	0.719	0.133	-	0.852
Funded from Reserves	-	-	(5.570)	(5.570)
<b>Transport Grant</b>	<b>15.609</b>	<b>6.347</b>	<b>63.125</b>	<b>85.081</b>
JTC General Transport Costs and former TWITA Costs	0.010	0.010	2.100	2.120
<b>Transport Levy</b>	<b>15.619</b>	<b>6.357</b>	<b>65.225</b>	<b>87.201</b>

## Durham

- 2.7 The budget and levy for public passenger transport activity in County Durham will be set at £15.619m for 2022/23. This compares with a levy for 2021/22 of £15.467m. The budget and levy for 2021/22, including the forecast outturn position for 2021/22 and 2022/23 is summarised in the table below.

Table 4: Durham Transport Budget and Levy 2022/23:

	<b>2021/22 Original Budget</b>	<b>Spend to date (to 31 Oct 2021)</b>	<b>2021/22 Forecast</b>	<b>2021/22 Forecast Variance</b>	<b>2022/23 Budget</b>
	<b>£m</b>	<b>£m</b>	<b>£m</b>	<b>£m</b>	<b>£m</b>
Concessionary Fares	11.932	6.268	11.932	0.000	12.205
Subsidised Services	2.556	1.161	2.671	0.115	2.688
Bus Stations	0.177	1.196	0.078	(0.099)	0.176
Bus Shelters	0.019	0.062	0.066	0.047	(0.268)
Passenger Transport Information	0.088	0.023	0.074	(0.014)	0.089
Staffing	0.685	0.400	0.685	0.000	0.719
Share of NECA Transport Costs	0.010	0.000	0.010	0.000	0.010
<b>Net Expenditure / Levy</b>	<b>15.467</b>	<b>9.110</b>	<b>15.516</b>	<b>0.049</b>	<b>15.619</b>

## Northumberland

- 2.8 The forecast outturn position for 2021/22 is currently estimated to be a £0.330m underspend to year end. Further guidance is awaited from the Department for Transport on ongoing payments to operators at pre-pandemic levels and if any post

Covid-19 recovery funding will be made available to both operators and local transport authorities.

In common with Northumberland's approach to funding supported services in 2020/21, Northumberland has continued to fund supported services at pre-Covid-19 levels with the majority of these services now returning to pre-Covid-19 frequency having operated at reduced frequency. These supported services include instances of services running commercially at popular and peak times, but where support is given to maintain journeys at other times for example early mornings or late evenings.

Northumberland County Council also makes payments to operators under the Government's English National Concessionary Travel Scheme (ENCTS) which entitles pass holders to free off-peak travel after 9.30 on local bus services. ENCTS scheme journeys are still significantly reduced due to the ongoing implications of the Covid-19 pandemic and subsequent messaging regarding only travelling for essential purposes. During the early part of 2021/22 the Council has reduced payments to those operators not running pre Covid mileage in line with government advice, those operators are currently being reimbursed based on the proportion of mileage currently being operated when compared with pre covid mileage, any shortfall is claimable by operators as part of the commercial CBSSG claim, which means despite the reduction in concessionary travel payment operators are no worse off. All other operators continue to be reimbursed at pre-pandemic levels to ensure the viability of routes and operators is maintained, in line with the Cabinet Office Procurement Policy Note 02/20 – Supplier Relief due to Covid-19, for at least the period of the outbreak to enable the resumption of socially necessary services afterwards.

- 2.9 The draft budget and levy for public transport activity in Northumberland is £6.357 million for 2022/23. This compares with a budget of £6.328 million for 2021/22. The reason for the small increase is due to an allowance for some inflation. The Council is currently developing its 2021/22 budget proposals. The budget and levy for 2021/22 and 2022/23 is summarised in the table below:

*Table 5: Northumberland Transport Budget and Levy 2022/23:*

	<b>2021/22 Original Budget</b>	<b>Spend to date (to 31 Oct 21)</b>	<b>2021/22 Forecast Outturn</b>	<b>2021/22 Forecast Variance</b>	<b>2022/23 Initial Budget</b>
	<b>£m</b>	<b>£m</b>	<b>£m</b>	<b>£m</b>	<b>£m</b>
Concessionary Fares	4.903	1.961	4.643	(0.260)	4.931
Subsidised Services	1.230	0.438	1.160	(0.070)	1.230
Bus Stations	0.026	(0.002)	0.026	0.000	0.028
Passenger Transport Information	0.025	0.025	0.025	0.000	0.025
Staffing	0.134	0.078	0.134	0.000	0.133
Share of NECA Transport Costs	0.010	0.000	0.010	0.000	0.010
<b>Net Expenditure / Levy</b>	<b>6.328</b>	<b>2.500</b>	<b>5.998</b>	<b>(0.330)</b>	<b>6.357</b>



## Tyne and Wear Levy

- 2.10 The levy for Tyne and Wear includes a centrally retained budget of £2.1m, required to fund central transport costs (primarily relating to the former Tyne and Wear Integrated Transport Authority).
- 2.11 The apportionment of the Tyne and Wear levy between the constituent councils is revised each year to consider the mid-year population estimates. In 2022/23 the split of the levy will be based on the mid-2020 population estimates, as set out in Table 6 below. The movement in population estimates means that the levy change per council may be higher or lower than the headline percentage change of 6.75%. Stripping out the impact of the population changes shows the change in levy per authority directly resulting from the requested increase.

Table 6: Tyne and Wear Levy Apportionment 2022/23:

Council	2020 Population	2021/22 Levy restated for population	2022/23 Proposed Levy	Change excluding population impact
		£	£	£
Gateshead	201,950	10,761,283	11,487,801	726,518
Newcastle	306,824	16,349,689	17,453,494	1,103,805
North Tyneside	208,871	11,130,081	11,881,498	751,417
South Tyneside	151,133	8,053,404	8,597,108	543,704
Sunderland	277,846	14,805,543	15,805,099	999,556
<b>Total</b>	<b>1,146,624</b>	<b>61,100,000</b>	<b>65,225,000</b>	<b>4,125,000</b>

## Nexus Revenue Budget

### Updated Nexus Forecast of Outturn 2021/22

- 2.12 The 2021/22 budget was set using pre-Covid service levels on the basis that government support would continue in the form of Light Rail Revenue Restart Grant (LRRRG) and Local Authority Coronavirus Bus Services Support Grant (LACBSSG). The original budget included £21.944m of Covid support with the remaining shortfall between income and expenditure of £2.680m being funded from reserves.
- 2.13 In July the DfT confirmed that a final tranche of LRRRG support would be available to the end of the financial year and then it would be discontinued. LRRRG is now expected to be in excess of the original budget and is currently envisaged to be sufficient in order to cover Metro's expected fare and commercial revenue losses over the remainder of the year.
- 2.14 Elsewhere within the budget, there are positive variances which means that the call on reserves is currently forecast to be £0.993m better than the original budget, which given the financial challenges that lie ahead, represents a positive outcome.

A summary of the forecast outturn is set out below:

2.15 *Table 7: Nexus Forecast of Outturn 2021/22:*

	<b>2021/22 Original Budget</b>	<b>Spend to date (to Period 7)</b>	<b>2021/22 Forecast Outturn</b>	<b>2021/22 Forecast Variance</b>
	<b>£m</b>	<b>£m</b>	<b>£m</b>	<b>£m</b>
Concessionary Fares	38.604	20.215	37.772	(0.832)
Bus Services	14.833	8.324	14.782	(0.051)
	<b>2021/22 Original Budget</b>	<b>Spend to date (to Period 7)</b>	<b>2021/22 Forecast Outturn</b>	<b>2021/22 Forecast Variance</b>
	<b>£m</b>	<b>£m</b>	<b>£m</b>	<b>£m</b>
Metro	24.103	13.107	24.530	0.427
Other	4.897	2.544	4.779	(0.118)
COVID-19 Support	(21.944)	(12.233)	(22.363)	(0.419)
Levy	(57.813)	(31.520)	(57.813)	0.000
<b>Total Expenditure</b>	<b>2.680</b>	<b>0.437</b>	<b>1.687</b>	<b>(0.993)</b>
Reserves	(2.680)	(0.437)	(1.687)	0.993

### **Metro**

- 2.16 The estimated LRRRG that Nexus will receive across the year is £21.102m. This is required to cover fare and commercial revenue losses, a shortfall on investment income and some (marginal) Covid related costs in relation to PPE, cleaning materials, IT equipment and licences.
- 2.17 Taking into account these other losses/increased costs, which are currently forecast to be £0.145m (investment income losses) and £0.120m (Covid related costs), this will require fare and commercial revenue of £30.035m to be generated in year, in order to make up the shortfall against the 2021/22 fare and commercial revenue budget.
- 2.18 To the end of P7, £16.612m fare and commercial revenue has been generated, which represents a 60% recovery rate (against an evenly profiled pre-Covid budget). To the extent fare and commercial revenue generated across the year is in excess of £30.035m, LRRRG can be used to cover additional costs to a maximum level set by the DfT.
- 2.19 Nexus has received intelligence from NEPO that the average price of HV Power could be up to 20% higher than budget across 2021/22. NEPO have confirmed that they have now purchased energy requirements for the remainder of the year and Nexus are expecting further information regarding the cost of this to estimate the budget pressure but given the size of this budget, it is likely to be in excess of £1.0m. In the current year, and noting that LRRRG can be used to cover additional costs to a maximum level set by the DfT, it is currently envisaged that this will be accommodated from within the overall Metro operating budget.

### **Concessionary Travel**

- 2.20 In line with government supplementary guidance, bus operators were given notice that from 19 July 2021, concessionary fares would be reimbursed based on the number of services operating, rather than at pre-COVID budgeted levels. To the end of period 7, service levels have been on average around 7% less than pre-COVID and deductions in concessionary fares reimbursement amount to £0.832m. Given the uncertainty around levels of service provision, the forecast for the year at this stage assumes no further deductions although to the extent that services do not recover to pre-COVID levels, further savings in this budget are likely.

### **Bus Services**

- 2.21 Bus commercial revenue to the end of P7 is £1.229m which is £0.446m higher than budget. The LACBSSG required was budgeted to be £0.594m to the end of P7, however as revenue is £0.446m higher than budget, this brings the fare loss support required to £0.148m.
- 2.22 The bus shuttle service to the Nightingale vaccination centre in the Sunderland area ended on 17 October 2021. The costs for this totalled £0.372m and as this service is a direct result of Covid-19 the costs have been claimed from LACBSSG.
- 2.23 Covid costs of £0.004m in relation to IT licences have been identified year to date. In addition, £0.358m has been claimed as a pass-through, on behalf of small operators who do not have access to LACBSSG funding.
- 2.24 This brings the total LACBSSG required to support Bus Services to £0.882m.
- 2.25 Additional scholar's services for the summer term (April to July) cost £0.770m and have been funded from the Department for Education. At this time there are no further additional services arranged for the new school term.
- 2.26 Taxi Card membership continues to be lower than budget with net savings of £0.051m identified to the end of period 7.

### **Other**

- 2.27 Ferry revenue to the end of period 7 is £0.181m which is £0.051m higher than budget but remains £0.042m (19%) lower than pre-covid levels. The MHCLG scheme was available for the first quarter of the financial year and a claim has been submitted to cover losses in this period. Thereafter, any revenue shortfall will be borne by Nexus, which is reflected in the forecast in table 7.
- 2.28 Salary savings from vacancies are currently forecasting a positive variance of £0.140m in 2021/22 which is reflected in the forecast under the category 'Other'.

### **Nexus Revenue Budget 2022/23**

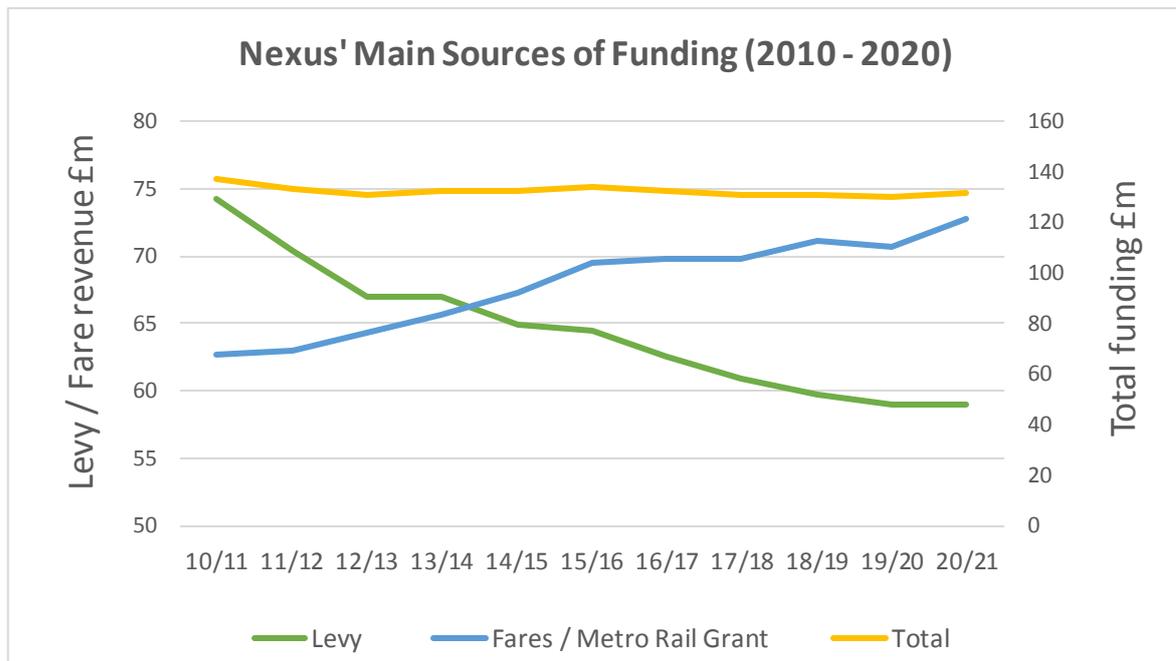
- 2.29 Over the past decade, Nexus' main sources of funding have reduced by £5.1m, from £136.0m to £130.9m between 2010 and 2020 (in real terms, this reduction is estimated at around £45.0m):
- a) The Tyne and Wear transport levy has reduced from £74.2m to £59.0m

(£15.2m or 20%) - had it increased in line with inflation, it would now be more than £100.0m;

b) By contrast, funding for Tyne and Wear Metro has increased, although not by enough to fully compensate for the reduction in the levy. In the decade prior to Covid, Metro fare revenue had grown by £8.6m (or 23%) whilst Metro Rail Grant (MRG)<sup>2</sup> from the DfT had increased by £1.5m (or 6%). Consequently, by 2020, only £3.3m of Nexus' Tyne and Wear transport levy funding was directed towards meeting Metro's operating costs, even though Metro's gross budget is in the order of £115.0m.

2.30 The support for Metro provided by the levy effectively compensates for revenue forgone in the provision of the Gold Card. However, previous estimates show that £3.3m is only around half of what would be required under the 'no better, no worse' requirement for reimbursing third parties i.e. commercial bus operators. Whilst Nexus has maintained non-Metro services during this period, it is fair to say that the relative buoyancy of Metro's funding has been a contributory factor in enabling this to happen.

2.31 The following graph illustrates Nexus' change in funding since 2010:



2.32 As previously indicated, over this time Nexus has not reduced its service output. Moreover, it has had to contend with significant financial pressures on services that are funded in their entirety by the Tyne and Wear transport levy e.g. growth in concessionary fares reimbursement, and secured bus service contractual inflation.

2.33 In terms of Metro, investment in upgrading the infrastructure has led to an increase in certain costs, especially following the introduction of digital assets e.g. new ticket vending machines, gatelines and smartcard technology, a new rail traffic

<sup>2</sup> Revenue grant only

management system (RTMS), and a new radio system. Recently, funding has also been required to invest in a revised Train Crew Agreement, necessary because of the introduction of another replacement asset e.g. the new fleet (although addressing significant attrition in the driver establishment was also a factor). In addition, measures to extend gateline operations to address anti-social behaviour and ticketless travel have recently been introduced.

- 2.34 Against a backdrop of shrinking levy funding and growth in Metro funding (but which has been re-invested to meet increasing cost) Nexus has also:
- Reduced headcount by 20% (a saving of 200 posts, reducing the employee cost base by around £10.0m per annum);
  - Reduced external debt, despite unprecedented investment in its asset base, by £26m (over 40%) since 2010, which has led to a reduction of £2.0m per annum in debt charges;
  - Provided a £3.2m 'rebate' to Tyne and Wear Councils (£2.0m in 2013/14 and £1.2m in 2021/22 in lieu of the levy being frozen (not cut) in those years);
  - Set aside £25.0m to provide the local contribution required by DfT for the new fleet; and
  - Increased usable reserves by over £10.0, since 2014, which are available to support frontline services.

### **Planning for 2022/23**

- 2.35 When the North East Joint Transport Committee (JTC) met on 16 November 2021, Nexus reported that the impact of Covid-19 has been profound. The government advised that Covid-19 funding for Metro operations will be withdrawn at the end of 2021/22 but patronage on the Metro will not have returned to pre-pandemic levels which leads to a major financial challenge.
- 2.36 It was also reported that a range of additional budget pressures have arisen that were not previously factored into the medium term financial planning assumptions. These include inflationary pressures over and above those previously anticipated e.g. increased employers national insurance contributions as a result of the health and social care levy, high voltage power cost increases, the Metrocar fleet maintenance contract, construction materials, general utilities and secured bus contracts. In addition, with interest rates at a record low, investment income is now forecast to be less than previously estimated. Taking these additional pressures into account, including the confirmation from the DfT that the Metro Rail Grant will no longer be indexed (see paragraph 2.41), means that the deficit for 2022/23 is now forecast at £21.2m, an increase of £2.0m, on the £19.2m previously reported.
- 2.37 The budget strategy contained in this report sets out the measures that are proposed in the absence of a positive response to the lobbying for continued Covid-19 funding in order to set a balanced budget next year. The measures include:
- A reduction of £7.5m in the budget used to fund Concessionary bus travel reimbursement in Tyne and Wear;
  - Efficiency savings and additional stretched income targets for Nexus of

£4.0m;

- Use of £5.6m of Nexus' reserves; and
- As a last resort, a levy increase in 2022/23 of 6.75%, or £4.1m year on year increase.

- 2.38 These measures, with additional commentary in respect of each of them set out below, would fully protect the services that Nexus operates which are described in Appendix 2.
- 2.39 There continues to be a significant reduction in concessionary pass holders using the English National Concessionary Travel Scheme (ENCTS), with uptake only recovering to circa 60% at this point. In 2022/23, in accordance with DfT guidance, the reduction in concessionary journeys will require a reduction in concessionary fares reimbursement, which Nexus estimates at £7.5m. Should any commercial bus routes be cut by operators, the budget challenges facing Nexus mean that it will be unable to provide financial support through its secured services budget, something that would have been possible if Nexus was better resourced. In this regard, it is worth noting that the Bus Service Improvement Plan (BSIP) submitted to DfT by Transport North East, made the case for additional subsidy in order to compensate
- 2.40 The proposed measures include the delivery of efficiencies without a cut to services. To balance the budget £2.4m of efficiency savings are included which are funded from a pay freeze in the current year, renegotiating key contracts and containing other cost pressures from within existing budgets are required. In addition to this, a stretch target to achieve additional Metro revenue in 2022/23 (expressed as a percentage of pre-Covid revenue and amounting to an additional £1.6m) has been included as shown within paragraph 2.42.
- 2.41 Since the JTC meeting in November, an additional pressure has arisen in respect of the revenue Metro Rail Grant (MRG) from the Department for Transport (DfT). The previous modelling had assumed an inflationary increase in this grant, in line with prior years, in each of the three years 2022/23 to 2024/25. However, the DfT have confirmed that MRG will no longer be indexed and will be cash flat. The modelling in respect of the fares review which is currently taking place suggests that an RPI+ increase could generate an estimated £0.8m of additional fare revenue. This is £0.4m above the amount of additional fare revenue that was budgeted for in respect the annual fares review meaning that the loss of grant previously expected in 2022/23 can be funded from additional fare revenue. This, i.e. making up the loss of MRG through additional fare revenue, is something that will need to be repeated across the period of the MTFF.
- 2.42 The table below shows Nexus' estimate of Metro fare revenue across the medium term using 2019/20 as the base year. Following the withdrawal of Covid-19 funding, Nexus is not forecasting to return to pre-pandemic levels until 2024/25 despite the impact of successive fares reviews and two major capital interventions.

Table 8: Nexus' estimate of Metro fare revenue to 2025

	<i>Actual</i> <b>19/20</b> <b>£m</b>	<i>Actual</i> <b>20/21</b> <b>£m</b>	<i>Budget</i> <b>21/22</b> <b>£m</b>	<i>Budget</i> <b>22/23</b> <b>£m</b>	<i>Budget</i> <b>23/24</b> <b>£m</b>	<i>Budget</i> <b>24/25</b> <b>£m</b>
Fare Revenue	44.0	13.3	28.0	37.6	40.9	44.5
LRRRG	1.1	31.7	20.8	-	-	-
Impact of New Fleet	-	-	-	-	0.3	1.3
Impact of Metro Flow	-	-	-	-	-	0.5
<b>Total</b>	<b>45.1</b>	<b>45.0</b>	<b>48.8</b>	<b>37.6</b>	<b>41.2</b>	<b>46.3</b>
<b>Total as a % of 19/20</b>	<b>N/A</b>	<b>100%</b>	<b>108%</b>	<b>84%</b>	<b>91%</b>	<b>103%</b>

- 2.43 Nexus is also proposing to underpin the revenue budget in 2022/23 by contributing £5.6m of reserve funding. Further reserves will be required in 2023/24, which at this point will mean the level of reserves earmarked to help underpin the revenue budget will have reduced to £1.5m. This leaves very little scope for addressing any additional budgetary pressures that might arise. It is also not a sustainable long term solution and further efficiencies or increases in the Tyne and Wear Levy may need to be considered in 2023/24 and beyond depending on how patronage numbers recover.
- 2.44 As a last resort, Nexus is seeking a 6.75% or £4.125m increase in the Tyne and Wear transport levy. Considering the financial challenges that the five local authorities in Tyne and Wear are facing, this is a significant financial burden placed on them, bearing in mind that the levy, save for underwriting revenue forgone in connection with Metro's Gold Card concessionary travel scheme has not been used in the past to fund the Tyne and Wear Metro. This proposal will need to be considered in order to set a balanced budget. It would, if accepted, be revised to reflect any new grant funding announcements and any increases in patronage on Metro beyond the latest estimates but is put forward in order to ensure the JTC complies with its legal obligations to set a balanced budget and to allow the constituent authorities to factor this into their budget planning. The proposed levy increase on each of the five constituent Councils is shown in table 6 at paragraph 2.11.
- 2.45 The alternative to an increased levy would be cuts to Nexus services to the value of £4.125m. However, Nexus is not proposing a cut to Metro services as this is considered counterproductive, particularly when significant investment is being made in the new fleet and the removal of the only single line operations on the network (Metro Flow). Modelling shows that operating a service with a reduced frequency would deliver £3.7m of annual savings, however, it would have a major impact on revenue with an estimated loss of £4.0m per year.
- 2.46 This demonstrates that a cut to Metro services would effectively require cuts elsewhere e.g. policing and security, cleaning and potentially maintenance, all of which, together with the incurrence of significant redundancy costs would lead to the closure of the system with a detrimental impact to the region including increased car usage (estimated 12million cars a year) and £8.50 per journey lost to

the local economy.

### Budget 2022/23

2.47 Nexus' 2022/23 budget and its main sources of funding are summarised in the table below and in more detail at Appendix 3, 4 and 5.

Table 9: Nexus Revenue Budget 2022/23

	Gross Exp <sup>3</sup>	Comm Revenue <sup>4</sup>	Govt Grant	Net position
	£m	£m	£m	£m
Concessionary Fares	28.3	(0.1)	-	28.1
Discretionary Concessions	3.3	(0.5)	-	2.8
Metro	113.6	(40.7)	(55.5)	17.4
Ferry	1.9	(0.4)	(0.2)	1.3
Local Rail	0.6	-	(0.3)	(0.3)
Bus Services	18.0	(1.8)	(0.9)	15.3
Bus Infrastructure	3.0	(0.5)	(0.4)	2.1
Public Transport Information	1.5	(0.2)	-	1.3
<b>Total</b>	<b>170.2</b>	<b>(44.2)</b>	<b>(57.3)</b>	<b>68.7</b>
JTC Grant from Levy				(63.1)
<b>Deficit funded from reserves</b>				<b>5.6</b>

As shown above, the proposed levy increase of £4.1m would mean the levy receivable by Nexus in 2022/23 is £63.1m. Assuming the levy is increased, a split of the services which it funds, between Metro and non-Metro is shown in the table below:

Table 10: Split of levy funding between Metro and non-Metro services

2022/23	Gross Exp £m	Comm Revenue £m	Govt Grant £m	Levy £m	Net Budget £m
Non-Metro Services	56.6	(3.5)	(1.8)	(51.3)	-
Metro Services	113.6	(40.7)	(55.5)	(11.8)	5.6
<b>TOTAL</b>	<b>170.2</b>	<b>(44.2)</b>	<b>(57.3)</b>	<b>(63.1)</b>	<b>5.6</b>
<b>Reserves</b>					<b>(5.6)</b>
<b>Budget 2022/23</b>					<b>-</b>

2.48 The previous budget report approved by the JTC in January 2021 identified that the amount of the levy earmarked for Metro services in 2020/21 was £3.3m. As explained in paragraph 2.44, this funding was used to underwrite revenue forgone in connection with Metro's Gold Card concessionary travel scheme. As the table above demonstrates, the proposal contained within this report increases the

<sup>3</sup> Including central support service costs and overheads.

<sup>4</sup> This assumes fare revenue recovers to 83.5% of pre-Covid levels.

amount of levy earmarked for Metro services to £11.8m. This is made up of a combination of the £4.1m proposed increase in the levy in 2022/23, plus an additional £4.4m previously earmarked for concessionary fares. The remaining £3.1m of the planned £7.5m reduction in the concessionary fares budget has been used to balance the non-Metro services budget which as reported to the JTC in previous budget rounds, exhibited a structural, underlying deficit that needed addressing at some point.

2.49 The table above also highlights that the £5.6m of reserve funding being earmarked to underpin the revenue budget in 2022/23, relates entirely to Metro services. This is not a long term sustainable budget strategy.

### **Risks and Opportunities**

2.50 The preparation of the 2022/23 budget gives rise to a number of risks and opportunities which include the following:

- a) The JTC may not approve the levy increase of £4.1m. This would force Nexus to cut non-Metro services as it is unable to balance the budget through a cut to Metro services as mentioned in paragraph 2.45 and 2.46.
- b) The budget makes an allowance for inflation on pay and non-pay. Inflation continues to increase and it is noted that if the allowance for an annual pay award falls below that which is contained within the budget, it may give rise to industrial action and/or additional budgetary pressure. Similarly, an allowance has been made for contractual inflationary increases and other major expenditure linked to market prices including HV power, general utilities and secured bus contracts, however if inflation levels rise above those assumed, Nexus' budget will be under additional pressure. HV power is of particular concern due to the instability of the energy market and the risk that this may result in a significant cost increase.
- c) As described in paragraph 2.39, the budget assumes that Nexus will reduce the concessionary fares reimbursement, meaning that this budget will reduce to around 80% of the pre-Covid level during 2022/23. There is a risk that ENCTS ridership may recover above this point which would put pressure on other budgets given Nexus is statutorily obliged to provide ENCTS reimbursement;
- d) Fare revenue is budgeted to recover to 83.5% of pre-Covid levels. In respect of this challenging target, it should be noted that Nexus' assessment of its ability to generate revenue at this level reflects how successful it has been in attracting customers back to the Metro and the fact that to date, it has outperformed other light rail operators elsewhere. Should Nexus outperform this target, any decision to increase the levy in 2022/23 (and any subsequent increases thereafter) would necessarily be revisited; and
- e) The budget preparation assumes that the government is not forthcoming with Covid-19 funding following the confirmation that this will end on 5 April 2022. If the government responds positively to lobbying and Covid-19 funding is forthcoming, some of the measures proposed by Nexus to

balance its budget may not be required.

### Forecasts 2023/24 and 2024/25

- 2.51 It may be necessary to further increase the Tyne and Wear transport levy in both 2023/24 and 2024/25 given Nexus cannot place reliance on reserves indefinitely. Nexus will be able to use an additional £3.1m of reserves in 2023/24 (£0.5m higher than previously reported due to its improved financial performance in 2021/22) as part of the medium-term financial plan.
- 2.52 The same planning assumptions have been used in compiling the estimate for 2023/24 and 2024/25 in relation to the cost base with the exception of an upward pressure in respect of pensions where advice from the Tyne and Wear Pension Fund has been to provide for an increase in the employer contribution rate. As a result, an increase of 1.5% has been included from April 2023. This represents an optimistic approach when considering the advice provided from the Fund, which was that there might be an upward pressure of between 2.0% and 3.0%.
- 2.53 Notwithstanding the huge uncertainties surrounding recovery from the pandemic, fare revenue is shown as growing to 91% of pre-Covid levels in 2023/24 and 103% of pre-Covid levels in 2024/25 in paragraph 2.42. This reflects the impact of fare increases and the stretch target required to make up the loss of MRG as described in paragraph 2.41. It also includes the impact of major capital interventions as additional revenue is expected to be generated when the new fleet enters passenger service and a ten minute frequency across the Metro network is introduced following the completion of Metro Flow, although cost estimates for running additional services need to be critically examined over the coming months. In addition to this, the forecast for 2023/24 and 2024/25 assumes additional efficiencies will be achieved through a reduction in HV power consumption arising from the introduction of the new fleet.
- 2.54 The redirection of concessionary fares funding to underwrite revenue losses in 2022/23 is a permanent feature of the base budget and therefore continues in 2023/24 and 2024/25. Should the numbers of concessionary passholders increase during 2023/24 and 2024/25, the ENCTS budget will need to be revisited.

*Table 11: 2023/24 forecast Nexus revenue budget*

<b>2023/24</b>	<b>Gross Exp £m</b>	<b>Comm Revenue £m</b>	<b>Govt Grant £m</b>	<b>Levy £m</b>	<b>Net Budget £m</b>
Non-Metro Services	57.5	(3.6)	(1.8)	(51.3)	0.8
Metro Services	120.9	(44.3)	(59.9)	(14.4)	2.3
<b>TOTAL</b>	<b>178.4</b>	<b>(47.9)</b>	<b>(61.7)</b>	<b>(65.7)</b>	<b>3.1</b>
Reserves					(3.1)
<b>Budget 2022/23</b>					-

Table 12: 2024/25 forecast Nexus revenue budget

<b>2024/25</b>	<b>Gross Exp £m</b>	<b>Comm Revenue £m</b>	<b>Govt Grant £m</b>	<b>Levy £m</b>	<b>Net Budget £m</b>
Non-Metro Services	58.2	(3.6)	(1.8)	(52.8)	-
Metro Services	126.1	(49.4)	(61.3)	(15.4)	-
<b>Budget 2022/23</b>	<b>184.3</b>	<b>(53.0)</b>	<b>(63.1)</b>	<b>(68.2)</b>	<b>-</b>

- 2.55 As shown in the tables above, despite various interventions, it will be necessary to propose a further increase to the Tyne and Wear transport levy by 4.0% (amounting to £2.6m) in 2022/23 and 3.75% (amounting to £2.5m) in 2023/24, to enable Nexus' services to be maintained.
- 2.56 In 2023/24, the £2.6m levy increase will be earmarked for Metro services which will take the total levy earmarked for Metro services to £14.4m. Reserves funding of £3.1m in this year will be used to balance the remaining deficit of £2.3m on Metro services and a £0.8m deficit on non-Metro services. In 2024/25, £1.0m of the £2.5m levy increase will be earmarked for Metro services, with the remaining £1.5m earmarked for non-Metro services.

### Transport North East

- 2.57 Since its creation in 2018, the Transport North East (TNE) team has been working at capacity to develop and lead on the delivery of a very broad and ambitious transport programme on behalf of the region. NECA and NTCA together form one of the largest areas in the country by population and geographical size. TNE acts as the strategic transport body that supports both Combined Authorities (via the JTC).
- 2.58 Forecast expenditure on the core budget for TNE in 2021/22 is estimated to be £0.817m compared with the original budget of £0.952m, primarily as a result of vacancies in the team and additional external contributions supporting some posts. When including expenditure on projects, grants and contributions, expenditure totalled £8.017m compared to the original budget of £2.660m. This is due to Covid grants allocated to the JTC and paid to delivery partners (such as Home to School Transport grant and Coronavirus Bus Services Support Grant), Active Travel Fund projects and the additional costs of the Bus Services Improvement Plan and Enhanced Partnership development (£1.208m forecast.) Forecast outturn on the BSIP work is lower than the agreed revised budget for this piece of work, since the scope of what was required has changed following confirmation that the national total available is significantly less than originally communicated. The work will be funded through DfT grant (£1.415m) and the contribution from JTC unallocated reserves previously agreed. In 2022/23, remaining funding will be used to meet the costs of the first year of operation of the EP, including staff, technical advice and legal support required to manage and administer the new arrangements.
- 2.59 The TNE core budget is funded through contributions from the Transport Levies which are retained to support JTC activity and a topslice of the Local Transport

Plan Integrated Transport Block grant which is awarded to the JTC plus external contributions to fund specific posts and external grants for specific programmes and projects. Following initial discussions with constituent local authorities, at this point in time the initial budget proposed for 2022/23 assumes that contributions from the levies and LTP made by councils are held at the same level as 2021/22. Reductions in historic financing costs funded from the retained levies has enabled an increase of £0.097m to be made to the TNE budget with no additional contributions required from constituent councils. An initial budget of £0.950m will allow business-as-usual activity to continue during 2022/23 but will not address existing issues around capacity and short-term funding streams (some of which, namely Transforming Cities Fund and Active Travel Fund, are currently due to end on 31 March 2023). The ability of the team to attract future funding through competitive bidding processes will be limited.

2.60 The draft budget for employee costs includes provision of £0.116m to make permanent three posts which were previously fixed-term positions and where there is an ongoing requirement for the work provided. The JTC is asked to agree to this change. It is anticipated that external funding will be available to meet a proportion of the costs in 2022/23 and potentially in future years, but this addition to the core budget underwrites the costs of the posts in the event external funding is not forthcoming.

The draft budget on the employee costs line for 2022/23 is slightly lower than the original budget for 2021/22 as certain posts are now shown in the Metro Futures Planning Studies and Rail Development lines. Higher expenditure than in the current year is forecast for TCF Programme Management due to the likely timing of work in finalising grant funding agreements and business cases review (including economic appraisal and legal support), as well as a higher volume of claims and quarterly monitoring reports to be managed.

2.61 *Table 13: Summary of TNE budget 2022/23:*

	<b>2021/22 Original Budget</b>	<b>Spend to Date to 31 October 2021</b>	<b>2021/22 Forecast Outturn</b>	<b>2021/22 Forecast Variance</b>	<b>2022/23 Budget</b>
	<b>£m</b>	<b>£m</b>	<b>£m</b>	<b>£m</b>	<b>£m</b>
Employee costs	0.758	0.331	0.656	(0.102)	0.709
Transport Plan / Strategy Work	0.070	0.001	0.051	(0.019)	0.060
Research and Development	0.100	0.000	0.042	(0.058)	0.100
Travel and Miscellaneous	0.013	0.005	0.017	0.004	0.021
ICT / Equipment / Accommodation	0.011	0.003	0.006	(0.005)	0.011
Zero Emission Bus Regional Areas (ZEBRA)	0.000	0.000	0.045	0.045	0.000

	2021/22 Original Budget	Spend to Date to 31 October 2021	2021/22 Forecast Outturn	2021/22 Forecast Variance	2022/23 Budget
	£m	£m	£m	£m	£m
Contingency	0.000	0.000	0.000	0.000	0.049
<b>Total Expenditure</b>	<b>0.952</b>	<b>0.340</b>	<b>0.817</b>	<b>(0.135)</b>	<b>0.950</b>
LTP Funding	(0.500)	(0.292)	(0.500)	0.000	(0.500)
Retained Transport Levy	(0.187)	(0.187)	(0.187)	0.000	(0.284)
External Funding for specific posts	(0.216)	(0.061)	(0.155)	0.061	(0.166)
<b>Total Income</b>	<b>(0.903)</b>	<b>(0.540)</b>	<b>(0.842)</b>	<b>0.061</b>	<b>(0.950)</b>
<b>Net Expenditure to be funded from Reserves</b>	<b>0.049</b>	<b>(0.200)</b>	<b>(0.025)</b>	<b>(0.074)</b>	<b>0.000</b>
<b>Contribution to/(from) Reserves</b>					
JTC unallocated reserves	0.000	0.200	0.025	0.074	0.000
Regional Transport Team reserves	(0.005)	0.000	0.000	0.000	0.000
Go Smarter legacy funds – Transport Plan	(0.044)	0.000	0.000	0.000	0.000

Table 14: Summary of TNE Grants and Contributions Forecast Outturn 2021/22 and Initial Budget 2022/23:

	2021/22 Original Budget	Spend to Date to 31 October 2021	2021/22 Forecast Outturn	2021/22 Forecast Variance	2022/23 Initial Budget
	£m	£m	£m	£m	£m
Go Ultra Low - Revenue	0.000	0.002	0.002	0.002	0.000
TCF Programme Management	0.361	0.085	0.259	(1.02)	0.621
Covid-19 Grants	0.000	3.734	3.734	3.734	0.000
Active Travel Planning	0.000	0.320	1.192	1.192	0.796
BSIP / Enhanced Bus Partnership	0.160	0.078	1.208	1.048	0.280

	2021/22 Original Budget	Spend to Date to 31 October 2021	2021/22 Forecast Outturn	2021/22 Forecast Variance	2022/23 Initial Budget
	£m	£m	£m	£m	£m
Metro Futures Planning Studies	1.187	0.029	0.581	(0.606)	1.136
Rail Development	0.000	0.077	0.224	0.224	0.236
<b>Total Expenditure</b>	<b>1.708</b>	<b>4.325</b>	<b>7.200</b>	<b>5.492</b>	<b>3.069</b>
ERDF grant – Go Ultra Low	0.000	(0.002)	(0.002)	(0.002)	0.000
TCF grant	(0.361)	(0.085)	(0.259)	(0.102)	(0.621)
Covid-19 grants	0.000	(3.734)	(3.734)	(3.734)	0.000
ATF Revenue grant	0.000	(0.320)	(1.192)	(1.192)	(0.796)
DfT Bus Capacity grant	0.000	(0.078)	(1.208)	(1.208)	(0.207)
Metro Futures Planning Studies – funded by Nexus contribution	(1.187)	(0.029)	(0.581)	0.606	(1.136)
Rail Administration Grant (via Nexus)	0.000	(0.077)	(0.256)	(0.256)	(0.236)
<b>Total Grants and Contributions</b>	<b>(1.548)</b>	<b>(4.325)</b>	<b>(7.232)</b>	<b>(5.684)</b>	<b>(2.996)</b>
<b>Net Expenditure from Grants and Contributions</b>	<b>0.160</b>	<b>0.000</b>	<b>(0.032)</b>	<b>(0.192)</b>	<b>0.073</b>
<b>Contribution to/(from) Reserves</b>					
JTC unallocated reserves	(0.160)	0.000	0.032	0.192	(0.073)

## Tyne Tunnels

- 2.62 The Tyne Tunnels are accounted for as a ring-fenced account within the JTC budget, meaning that all costs relating to the tunnels are wholly funded from toll income and Tyne Tunnels reserves, with no call on the levy or external government funding.
- 2.63 The JTC receives all toll income from the vehicle tunnels and a payment under the contract with TT2 is determined based on traffic levels. The balance retained by the JTC is to meet other costs associated with the Tyne Tunnels, primarily interest and

principal repayments on borrowing taken out to fund the New Tyne Crossing project and client costs associated with the management of the contract with the concessionaire.

- 2.64 The 2021/22 budget included an increase in tolls for Class 2 vehicles to £1.90 in line with inflation as measured by the Retail Price Index (RPI) – a year on year increase of £0.10.
- 2.65 Traffic flows through the Tyne Tunnels are reviewed daily by TT2 and TNE. Following a significant reduction in traffic using the tunnels in March 2020 during the first Covid-19 lockdown, for the rest of 2020 and early 2021, traffic levels were around 60/70% of normal expected levels. This meant that for most of the first 18 months of the pandemic traffic and toll revenue was significantly below pre-pandemic levels. TT2 has borne the loss from the reduced toll income rather than the JTC, as the JTC share of the income is protected by the nature of the Project Agreement which sees JTC retain the first share of traffic income while TT2 takes its income from the additional traffic over that level. This means that TT2 takes the main financial risk on any reduction in traffic levels.
- 2.66 Following a strong recovery during summer 2021, traffic levels dropped back slightly to around 95% of pre-pandemic levels. This seems to have been a direct result of the fuel shortage and increase in fuel prices which has resulted in reduced journey numbers.
- 2.67 The Tyne Pass Barrierless Scheme went live on 8 November 2021. At the time of writing this report, it is too early to tell whether this has had any impact on traffic levels (which are also influenced by fuel prices and work from home recommendations by government). However, delays experienced during rush hour on the first day have reduced significantly since as drivers become familiar with the new layout.
- 2.68 The updated forecast outturn and budget for 2022/23 is set out below. This assumes the 20p increase in class 3 vehicle tolls is agreed to increase the toll charge to £3.90 and the additional revenue generated is used to make revenue provision for the repayment of debt. This is a year-on-year increase of 5.4% but will be the first time that the class 3 tolls have been increased since August 2020 and is driven by current levels of inflation, which dictates and triggers necessary increases. The position in relation to the tolls for Class 2 vehicles will be kept under review and proposals brought to the Tyne and Wear Sub Committee once an increase is possible. This may be during 2022/23 as inflation levels are currently higher than they have been for many years.

2.69 *Table 15: Tyne Tunnels Budget 2021/22 and 2022/23 and initial forecast to 2023/24:*

	<b>2021/22 Original Budget</b>	<b>Spend to Date to 31 October 2021</b>	<b>2021/22 Forecast Outturn</b>	<b>2021/22 Forecast Variance</b>	<b>2022/23 Initial Budget</b>	<b>2023/24 Initial Budget</b>
	<b>£m</b>	<b>£m</b>	<b>£m</b>	<b>£m</b>	<b>£m</b>	<b>£m</b>
Tolls Income <sup>5</sup>	(30.004)	(19.053)	(29.046)	0.958	(32.715)	(35.127)
TT2 Contract	21.707	12.374	21.597	(0.110)	24.322	26.109
Employees	0.093	0.061	0.110	0.017	0.142	0.142
Pensions	0.054	0.025	0.050	(0.004)	0.050	0.052
Premises	0.021	0.002	0.021	0.000	0.014	0.015
Support Services	0.129	0.117	0.155	0.026	0.155	0.155
Supplies & Services	0.095	0.020	0.086	(0.009)	0.195	0.198
Financing Charges	8.195	0.000	7.333	(0.862)	8.140	8.761
Interest /Other Income	(0.050)	(0.008)	(0.065)	(0.015)	(0.065)	(0.065)
Repayment from TWITA for temporary use of reserves	(0.240)	(0.240)	(0.240)	0.000	(0.240)	(0.240)
<b>(Surplus) /Deficit on Tyne Tunnels revenue account</b>	<b>0.000</b>	<b>(6.702)</b>	<b>0.001</b>	<b>0.001</b>	<b>(0.002)</b>	<b>(0.000)</b>

### **JTC Reserves**

2.70 The JTC holds reserves to fund future activity and to manage financial risk associated with its activities. A summary of the reserves held at 1 April 2021 and the forecast position at 31 March 2022 and 31 March 2023 is shown in the table below. Reserves are forecast to reduce to 31 March 2022 as a result of the application of funding held in the Tyne Tunnels reserve to fund works on the Tyne Pedestrian and Cycle Tunnels in 2021/22, and the use of £1.2m reserves held on behalf of Nexus to fund the levy 'rebate' to Tyne and Wear Councils in 2021/22. Reserves are forecast to reduce further in 2022/23 as funds transferred from Nexus in 2020/21 and 2021/22 to fund work on Metro and Local Rail studies is completed. As set out in the capital programme report, £5.0m reserves is forecast to be drawn

<sup>5</sup> Toll Income includes an assumed inflation increase in tolls for class 3 vehicles of £0.20 from April 2022.

down in 2022/23 to support the Metro Fleet Replacement. The level of reserves forecast at 31 March 2023 is considered to be prudent in order to manage risk associated with the activities of the JTC, taking into account that separate reserves are held by Nexus.

Table 16: Summary of JTC Reserves

2.71

	<b>1 April 2021</b>	<b>Forecast 31 March 2022</b>	<b>Movement in Year 2021/22</b>	<b>Forecast 31 March 2023</b>	<b>Movement in Year 2022/23</b>
	<b>£m</b>	<b>£m</b>	<b>£m</b>	<b>£m</b>	<b>£m</b>
JTC Unallocated Reserve	(0.833)	(0.776)	0.057	(0.076)	0.000
Tyne Tunnels	(9.222)	(8.022)	1.200	(8.022)	0.000
Metro Reinvigoration	(9.271)	(8.071)	1.200	(8.071)	0.000
Metro Fleet Renewal	(10.127)	(10.127)	0.000	(5.127)	5.000
Go Smarter Legacy (within Grants Unapplied)	(0.044)	(0.044)	0.000	(0.044)	0.000
Regional Transport Team	(0.141)	(0.141)	0.000	(0.141)	(0.141)
Metro and Local Rail Studies	(0.754)	(1.360)	(0.606)	(0.227)	1.133
<b>Total JTC Reserves</b>	<b>(30.392)</b>	<b>(28.541)</b>	<b>1.851</b>	<b>(21.708)</b>	<b>5.992</b>

### 3. Reasons for the Proposals

3.1 The proposals are presented in this report to enable the JTC to set its budget for 2022/23.

### 4. Alternative Options Available

4.1 Option 1 – The North East Joint Transport Committee may accept the recommendations set out in the report.

4.2 Option 2 – The North East Joint Transport Committee may not accept the recommendations set out in the report.

4.3 Option 1 is the recommended option. If the recommendations in the report are not agreed, a special meeting of the JTC would be urgently required in order to agree 2021/22 Transport Levies before the statutory deadline of 15 February.

### 5. Next Steps and Timetable for Implementation

5.1 The NTCA Cabinet and NECA Leadership Board will issue the transport levies to their constituent authorities on behalf of the Joint Transport Committee, and this will be presented for agreement at meetings on 25 January and 1 February respectively.

## **6. Potential Impact on Objectives**

- 6.1 The budgets presented in this report are aligned to the achievement of the Transport policy objectives of the Authority. They allow a balanced budget to be established in 2022/23 and include a strategy to address the significant financial challenges caused by the ongoing impact of the pandemic and where Government support is being withdrawn in April 2022.

## **7. Financial and Other Resources Implications**

- 7.1 The financial and other resource implications are set out in the body of the report.

## **8. Legal Implications**

- 8.1 The JTC must approve the transport budget and levies unanimously. The NECA Leadership Board and NTCA Cabinet must agree to issue their transport levies by 15 February preceding the financial year to which they relate. The Newcastle upon Tyne, North Tyneside and Northumberland Combined Authority (Establishment and Functions) Order 2018 specifies that this function is exercisable only by the JTC.

## **9. Key Risks**

- 9.1 Appropriate risk management arrangements are put in place in each budget area by the delivery agencies responsible. Reserves are maintained to help manage financial risk to the authority.
- 9.2 The JTC must approve the transport budget and levies unanimously. Despite mitigations including briefings and consultation with all constituent authorities particularly in Tyne and Wear, there remains a risk that it is not possible to achieve unanimous agreement at this meeting.
- 9.3 Should the proposals for the levies not be agreed unanimously at this meeting, a special meeting of the JTC would be required to consider revised proposals. Without an increase in the Tyne and Wear levy, the approach to balancing the Nexus budget in 2022/23 would involve reductions in non-Metro services, namely secured bus services.
- 9.4 Under the Transport Levying Bodies Regulations 1992, the two combined authorities are required to issue a levy before 15 February preceding the commencement of the financial year in respect of which it is issued. This is to enable constituent local authorities to be able to include the levy amounts in their budgets for the new financial year. Should a special meeting of the JTC be required after 18 January in order to reach a position of unanimous agreement on the levies, special meetings of the NECA Leadership Board and NTCA Cabinet would also be required before 15 February in order for the Combined Authorities to formally determine to issue the levies.
- 9.5 Bus operators are in an extremely difficult financial position as a result of the Covid-19 pandemic and the impact on passenger numbers. The planned withdrawal of Government recovery funding from the end of the current financial year means bus operators may make changes to services from April. The risk of service reductions

is also exacerbated by the planned reinstatement of the link between usage and reimbursement for concessionary fares as set out in section 2.39, as ENCTS pass usage is forecast to remain well below pre-pandemic levels. This will be a particular challenge in the Tyne and Wear area, where savings on the ENCTS budget will be required to partially fund the shortfall in the Metro budget next year and beyond.

## **10. Equality and Diversity**

10.1 There are no equality and diversity implications arising from this report.

## **11. Crime and Disorder**

11.1 There are no crime and disorder implications arising from this report.

## **12. Consultation/Engagement**

12.1 The NECA Constitution requires that consultation on budget proposals prepared in its role as Accountable Body for the JTC be undertaken at least two months prior to the budget being agreed. The draft proposals have been subject to consultation with the members of the JTC Overview and Scrutiny Committee, JTC Audit Committee, the Tyne and Wear Sub Committee and constituent councils.

12.2 The JTC Overview and Scrutiny members discussed the draft budget proposals in its meeting on 14 October (inquire) and in an online briefing meeting, accessible to the public via YouTube, on 16 December. As part of their discussions, Members recognised the current forecasts of deficits in the Nexus budget arising from the removal of emergency Covid-19 support from April 2022 resulted in a serious position for the JTC and a set of stark choices around levy increases.

12.3 Members expressed concerns about the impact of any reduction in public transport services on the green agenda, noting that this was a priority for the authority which must be taken into account in making any decisions.

12.4 Members also requested further engagement on the impact of any proposals for reductions in funding to bus operators as a result of lower concessionary pass usage, and how this would impact on services provided.

12.5 At the 16 December briefing meeting of the Committee, Members noted the use of reserves to balance Nexus' budget in 2022/23 and 2023/24 and discussed the importance of a longer-term funding strategy by the JTC.

## **13. Other Impact of the Proposals**

13.1 There are no other impacts arising from this report.

## **14. Appendices**

14.1 Appendix 1 – Transport Levy Arrangements

Appendix 2 – Nexus Services

Appendix 3 – Nexus Summary Revenue Budget Requirement 2022/23

Appendix 4 – Nexus Summary Revenue Budget Requirement 2021/22 v 2022/23  
Appendix 5 – Detailed Nexus Revenue Budget 2022/23

## **15. Background Papers**

- 15.1 Budget Proposals 2022/23 – JTC Report 16 November 2021 ([Public Pack](#))[Agenda Document for North East Joint Transport Committee, 16/11/2021 14:30 \(northeastca.gov.uk\)](#)

## **16. Contact Officers**

- 16.1 Eleanor Goodman, NECA Finance Manager,  
[eleanor.goodman@northeastca.gov.uk](mailto:eleanor.goodman@northeastca.gov.uk), 0191 433 3860

## **17. Sign off**

- The Proper Officer for Transport:
- Head of Paid Service:
- Monitoring Officer:
- Chief Finance Officer:

## **18. Glossary**

CBSSG – Coronavirus Bus Services Support Grant

DfT – Department for Transport

ENCTS – English National Concessionary Travel Scheme

JTC – Joint Transport Committee

LRRRG – Light Rail Revenue Restart Grant

LTP – Local Transport Plan

MHCLG – Ministry of Housing, Communities and Local Government

MRG – Metro Rail Grant

NECA – North East Combined Authority

NTCA – North of Tyne Combined Authority

RPI – Retail Price Index

TCF – Transforming Cities Fund

TfN – Transport for the North

TNE – Transport North East

TT2 – TT2 Ltd, Tyne Tunnels Concessionaire

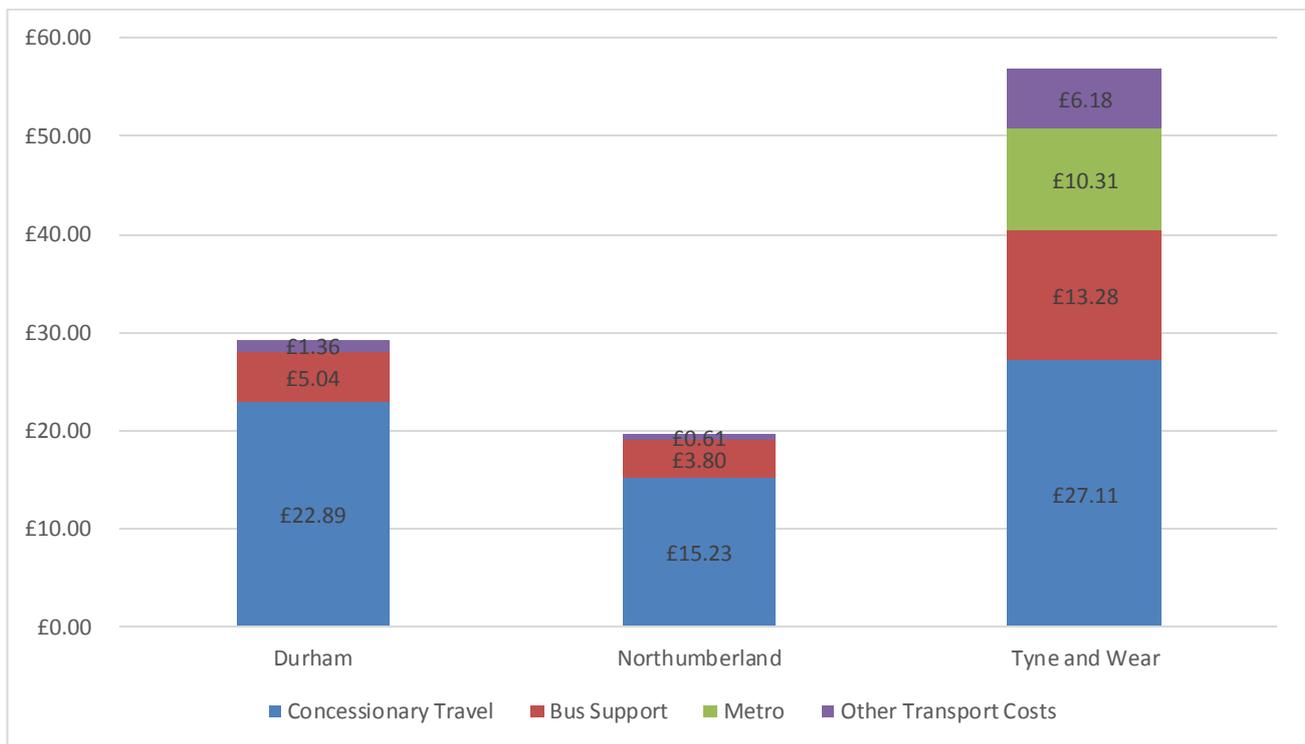
## **Appendix 1 – Transport Levy Arrangements**

### **Background to Levy Arrangements**

Public Transport has traditionally been seen as a county-wide level service, due to the wider geographic nature of transport services. County-wide precepts for Transport costs were replaced in 1990 with levying arrangements, reflecting Government decisions about how public transport grant support was to be provided, i.e. within the Revenue Support Grant paid to metropolitan districts rather than directly to PTAs. The levying arrangements which specified a population apportionment were set out in the Transport Levying Bodies Regulations 1992, now amended by the Transport Levying Bodies (Amendment) Regulations 2015. The regulations reflected the principle that all residents in a county area should contribute equally to access to transport services. In recent years concessionary travel costs have also been classified by MHCLG and DfT as a county-wide level service.

In establishing Combined Authorities with levying powers, Government required population to be used as the basis for levy apportionment. The JTC area, unlike other Combined Authority areas, includes three county areas with very different levels of cost and different levels of grant funding. The difference in costs relates particularly to the cost of concessionary travel reimbursement, which is considerably higher in Tyne and Wear due to the high levels of travel on an urban transport network as well as higher levels of historic public transport borrowing costs. Both of these items are reflected in higher grants historically paid to Tyne and Wear authorities within revenue support grant. It was not therefore possible to have a single transport levy covering the whole JTC area and the amended levy arrangements established three separate levies through legislation: one for Durham County Council, one for Northumberland County Council and one for Tyne and Wear. The difference in transport costs and levies between the three areas can be seen in the chart below:

#### **Chart 1: JTC Levies per head of population – 2022/23 Proposed Levies**



The costs per head of population in Tyne and Wear are higher because they reflect a significantly higher level of concessionary travel activity and the support for secured bus services to provide accessible transport schemes across the county. 'Other' Transport costs also includes capital financing costs relating to transport schemes which are not included in the other levies. In 2022/23, due to the deficit forecast on Metro arising from passenger numbers not yet having recovered to pre-pandemic levels and the cessation of government covid support, there is a significant contribution required from the levy, in contrast to previous years when the levy contribution to Metro was to meet the costs of the Gold Card.

### Apportionment on Population basis in Tyne and Wear

Under the Transport Levying Bodies Regulations, the measure of population which must be used to apportion the Tyne and Wear Transport levy between the constituent authorities is the total resident population at the relevant date of the area of each Authority concerned (the relevant date being 30 June in the financial year which commenced prior to the levying year).

For the 2022/23 levy, this is the 2020 Mid-Year estimates published by the Office for National Statistics (ONS). The population estimates for 2019 and 2020 are set out in the table below. The population estimates for all five authorities have changed by different proportions:

	2019 MYE	2020 MYE	Change	
	People	People	People	% (increase/-decrease)
Gateshead	202,055	201,950	(105)	(0.05)%

Newcastle	302,820	306,824	4,004	1.32%
North Tyneside	207,913	208,871	958	0.46%
South Tyneside	150,976	151,133	157	0.10%
Sunderland	277,705	277,846	141	0.05%
<b>Total Tyne &amp; Wear</b>	<b>1,141,469</b>	<b>1,146,624</b>	<b>5,155</b>	<b>0.45%</b>

Apportioning the proposed levy of £65.225m gives the following figures for Tyne and Wear:

	2021/22	2022/23	Change from 2021/22	
	£	£	£	%
Gateshead	10,815,502	11,487,800	672,298	6.22
Newcastle	16,209,202	17,453,495	1,244,293	7.68
North Tyneside	11,129,066	11,881,498	752,432	6.76
South Tyneside	8,081,370	8,597,108	515,738	6.38
Sunderland	14,864,860	15,805,099	940,239	6.33
<b>Total Tyne &amp; Wear</b>	<b>61,100,000</b>	<b>65,225,000</b>	<b>4,125,000</b>	<b>6.75</b>

#### Appendix 2 – Nexus Services

- **Statutory Concessionary Travel** – comprising the net costs of the English National Concessionary Travel Scheme (ENCTS) in Tyne and Wear, which is a statutory obligation placed upon Nexus as the Travel Concession Authority (TCA). Expenditure is dependent upon the numbers of passengers using the Scheme, the fare that would have been paid (to the bus operator) if the Scheme did not exist and an estimate of the additional costs of meeting the increased demand caused by the existence of the Scheme. TCAs and bus operators utilise DfT guidance in determining the value of payments due but, in essence, Nexus has no control over this budget.
- **Discretionary Concessionary Travel** – comprising the discretionary add-ons to the ENCTS (the all-day disabled pass, the companion pass, post 23:00 boardings, and pre 09:30 boardings for the purposes of attending medical appointments), the Under 16 Scheme and Teen Travel.
- **Metro** – comprising operations (train control, train crew, cleaning security, fleet engineering, customer services and track access), infrastructure repairs and maintenance and planning studies relating to potential future extensions. The cost of the Metro concessionary travel Scheme (Gold Card) also forms part of this budget. Costs are offset by central and local government grants, fare revenue and other commercial income.

- **Ferry** – comprising staffing, fuel, maintenance, cleaning and security.
- **Local Rail** – comprising the cost of Nexus' involvement in the franchise management arrangements of Northern Rail and Trans Pennine Express. This includes servicing the North East Rail Management Unit on behalf of the JTC.
- **Bus Services** – mainly comprising secured bus services which necessarily involves the following types of service provision:
  - All day services
  - Scholars services
  - Works/Early Morning services
  - Evenings and weekend extensions
  - Route diversions
  - Taxibus and Community Transport
- **Bus Infrastructure** – comprising staffing, cleaning, maintenance and security of bus interchanges, stations and shelters.
- **Public Transport Information** – comprising website design and maintenance, printed material including Bus, Metro and Ferry timetables (including bus stop liners), call handling and the provision of electronic information for journey planning.

### Appendix 3 – Nexus Summary Revenue Budget Requirement 2022/23

#### Revenue Budget 2022/23

	Direct Costs	External Income	Net Costs	Net Indirect	Grants	Loan Interest	Capital Adjustment	2022/23 Net
	£m	£m	£m	£m	£m	£m	£m	£m
ENCTS	27.432	-	0.893	(0.063)	-	-	-	28.262
Discretionary CT	3.056	(0.440)	0.223	(0.016)	-	-	-	2.823
Metro	97.368	(39.625)	15.134	(1.068)	(27.665)	1.127	(27.875)	17.396
Ferry	1.370	(0.338)	0.519	(0.037)	-	0.015	(0.236)	1.293
Local Rail	0.238	-	0.299	(0.021)	(0.252)	0.015	-	0.279
Bus Services	16.104	(1.721)	1.609	(0.114)	(0.891)	0.245	(0.005)	15.227
Bus Infrastructure	2.372	(0.440)	0.628	(0.045)	-	0.009	(0.366)	2.158
Public Transport Information	0.545	(0.172)	0.950	(0.067)	-	0.031	-	1.287
<b>Total requirement</b>	<b>148.485</b>	<b>(42.736)</b>	<b>20.255</b>	<b>(1.431)</b>	<b>(28.808)</b>	<b>1.442</b>	<b>(28.482)</b>	<b>68.725</b>
<b>JTC Grant (levy)</b>								<b>(63.125)</b>
<b>Deficit</b>								<b>5.600</b>

## Appendix 4: Nexus Summary Revenue Budget Requirement 2021/22 v 2022/23

### Revenue Budget 2021/22 v 2022/23

	2021/22				2022/23			
	Gross Exp £m	Comm Rev £m	Govt Grant £m	Net £m	Gross Exp £m	Comm Rev £m	Govt Grant £m	Net £m
ENCTS	35.744	(0.034)	-	35.710	28.325	(0.063)	0.000	28.262
Discretionary CT	3.242	(0.348)	-	2.894	3.279	(0.456)	0.000	2.823
Metro	110.401	(30.264)	(56.034)	24.103	113.629	(40.693)	(55.540)	17.396
Ferry	1.696	(0.217)	(0.201)	1.278	1.904	(0.375)	(0.236)	1.293
Local Rail	0.523	(0.011)	(0.252)	0.260	0.552	(0.021)	(0.252)	0.279
Bus Services	17.119	(1.390)	(0.896)	14.833	17.958	(1.835)	(0.896)	15.227
Bus Infrastructure	3.015	(0.449)	(0.412)	2.154	3.009	(0.485)	(0.366)	2.158
Public Transport Info	1.409	(0.204)	-	1.205	1.526	(0.239)	0.000	1.287
<b>Total requirement</b>	<b>173.149</b>	<b>(32.917)</b>	<b>(57.795)</b>	<b>82.437</b>	<b>170.182</b>	<b>(44.167)</b>	<b>(57.290)</b>	<b>68.725</b>
<b>JTC grant from levy<sup>6</sup></b>				(57.813)				(63.125)
<b>Deficit before Covid support</b>				<b>24.624</b>				<b>5.600</b>
<b>Projected Covid support</b>				(21.944)				-
<b>Deficit</b>				<b>2.680</b>				<b>5.600</b>

<sup>6</sup> In 2021/22, the levy was temporarily reduced by £1.2m to reflect the transfer of a planning studies budget.

## Appendix 5: Nexus Detailed 2022/23 budget

Service Area	Direct Costs £m	External Income £m	Indirect £m	Grants £m	Loan Interest £m	Asset Financing £m	Net £m
Statutory CT	27.432	-	-	-	-	-	27.432
<b>Statutory CT</b>	<b>27.432</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>27.432</b>
Discretionary CT	3.056	(0.440)	-	-	-	-	2.616
<b>Discretionary CT</b>	<b>3.056</b>	<b>(0.440)</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>2.616</b>
<b>METRO</b>							
Metro Farebox	0.785	(37.637)	-	-	-	-	(36.852)
PFN Income	-	(0.562)	-	-	-	-	(0.562)
Car Park Income	-	(0.193)	-	-	-	-	(0.193)
Ticketing & Gating	0.842	-	-	-	-	-	0.842
Automatic Fare Collection	1.523	-	-	-	-	-	1.523
<b>Fare Collection &amp; Revenue</b>	<b>3.150</b>	<b>(38.392)</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>(35.242)</b>
Contracts and Commercial	14.296	(1.222)	-	-	-	-	13.074
Performance, Planning and Resources	1.143	-	-	-	-	-	1.143
Service Delivery	2.548	-	-	-	-	-	2.548
Operations Delivery	15.160	-	-	-	-	-	15.160
<b>Metro Operations</b>	<b>33.148</b>	<b>(1.222)</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>31.926</b>
MMA Management	7.574	-	-	-	-	-	7.574
<b>MMA</b>	<b>7.574</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>7.574</b>
Metro Insurance & Claims	1.666	-	-	-	-	-	1.666
Metro Rates	1.664	-	-	-	-	-	1.664
Metro Utilities	0.389	-	-	-	-	-	0.389
Metro Marketing	0.747	-	-	-	-	-	0.747

Metro Customer Relations	0.042	-	-	-	-	-	0.042
Metro Depreciation	28.996	-	-	-	-	-	28.996
<b>Metro - Other</b>	<b>33.505</b>	-	-	-	-	-	<b>33.505</b>
Metro HV Power	8.356	-	-	-	-	-	8.356
Metro Health & Safety	1.584	-	-	-	-	-	1.584
Planning & Performance	0.724	-	-	-	-	-	0.724
Engineering	0.234	-	-	-	-	-	0.234
Buildings & Facilities	2.849	-	-	-	-	-	2.849
Civils & Structures	2.227	-	-	-	-	-	2.227
Rail Management & Administration	0.099	-	-	-	-	-	0.099
Permanent Way	1.642	(0.012)	-	-	-	-	1.630
Power Supplies	0.777	-	-	-	-	-	0.777
Signalling	1.287	-	-	-	-	-	1.287
Stores	0.180	(0.001)	-	-	-	-	0.179
Capital Delivery	0.026	-	-	-	-	-	0.026
Track Renewal	(0.000)	-	-	-	-	-	(0.000)
Renewals	0.004	-	-	-	-	-	0.004
<b>Metro Infrastructure</b>	<b>19.991</b>	<b>(0.013)</b>	-	-	-	-	<b>19.978</b>
<b>Metro</b>	<b>97.367</b>	<b>(39.626)</b>	-	-	-	-	<b>57.741</b>
Ferry	1.370	(0.338)	-	-	-	-	1.032
<b>Ferry</b>	<b>1.370</b>	<b>(0.338)</b>	-	-	-	-	<b>1.032</b>
Local Rail	0.238	-	-	-	-	-	0.238
<b>Local Rail</b>	<b>0.238</b>	-	-	-	-	-	<b>0.238</b>
Contract Management	0.254	-	-	-	-	-	0.254
Network Management	0.192	-	-	-	-	-	0.192
TaxiCard	0.255	(0.028)	-	-	-	-	0.227

Secured Bus Services	15.404	(1.693)	-	-	-	-	13.711
<b>Bus Services</b>	<b>16.104</b>	<b>(1.721)</b>	-	-	-	-	<b>14.383</b>
Bus Infrastructure	2.373	(0.439)	-	-	-	-	1.934
<b>Bus Infrastructure</b>	<b>2.373</b>	<b>(0.439)</b>	-	-	-	-	<b>1.934</b>
Information	0.545	(0.172)	-	-	-	-	0.373
<b>Public Transport Information</b>	<b>0.545</b>	<b>(0.172)</b>	-	-	-	-	<b>0.373</b>
<b>INDIRECT</b>							
Pensions & Provisions	-	-	2.921	-	-	-	2.921
Investment Income	-	-	(0.115)	-	-	-	(0.115)
Board	-	-	1.228	-	-	-	1.228
<b>Central Other</b>	-	-	<b>4.033</b>	-	-	-	<b>4.033</b>
Media & Communications	-	-	0.425	-	-	-	0.425
Print & Distribution	-	-	0.202	-	-	-	0.202
Marketing	-	-	0.395	-	-	-	0.395
Customer Services	-	-	1.102	-	-	-	1.102
<b>Customer Services</b>	-	-	<b>2.125</b>	-	-	-	<b>2.125</b>
Human Resources	-	-	0.757	-	-	-	0.757
Learning & Development	-	-	2.120	-	-	-	2.120
Corporate Planning	-	-	1.326	-	-	-	1.326
<b>People &amp; Culture</b>	-	-	<b>4.202</b>	-	-	-	<b>4.202</b>
Admin	-	-	0.162	-	-	-	0.162
Legal	-	-	0.432	-	-	-	0.432
Finance & Audit	-	-	1.470	-	-	-	1.470
Procurement	-	-	0.274	-	-	-	0.274

Estates	-	-	0.695	-	-	-	0.695
ICT	-	-	3.933	-	-	-	3.933
<b>Finance &amp; Resources</b>	-	-	<b>6.967</b>	-	-	-	<b>6.967</b>
ICT Projects	-	-	0.138	-	-	-	0.138
ISTP	-	-	0.226	-	-	-	0.226
<b>Major Projects</b>	-	-	<b>0.365</b>	-	-	-	<b>0.365</b>
Health & Safety	-	-	1.132	-	-	-	1.132
<b>Health &amp; Safety</b>	-	-	<b>1.132</b>	-	-	-	<b>1.132</b>
<b>Indirect</b>	-	-	<b>18.824</b>	-	-	-	<b>18.824</b>
Loan Charges	-	-	-	-	1.442	-	1.442
Released from Capital Reserves	-	-	-	-	-	(1.176)	(1.176)
Released from Capital Grants	-	-	-	-	-	(27.305)	(27.305)
<b>Asset Financing</b>	-	-	-	-	<b>1.442</b>	<b>(28.482)</b>	<b>(27.039)</b>
Bus Operators Grant	-	-	-	(0.891)	-	-	(0.891)
Heavy Rail Grant	-	-	-	(0.252)	-	-	(0.252)
Metro Rail Grant	-	-	-	(27.200)	-	-	(27.200)
Other Grant	-	-	-	(0.465)	-	-	(0.465)
<b>Grants</b>	-	-	-	<b>(28.808)</b>	-	-	<b>(28.808)</b>
<b>TOTAL REQUIREMENT</b>	<b>148.485</b>	<b>(42.736)</b>	<b>18.824</b>	<b>(28.808)</b>	<b>1.442</b>	<b>(28.482)</b>	<b>68.725</b>
JTC Grant	-	-	-	(63.125)	-	-	(63.125)
<b>JTC Grant</b>	-	-	-	<b>(63.125)</b>	-	-	<b>(63.125)</b>

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148.485	(42.736)	18.824	(91.934)	1.442	(28.482)	5.600
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148.485	(42.736)	18.824	(91.934)	1.442	(28.482)	5.600
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## North East Joint Transport Committee

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**Date:** 18 January 2022

**Subject:** Forecast of Capital Outturn 2021/22 (Period to 31 October 2021) and 2022/23 Capital Programme Assumptions

**Report of:** Chief Finance Officer

### Executive Summary

This report provides the North East Joint Transport Committee with an updated forecast capital outturn for 2021/22 and presents the initial 2022/23 capital programme, totalling £279.774m, for consideration and approval.

The report identifies that total capital expenditure on Transport schemes of £153.453m is now forecast for 2021/22 against the revised programme budget of £157.510m. The main variances since the last update reported to the committee is a reduction in expenditure on the Active Travel Fund programme where some schemes have had extensions approved and expenditure is now being reprofiled into 2022/23; a small increase in forecast expenditure on TCF Tranche 2 and small reductions to the forecasts for the Metro Asset Renewal Plan programme and Metro Fleet Replacement.

£0.901m is forecast to be invested on TCF Tranche 1 schemes in 2021/22, with schemes due to complete this financial year.

£32.455m is forecast to be paid out on TCF Tranche 2 schemes in 2021/22, including Durham Bus Station and Sunderland Central Station. The programme for 2022/23 is £70.618m, representing the final year of the programme as all schemes must be fully committed by the end of March 2023. Reporting on the Metro Flow project is included within the sections on the Metro capital programme.

The report sets out details of the Nexus capital programme for 2022/23, totalling £194.413m which includes the Metro Asset Renewal Programme (MARP, £32.762m), Fleet Replacement Programme (FRP, £69.808m), Other Nexus Capital Projects (£8.345m) and Metro Flow (£83.498m). Indicative figures for 2023/24 and 2024/25 are included, which are subject to approval of funding.

The programme includes an estimated £14.057m of Local Transport Plan Integrated Transport Block grant that will be received by NECA on behalf of the Joint Transport Committee, most of which will be paid to constituent authorities and Nexus on a quarterly

basis to support their capital programmes. Expenditure on the Nexus elements is included in the sections on the Nexus capital programme. A proposed allocation of the LTP Integrated Transport block is set out in the report, but this is subject to confirmation of the total grant due in 2022/23 which has not yet been received.

Most of the capital works during the current and next financial year will be funded through government grants awarded (£141.552m in 2021/22 and £269.728m in 2022/23) with elements of the Nexus capital programme and the Tyne Pedestrian and Cyclist Tunnels works funded by reserves (£111.901m in 2021/22 and £10.046m in 2022/23) held specifically for this purpose.

## **Recommendations**

The North East Joint Transport Committee is recommended to:

- i. Note the latest position in respect of the 2021/22 capital programme, set out in section 2.1 and the following sections
- ii. Approve the proposed initial capital programme for 2022/23 which amounts to £279.774m as set out in section 2.1 and the following sections.

## 1. Background Information

- 1.1 In January 2021, the JTC approved the initial 2021/22 capital programme of £152.674m. The capital programme was updated to take account of adjustments for slippage in the 2020/21 and any new developments in 2021/22. The revised updated budget approved by JTC in November 2021 is £157.510m.

## 2. Proposals

- 2.1 A summary of the Transport capital outturn forecast for 2021/22, together with a forecast outturn position and details of actual expenditure to 31 October 2021 is set out in the table below, with further details provided in the sections that follow.

*Table 1: Transport Capital Programme 2021/22 and 2022/23*

	<b>2021/22 Revised Budget (Nov JTC)</b>	<b>Spend to October 2021</b>	<b>2021/22 Forecast Outturn</b>	<b>2021/22 Forecast Variance</b>	<b>2022/23 Initial Programme</b>
	<b>£m</b>	<b>£m</b>	<b>£m</b>	<b>£m</b>	<b>£m</b>
TCF Tranche 1	0.931	0.896	0.901	(0.030)	0.000
TCF Tranche 2 (Exc. Metro Flow)	30.916	1.725	32.455	1.539	70.618
Active Travel Fund (capital elements)	6.977	0.260	3.752	(3.225)	3.186
Go Ultra Low	0.127	0.000	0.000	(0.127)	0.000
Electric Vehicle Charging Infrastructure	0.000	0.082	0.257	0.257	0.175
Ultra-Low Emission Vehicles – Taxi Project	0.049	0.001	0.049	0.000	0.043
Metro Asset Renewal Plan	19.310	6.742	18.226	(1.084)	32.762
Metro Fleet Replacement	65.227	39.965	64.801	(0.426)	69.808
Nexus non- Metro Programme	3.549	0.712	2.589	(0.960)	8.345
Metro Flow	17.885	5.820	17.884	(0.001)	83.498
Tyne Tunnels	1.200	0.470	1.200	0.000	0.000
LTP	11.339	7.876	11.339	0.000	11.339
<b>Total Capital Programme</b>	<b>157.510</b>	<b>64.549</b>	<b>153.453</b>	<b>(4.057)</b>	<b>279.774</b>

## Transforming Cities Fund (TCF) – Tranche 1 and Tranche 2

- 2.2 The North East was awarded £208m grant from the Transforming Cities Fund (TCF), of which £10m was for Tranche 1 and £198m was for Tranche 2. Within the Tranche 2 schemes, £104m is for schemes where the decision making on funding is devolved to the region, and the remaining £94m is for the Metro Flow scheme managed by Nexus, where the decision making on the funding is retained by the Department for Transport.
- 2.3 There are 19 schemes within the TCF Tranche 1 programme, of which 12 have been fully claimed and audit statements submitted which have released the retention held by NECA. There are a further five schemes which have submitted a final claim, but an audit statement is awaited to release the retention. The remaining two schemes are Barras Bridge (Newcastle City Council) and New Road to Lingley Lane (Gateshead Council) which are due to complete by the end of 2021.
- 2.4 Ten schemes have currently been identified within the TCF Tranche 2 programme, 4 of which are currently underway, Durham Bus Station, Sunderland Central Station, Regional Option Survey and the Active Travel Campaign.
- 2.5 Approximately £2.4m of the total TCF Tranche 2 grant allocation for the North East region has been spent to 31 October 2021, which represents 2.3% of the overall programme. However, this is expected to start increasing significantly, as both Durham Bus Station and Sunderland Station schemes have been approved, which accounts for 19.2% of the total £103.8m Devolved Pot. In 2021/22 so far £1.725m payments from the Devolved Pot have been made. There is a rapid acceleration in the anticipated spend over 2021/22 which is based on the anticipated milestones provided to TNE and requires a number of business cases to come forward for approval during this financial year. A total of £32.455m expenditure is forecast for 2021/22.
- 2.6 *Table 2: TCF Tranche 2 Capital Forecast of Outturn 2021/22 to 2022/23:*

<b>TCF Tranche 2</b>	<b>2020/21 Outturn</b>	<b>2021/22 Forecast Outturn</b>	<b>2022/23 Initial Budget</b>	<b>Total Budget</b>
	<b>£m</b>	<b>£m</b>	<b>£m</b>	<b>£m</b>
Devolved Programme Level	0.726	32.455	70.618	103.799
Nexus Metro Flow (reported with Nexus Capital Programme)	1.142	17.884	75.659	94.685
<b>All Programme Level</b>	<b>1.868</b>	<b>50.339</b>	<b>146.277</b>	<b>198.484</b>

## Active Travel Fund – Tranche 2

- 2.7 In November 2020, the North East region was allocated £9.049m of grant funding from Tranche 2 of the Active Travel Fund (ATF) (£7.239m capital and £1.810m revenue). £0.262m of the capital funding was used in 2020/21.

- 2.8 Ten Active Travel schemes across the seven Local Authorities have been allocated £6.938m from the remaining £6.978m. In order for a Grant Funding Agreement (GFA) to be set up and claims to be processed for schemes, TNE has requested that an Assurance Statement and a Monitoring and Evaluation Plan is submitted for the scheme. This is additional to the DfT requirement to submit a letter confirming the outcomes of public consultation activities. These documents have started to come through and GFAs will begin to be issued.
- 2.9 At present there has been no grant funding paid to scheme promoters. Durham County Council's Great North Cycleway GFA has been received and work is currently ongoing, with their claim to be received shortly. Transport North East have completed their Regional Public Opinion Survey and the Active Travel Campaign is due to complete in the near future.

2.10 *Table 3: ATF Tranche 2 Capital Forecast of Outturn 2021/22 to 2022/23*

ATF Tranche 2	2021/22 Forecast Outturn	2022/23 Initial Budget	Total Budget
	£m	£m	£m
Great North Cycleway	0.520	0.000	0.520
Gateshead Town Centre Walking and Cycling Improvements	0.361	0.000	0.361
Grey Street	0.656	1.313	1.969
RVI Active Travel Access Improvements	0.434	0.434	0.868
Strategic Corridors	0.630	0.630	1.260
A183 Whitburn Road Cycleway	0.225	0.675	0.900
Waterloo Road/Renwick Road Cycle Improvements, Blyth	0.134	0.134	0.268
Four Active Travel Corridors Package	0.432	0.000	0.432
Regional Public Opinion Survey	0.040	0.000	0.040
Active Travel Campaign	0.320	0.000	0.320
<b>All Programme Level</b>	<b>3.752</b>	<b>3.186</b>	<b>6.938</b>

### **Electric Vehicle charging infrastructure**

- 2.11 Following the completion of the Go Ultra Low project earlier this year, good progress is being made in the delivery of further Electric Vehicle charging infrastructure across the north east, using Local Growth Fund resources. All sites are due to be completed by the end of the next financial year.
- 2.12 Capital expenditure to the end of October 2021 was £0.082m. Forecast expenditure to the year end is £0.257m. The initial budget for 2022/23 is £0.175m.

### **Ultra-Low Emission Vehicles – Taxi Project**

- 2.13 Nine of the ten dedicated electric vehicle charges for the taxi and private hire industry (funded by the Office of Zero Emission Vehicles) are now live and operational.

Engagement events to encourage the switch to electric vehicles in the taxi trade are planned for 2021 and 2022. There are issues impacting on implementing the final site. The Coronation Street site in North Tyneside is currently being used as a Covid testing centre. Discussions are being held with North Tyneside Council on the future of this site. £0.043m budget will be carried over into 2022/23 for this site.

- 2.14 Capital expenditure to the end of October 2021 was £0.001m. Forecast expenditure to the year end is £0.049m.

### **Nexus Capital Programme**

- 2.15 The JTC approved Nexus' Capital Programme for 2021/22 to 2024/24 in January 2021. The programme is sub-divided into the following sections:

- i) Metro Infrastructure (the Metro Asset Renewal Programme or MARP);
- ii) A new fleet of Metrocars (the Fleet Replacement Programme or FRP);
- iii) Other Capital Projects (OCP); e.g. the cross Tyne Ferry; and
- iv) Metro Flow (MFL)

### **Total Nexus Capital Programme Summary**

- 2.16 Nexus' revised capital programme for 2021/22, provides for gross expenditure of £111.835m. The programme forecast outturn as at Period 7 (to 16 October 2021) stands at £103.500m. At the end of Period 7 the total programme spend was £50.239m, against the budgeted spend of £57.815m.

- 2.17 The 2021/22 forecast outturn is £103.500m against a revised budget of £111.835m. Importantly, the under spend and associated programme implications can be accommodated, and no resources will be clawed back. The £8.335m net underspend is detailed below.

*Table 4: Nexus Capital Programme Forecast Outturn 2021/22*

	<b>2021/22 Original Budget</b>	<b>2021/22 Revised Budget</b>	<b>2021/22 Forecast Outturn</b>	<b>2021/22 Forecast Variance</b>
	<b>£m</b>	<b>£m</b>	<b>£m</b>	<b>£m</b>
<b>Cumulative to Period 7</b>				
Metro Asset Renewal Programme		7.768	6.742	(1.026)
Fleet Replacement Programme		40.827	36.965	(3.862)
Other Capital Projects		1.236	0.712	(0.524)
Metro Flow		7.984	5.820	(2.164)
		<b>57.815</b>	<b>50.239</b>	<b>(7.576)</b>
<b>Outturn</b>				
Metro Asset Renewal Programme	19.222	23.609	18.226	(5.383)
Fleet Replacement Programme	63.069	64.215	64.801	0.586
Other Capital Projects	8.252	3.379	2.589	(0.790)
Metro Flow	8.100	20.632	17.884	(2.748)
	<b>98.643</b>	<b>111.835</b>	<b>103.500</b>	<b>(8.335)</b>

- 2.18 At the end of Period 7, £63.602m of capital grant has been claimed from the Department for Transport (DfT). This includes both the MARP, FRP and MFL. The actual amount claimed in total was 100% of forecast and therefore within DfT tolerance levels of +/- 5%.
- 2.19 The initial budget for 2022/23 is £194.413m.
- 2.20 Funding for (i) to (iv) is largely provided by the DfT:
- i. In respect of the MARP, 2022/23 represents the first year of a three-year funding programme. Following the Autumn 2021 Spending Review the Department for Transport (DfT) have confirmed the capital grant funding for 2022/23 but not yet for future years. The MARP programme within the report assumes capital grant funding of £30.200m in 2022/23, £30.000m in 2023/24 and £27.000m in 2024/25.
  - ii. In relation to FRP, 2022/23 represents the fourth year of capital funding from DfT, with the programme fully funded to expected completion in 2025/26.
  - iii. OCP is largely funded via DfT Transforming Cities Fund (TCF) grant and Nexus Reserves, which in lieu of other funding being confirmed is currently underwriting the development work for the North Shields Ferry Landing relocation project.
  - iv. The MFL, funding was approved following submission of the Final Business Case (FBC) to DfT, in Summer 2021. The local contributions will come from Metro Rail Grant.
- 2.21 Other than the FRP, obtaining funding for the capital programme 2022/23 to 2024/25 has been extremely challenging, with the submission to the 2021 Spending Review in relation to the MARP not yet fully confirmed, although the 2022/23 allocation has now been confirmed at £30.2m of capital grant. MARP funding for 2023/24 and 2024/25 is, at this point in time, subject to further approvals and is likely to be linked to the region receiving a City Region Sustainable Transport Settlement. However, the MARP has been developed on the assumption that funding for future years will be obtained and if funding for the capital programme that has been developed is approved, this represents over £400 million of investment in key assets over the next three years.

### **Metro Asset Renewal Programme (MARP)**

#### **Forecast of Outturn 2021/22 - MARP**

- 2.22 Actual spend at the end of Period 7 was £6.742m against the revised budgeted profile of £7.768m. The £1.026m underspend relates to reduced use of contingency than forecast during the period.
- 2.23 Forecast outturn for 2021/22 is £18.226m (including a risk contingency of £0.500m) against a revised budget of £23.609m. The £5.383m net decrease is mainly as a result of £2.944m of project spend deferred into 2022/23 (Network Refresh, Tanners Bank, Battery Loco replacement, Timetabling and Rostering system and Relay Rooms), plus net savings of £0.479m (Tyne Dock track works and Heworth to South Shields plain line renewal). Also, a review of the required contingency has been undertaken which has resulted in a reduction in the contingency provision held of £1.960m. The lack of

long-term surety is now severely impacting on delivery of the MARP because future projects aren't sufficiently developed in the life cycle and therefore incapable of being brought forward to mitigate slippage in the current year's programme.

- 2.24 The October grant claim was £1.301m, compared to the forecast £1.300m and therefore within the +/- 5% DfT target.
- 2.25 Total grant claimed to date is £6.691m and MRG capital grant totalling £16.000m is forecast to be claimed by year end. Whilst the forecast outturn is currently only £0.004m above the minimum spend target of £18.222m, arrangements have been made with the DfT, in the event that the minimum spend level is not achieved, thereby ensuring no claw back of MRG capital grant at the year-end.
- 2.26 The remaining £2.227m of forecast spend will be funded from £1.835m of local funding (LTP), plus £0.392m Highways Challenge Fund grant for Tanners Bank.

### **Initial Budgets 2023/24 to 2024/25 - MARP**

- 2.27 Funding for the 2022/23 programme totals £32.762m, consisting of Metro Rail Grant of £22.875m (£30.200m less the £7.325m contribution to Metro Flow funding), supplemented by local contributions of £2.604m LTP grant, £5.238m reserves (including over programming) and £2.245m Highways Challenge Fund in respect of the Tanners Bank bridge project.
- 2.28 As outlined in paragraph 2.21 developing the MARP for 2022/23 to 2024/25 has been extremely challenging with capital grant from DfT beyond 2022/23 still not confirmed. Nexus has received confirmation from DfT that it will receive £30.200m of capital grant in 2022/23, with funding thereafter contingent on the region becoming eligible for a City Region Sustainable Transport Settlement (CRSTS), subject to putting in place appropriate governance. This is far from satisfactory given that next year's allocation is less than what was originally sought and the lack of a CRSTS for the region means that essential funding for infrastructure renewal beyond 2022/23 is not in place at this time. Since 2019, the MARP has been subject to annual funding settlements and as a result, planning the essential renewals programme has been very difficult, including preparation of the 2022/23 programme which had initially been assessed as being for one-year only. However, and notwithstanding the challenges Nexus has had in connection with the Spending Review formalising capital grant allocations across the next three years, the MARP has been developed on the assumption that funding for future years beyond 2022/23 will be obtained. However, the timescales have been more challenging than usual, and this has given rise to the development of a three-year programme that will likely require further refinement once projects progress through the stage gate process and become better defined.
- 2.29 In addition, there are emerging risks associated with safety considerations (the need to improve track worker safety) and climate change (vegetation management and embankment strengthening) where although investment has been earmarked for these initiatives within the three-year programme, this might need to be revisited depending on a more detailed understanding of what is actually required.
- 2.30 A number of significant projects across a range of different asset categories are planned in 2022/23. The programme is developed using a prioritisation model that, in

the context of finite funding available for investment in the Metro asset base, targets resources based on a range of criteria ranging from safety and performance to impact on demand for the Metro service to strategic fit. The proposed programme is set out in Appendix 1 and a summary is provided below:

### Civils

- Cullercoats Footbridge refurbishment
- Design and planning of refurbishment of bridges at Stoddart Street (Newcastle)
- Development of a scheme to replace the track system on Howdon Viaduct
- Renewal of Tanners Bank Bridge, North Shields

### Permanent Way

- Renewal of switches and crossings at Monkseaton and development of the renewal at Chillingham Road.
- Design and planning for the renewal of Prudhoe Street switch and crossing (Central Newcastle tunnel).
- Design and planning for the renewal and refurbishment of track between Regent Centre and Airport
- Scope and option development to enable reduced reliance on lookout protection for infrastructure works.

### Mechanical and Electrical

- Completion of the programme of half-life refurbishment of lifts and escalators installed in the early years of the Asset Renewal Programme
- Commence renewal of tunnel lighting under central Newcastle

### Overhead Line Equipment

- Continuation of the overhead line renewal (50% complete to date)

### ICT Infrastructure

- Upgrades to ticketing and gating systems including operating system
- Renewal of Network Infrastructure equipment
- Replacement of Firewalls
- Scoping and development of systems for remote asset condition monitoring.

### Business Applications

- Completion of Payroll / HR System Upgrade
- Completion of Finance System implementation
- Implementation of Timetabling and Rostering Applications.
- Scoping and development of a new Asset Management system

### Signalling

- Commencement of development of proposals for a new signalling system.
- Development design and implementation of a new SCADA system,
- Progression of works to address cable degradation in relay rooms. This will become an ongoing multi-year programme continuing across the Metro infrastructure – similar to the OLE renewal programme.

### Capital Maintenance/Other

- Continued heavy maintenance of the existing fleet
- Investment in our premises, particularly with regard to accessibility
- Addressing vegetation around the system
- Refurbishment of electrically powered works locomotives.

- 2.31 Despite considerable investment over the past twelve years, the programme of renewals needs to continue across the next three years and beyond in order to stabilise the backlog that had developed pre-2010, when Metro was subject to annual funding settlements, meaning that the condition of the Metro infrastructure had steadily declined. Years 2 and 3 (2023/24 and 2024/25) of this three-year programme therefore represents the planned investment to continue network Essential Renewals, although as highlighted in paragraph 2.24 above, funding for both these years has not yet been approved.
- 2.32 In addition, in January 2020, DfT's Rail Investment Board (RIB) had approved a £200m five-year funding package between 2021/22 to 2025/26. Due to the global pandemic, that funding was never approved by HM Treasury. Instead, Nexus were awarded £20m in 2021/22, £30.2m in 2022/23 with an expected further £57m for 2023/24 to 2024/25. Including financial year 2025/26 which is not covered by the 2021 Spending Review, this represents a £93m reduction in funding previously approved by DfT's RIB.
- 2.33 To this extent, a number of projects within the original programme are no longer able to be delivered. Examples of projects now deferred or where funding has been cut include:
- Track renewal and refurbishment from Tynemouth to Northumberland Park won't be carried out meaning redundant wooden formation sleepers won't be replaced, drainage systems won't be introduced, and the risk of rail breaks and buckles will heighten given the age of the track;
  - The airport cross-over won't be replaced;
  - Manors, Chichester, Monument and Gateshead station refurbishments are likely to be delayed beyond 2025;
  - Investment in remedying cable degradation across the network and in relay rooms will be scaled back to around 50% of what was planned; and
  - Funding to deal with emerging issues with fare collection systems is also cut in half.
- 2.34 The likely consequences of delaying this investment beyond 2025 include continued degradation of track and formation which together with cable faults and signalling failures will increase the likelihood of speed restrictions, timetable disruptions, increased journey times and reduced service frequency. From a safety perspective, risks will need to be managed through additional inspection and maintenance, which is likely to put additional pressure on the revenue budget. Increasing unreliability of fare collection systems will also increase outages leading to further pressure on the revenue budget. Should this lead to an increase in less sustainable forms of transport, the wider economic benefits generated by the Metro for the region will be impaired. By way of example, the Metro Infrastructure Essential Renewals business case states that failure to invest will result in an additional 11 million car journeys in Tyne and Wear travelling an estimated 96 million Kms and creating 16,414 tonnes of CO2 emissions.

2.35 Investment that is planned over the next 36 months, accepting the caveats set out in paragraphs 2.29 and 2.30, the indicative MARP programme for 2022/23 to 2024/25 at asset category level is set out below and in more detail at Appendix A:

*Table 5: Indicative MARP programme 2022/23 to 2024/25*

	<b>2022/23 Initial Budget</b>	<b>2023/24 Initial Budget</b>	<b>2024/25 Initial Budget</b>	<b>Total</b>
	<b>£m</b>	<b>£m</b>	<b>£m</b>	<b>£m</b>
Capital Maintenance	4.100	3.900	2.700	10.800
Civils	5.000	2.600	1.800	9.300
Level Crossings	0.100	0.100	0.100	0.200
Mechanical and Electrical	1.900	0.600	0.300	2.800
Overhead line	3.100	3.400	3.500	10.000
Permanent Way (Plain line)	4.100	5.900	8.900	18.800
Plant	1.500	2.100	1.000	4.600
Risk Contingency	2.000	2.500	3.000	7.500
Signalling	3.100	6.900	6.000	16.000
Stations	3.100	4.500	6.800	14.300
Business Applications	1.100	0.600	0.200	1.900
ICT Infrastructure	1.700	3.100	2.500	7.200
Miscellaneous	1.600	1.000	0.700	3.200
Power	0.600	1.100	0.800	2.300
<b>Total MARP</b>	<b>33.000</b>	<b>38.300</b>	<b>38.300</b>	<b>108.900</b>

2.36 Nexus will still be required to fund 10% of the overall investment in the MARP, which will amount to £3.333m in 2022/23. As with investment since 2010, Nexus will secure this from the LTP Integrated Transport Block plus Highways Maintenance Challenge Fund (HMCF) grant secured to fund Tanner's Bank bridge replacement.

### **Fleet Replacement Programme (FRP)**

#### **Forecast of Outturn 2021/22 - FRP**

2.37 Actual spend at the end of Period 7 was £36.965m against the revised budget profile of £40.827m. The majority of the £3.862m underspend relates to less contingency being applied than budgeted and a realignment of contractor activities on the Gosforth Depot project. None of this is expected to delay the depot completion date.

2.38 Forecast outturn for 2021/22 is now £64.801m which represents an overspend on budget of £0.586m. The movement from the current under spend at Period 7 to the forecast overspend at the year-end relates to an acceleration of Work In Progress in manufacture of the new trains.

2.39 The October grant claim is 103.3% of the forecast. The £64.801m forecast outturn is expected to be funded from the £54.100m DfT Fleet Replacement grant available in 2021/22. With the balance funded from the local contribution of £10.701m.

## Initial Budgets to 2025/26 - FRP

2.40 In October 2017, government announced £336.8m of grant funding for the replacement of Nexus' fleet of Metrocars. This is augmented by a £25.0m local contribution.

2.41 The funding profile was confirmed in January 2020 based on the key milestones to be delivered within the programme and is detailed below:

*Table 6: FRP original funding profile*

	2018/ 2019	2019/ 2020	2020/ 2021	2021/ 2022	2022/ 2023	2023/ 2024	2024/ 2025	2025/ 2026	Total
	£m	£m	£m	£m	£m	£m	£m	£m	£m
DfT Capital Grant	0.000	21.600	29.800	44.000	78.600	117.700	43.600	1.500	336.800
Local Contribution	1.100	7.600	16.300	0.000	0.000	0.000	0.000	0.000	25.000
<b>Total</b>	<b>1.100</b>	<b>29.200</b>	<b>46.100</b>	<b>44.000</b>	<b>78.600</b>	<b>117.700</b>	<b>43.600</b>	<b>1.500</b>	<b>361.800</b>

2.42 The programme has necessarily evolved since this funding profile was initially agreed, although there are other factors, most notably changes to the delivery milestones for the Depot Construction Contract (DCC) and the addition of four additional trains in relation to the Metro Flow project. Whilst the additional trains are funded as part of the Metro Flow project, their addition has altered the FRG funding profile. The latest spend profile for grant draw down is being discussed with DfT and is detailed below:

*Table 7: FRP programme forecast to 2025/26*

	2018/ 2019	2019/ 2020	2020/ 2021	2021/ 2022	2022/ 2023	2023/ 2024	2024/ 2025	2025/ 2026	Total
	£m								
DfT Capital Grant	0.000	21.600	35.800	54.100	64.800	99.000	42.300	19.200	336.800
Local Contribution	1.500	3.300	7.900	7.300	5.000	0.000	0.000	0.000	25.000
<b>Total</b>	<b>1.500</b>	<b>24.900</b>	<b>43.700</b>	<b>61.400</b>	<b>69.800</b>	<b>99.000</b>	<b>42.300</b>	<b>19.200</b>	<b>361.800</b>

2.43 Importantly the re-profiling of the delivery programme has not resulted in a delay to the planned delivery of the new train fleet and over the next 36 months, the Manufacture and Supply Agreement (MSA) will progress through manufacture and acceptance of the first train, leading to the delivery of all 46 new trains. In addition, the existing depot in Gosforth will be replaced with a brand-new facility. The following expenditure is forecast:

*Table 8: FRP programme forecast 2022/23 to 2024/25*

	2022/23 Initial Budget	2023/24 Initial Budget	2024/25 Initial Budget	Total
	£m	£m	£m	£m
New Train Fleet (MSA)	40.900	90.800	41.200	172.800
Gosforth Depot (DCC)	22.300	4.500	0.000	26.900
Project Delivery	2.800	2.200	1.000	5.900

Risk Contingency	3.800	1.600	0.100	5.500
	<b>69.800</b>	<b>99.000</b>	<b>42.300</b>	<b>211.100</b>

### Other Capital Projects (OCP)

#### Forecast of Outturn 2021/22 - OCP

- 2.44 In 2021/22 Other Capital Projects have a revised budget of £3.379m comprising of £1.322m Transforming Cities car park projects, £1.226m Ferry North Landing relocation, £0.515m Ferry vessels and infrastructure and £0.316m non-Metro digital projects.
- 2.45 Actual spend at the end of Period 7 was £0.712m against the revised budgeted profile of £1.236m, resulting in a £0.524m underspend. This is mainly as a result of delays in the Ferry North Landing relocation project. The timescales for the design have been pushed back further although the tender for the GI works is now being evaluated.
- 2.46 Forecast outturn for 2021/22 is £2.589m (including a risk contingency of £0.472m) against an approved budget of £3.379m. The forecast underspend consists of £0.862m relating to the Transforming Cities (TCF) car park projects. This is as a result of a reduction in contingency and programme slippage into the next financial year. Although forecasts have reduced in 2021/22 both TCF projects are estimated to complete by the funding deadline of March 2023 and are being monitored closely. Additionally, there is a £0.388m overspend on Ferry vessels and South Landing refurbishment, offset against a £0.331m forecast underspend on the North Landing Relocation project due to the aforementioned programme delays. The net increase is offset against the £0.150m additional NELEP grant approved in Period 4

#### Initial Budgets 2022/23 to 2024/25 - OCP

- 2.47 Other Capital Projects largely feature other external funding that Nexus has secured. During the three years Nexus will expand the car park at Callerton Metro station and deliver a range of digital enhancements at other car parks across the Metro estate, funded by the Transforming Cities Fund. The relocation of the North Shields Ferry Landing to a new site on North Shields Fish Quay is also planned for 2022/23 but has thus far failed to secure external funding and its development is currently underwritten by Nexus reserves. The construction cost, whilst included in the table below is subject to external funding being obtained and the tendering exercise that will inform the estimate is not expected to progress until this funding is secured.

*Table 9: Nexus Other Capital Projects 2022/23 to 2024/25*

	2022/23	2023/24	2024/25	Total
	Initial Budget	Initial Budget	Initial Budget	
	£m	£m	£m	£m
North Shields Ferry Landing Relocation	3.300	5.900	0.000	9.200
Other Ferry Infrastructure	0.400	0.400	0.000	0.800
Callerton Car Park	2.200	0.000	0.000	2.200
Digital Car Park Enhancements	2.500	0.000	0.000	2.500

<b>Total</b>	<b>8.400</b>	<b>6.300</b>	<b>0.000</b>	<b>14.700</b>
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## **Metro Flow (MFL)**

### **Forecast of Outturn 2021/22 - MFL**

- 2.48 Actual spend at the end of Period 7 was £5.820m against an expected cumulative spend of £7.984m, resulting in a £2.163m underspend. The variance relates to contractor delays to undertaking planned surveys and reduced spend on PM time and de-vegetation works.
- 2.49 Forecast outturn for 2021/22 is £17.884m (including a risk contingency of £1.807m) against a revised budget of £20.632m. The £2.748m underspend is due to deferred contractor programme £0.858m, a reduction in internal team costs £0.374m and a £1.516m reduction of forecast contingency usage.
- 2.50 The project is 100% TCF capital grant funded with TCF grant of £20.100m delegated to and received in full by Nexus during Period 4. TCF Grant conditions allow grant, already received, to be carried forward into 2022/23 in the event that there is an underspend in year. The 2021/22 grant allocation, together with TCF grant receivable in 2022/23, must be fully utilised by the end of 2022/23.
- 2.51 In relation to the match funding (£8.5m Metro Rail Grant and the £4.9m to acquire Network Rail infrastructure) a letter of comfort was received from DfT in August 2021, which has enabled the award of both the contracts for the 4 additional trains to Stadler and the main works contract to Buckingham Group. Full confirmation of the ongoing funding package is still to be announced despite the Government's 2021 Spending Review taking place at the end of October. Discussions with civil servants continue in order to resolve the delay.

### **Initial Budgets 2022/23 to 2024/25 - MFL**

- 2.52 In March 2020 DfT awarded Nexus £95.0m of Transforming Cities funding for the Metro Flow project, subject to approval of the Final Business Case which was duly achieved in Summer 2021. A local contribution of £8.4m, from an allocation of Metro Rail Grant was confirmed by DfT, ahead of final confirmation of MRG funding for 2022/23.
- 2.53 The MFL project will deliver more capacity, better frequency and more resilience to the existing network via the implementation of dual tracking in South Tyneside and the procurement of four additional trains. It is envisaged that this project will increase patronage, reduce emissions and improve journey times.
- 2.54 Both contracts for the main contracted works and the additional four trains have been awarded. The expected profile for the project to completion, based on the latest programme, is illustrated below:

*Table 10: MFL profile 2022/23 to 2024/25*

	<b>2022/23 Initial Budget</b>	<b>2023/24 Initial Budget</b>	<b>2024/25 Initial Budget</b>	<b>Total</b>
	<b>£m</b>	<b>£m</b>	<b>£m</b>	<b>£m</b>

Main Construction Contract	47.600	0.000	0.000	47.600
Additional Trains	12.300	0.000	0.000	12.300
Project Delivery	6.200	0.600	0.000	6.800
	<b>2022/23 Initial Budget</b>	<b>2023/24 Initial Budget</b>	<b>2024/25 Initial Budget</b>	<b>Total</b>
	<b>£m</b>	<b>£m</b>	<b>£m</b>	<b>£m</b>
Risk Contingency	17.400	0.500	0.000	17.900
<b>Total</b>	<b>83.500</b>	<b>1.100</b>	<b>0.000</b>	<b>84.600</b>

### Nexus Capital Programme Funding

2.55 The initial Capital Programme budget for 2022/23 to 2024/25 is only funded in part, with the bulk of years 2 and 3 dependent on bids to DfT, whether for Metro Rail Grant or Transforming Cities funding. Notwithstanding this, the programme funding is summarised in the following table:

2.56 Funding for the proposed Capital Programme for 2022/23 to 2024/25 is only secured in part, with MRG funding still to be confirmed by DfT. Notwithstanding this, the programme funding is summarised in the following table:

2.57 *Table 11: Nexus Capital Funding 2022/23 to 2024/25*

	<b>Proposed Funding 2022/23</b>	<b>Proposed Funding 2023/24</b>	<b>Proposed Funding 2024/25</b>	<b>Total</b>
	<b>£m</b>	<b>£m</b>	<b>£m</b>	<b>£m</b>
Metro Rail Grant (DfT)	30.200	30.000	27.000	87.200
Highways Challenge Fund	2.200	0.000	0.000	2.200
LTP Grant	2.700	2.7000	2.600	8.000
Fleet Replacement Grant (DfT)	64.800	99.000	42.300	206.100
Transforming Cities Grant (DfT)	80.400	0.000	0.000	80.400
	<b>180.300</b>	<b>131.700</b>	<b>71.9000</b>	<b>383.900</b>
Nexus Reserves	1.000	0.300	0.000	1.400
NECA Reserves	5.000 <sup>1</sup>	0.700	0.400	6.100
Overprogramming	5.000	5.900	8.000	19.000
Unfunded <sup>2</sup>	3.000	5.900	0.000	8.900
	<b>14.100</b>	<b>12.800</b>	<b>8.400</b>	<b>35.300</b>

<sup>1</sup> 2022/23 funding relates to the Fleet Replacement project. Thereafter funding relates to MARP.

<sup>2</sup> North Shields Ferry Landing. The construction element of which will be delivered if further funding can be secured.

Total	<b>194.400</b>	<b>144.500</b>	<b>80.300</b>	<b>419.300</b>

## **Tyne Tunnels**

- 2.58 It was anticipated at the time of setting the 2021/22 budget that works would be completed by December 2021, and that the Tyne Pedestrian and Cycle Tunnels would be handed over to the operation of TT2 this year. Works on the inclined lifts have progressed well since July 2021 with specialist engineers on site daily working on parts of the lifts, in particular the wiring, counterweights and track works have all been completed successfully on both the north and south lifts. However, there are further parts relating to the doors, the operating mechanisms and the cabin which are required from suppliers. These are bespoke parts have a supplier lead time of 14 weeks; therefore, the lifts will not be brought into operation until early 2022.
- 2.59 Until the works are completed, additional costs will be incurred if the Tunnels are to remain open to the public. Costs including onsite security, maintenance contracts, cleaning and utilities are being incurred. There is also further expenditure required on the door parts, operating mechanisms and cabin which need to be fitted by specialist lift engineers. It was unclear at the start of the works whether some existing parts could be used or required replacement, however it has been assessed that whilst some can be reused there are also new parts required to make the lift safe and fully operational to open to the public. Regular updates on the works will continue to be provided to the Tyne & Wear Sub Committee.
- 2.60 Capital expenditure to 30 October is £0.470. Forecast capital expenditure to the year-end is expected to be up to £1.200m

## **Local Transport Plan**

- 2.61 Local Transport Plan (LTP) Integrated Transport Block funding is made available by the DfT to the whole JTC area. This block is allocated between the JTC constituent authorities on a locally agreed basis with an allocation to Nexus (mainly used to provide the match funding needed for the Metro ARP capital programme. The LTP block allocation is also used to contribute to the costs of the Transport Strategy Unit (TSU) and, in Tyne an Wear, to the Urban Traffic Management and Control (UTMC) centre. Payments have been made to the authorities for the first 3 quarters of the year, following receipt of the grant from DfT and expenditure to 31 October 2021 is £7.876m.
- 2.62 At the time of writing this report, final confirmation from DfT of the level of Integrated Transport Block grant for 2022/23 has not been received. Should the same amount be received as for 2021/22, it is proposed that the apportionment of the grant between constituent authorities be made on the same basis as 2021/22, as set out in the table below.

2.63 *Table 9: Allocation of LTP Integrated Transport Block grant 2022/23*

	Allocation	Top-slice for TNE	Top-slice for UTMC	2022/23 Net Allocation
	£m	£m	£m	£m
Durham	2.811	(0.0625)	0.000	2.749
Gateshead	1.339	(0.0625)	(0.079)	1.198
Newcastle	1.663	(0.0625)	(0.115)	1.486
North Tyneside	1.097	(0.0625)	(0.080)	0.955
Northumberland	1.708	(0.0625)	0.000	1.646
South Tyneside	0.849	(0.0625)	(0.059)	0.728
Sunderland	1.618	(0.0625)	(0.109)	1.447
MARP Local Contribution / Public Transport Schemes	2.972	(0.0625)	0.000	2.910
<b>Total</b>	<b>14.057</b>	<b>(0.500)</b>	<b>(0.442)</b>	<b>13.115</b>

**Overall Capital Programme Financing**

2.64 Forecast capital expenditure for the 2021/22 year will be financed as follows:

*Table 10: Capital Programme Financing 2021/22*

	2021/22 Original Budget	2021/22 Updated (November JTC)	2021/22 Revised Forecast	Variance – (November JTC to January JTC)
	£m	£m	£m	£m
Government Grants	147.174	153.499	141.552	(11.947)
Earmarked Reserves	5.500	4.011	11.901	7.890
<b>Total Funding</b>	<b>152.674</b>	<b>157.510</b>	<b>153.453</b>	<b>(4.057)</b>

2.65 The 2022/23 capital programme will be financed as follows:

*Table 11: Capital Programme Financing 2022/23*

	<b>2022/23 Initial Programme Budget</b>
	<b>£m</b>
Government Grants	269.728
Earmarked Reserves	10.046
<b>Total Funding</b>	<b>279.774</b>

### **3. Reasons for the Proposals**

3.1 The proposals are presented in this report to enable the Joint Transport Committee to agree its capital programme for 2022/23.

### **4. Alternative Options Available**

4.1 Option 1 – The North East Joint Transport Committee may accept the recommendations set out in this report.

4.2 Option 2 – The North East Joint Transport Committee may not accept the recommendations set out in this report.

4.3 Option 1 is the recommended option.

### **5. Next Steps and Timetable for Implementation**

5.1 Progress against the JTC Capital Programme will be reported regularly throughout the year and monitored carefully by officers at the various delivery bodies. As and when updated information on funding bids is received, the capital programme will be updated and presented to the JTC for consideration and approval.

### **6. Potential Impact on Objectives**

6.1 Successful delivery of the various transport schemes and investment proposals outlined in this report will assist the JTC in meeting its objective to maximise the region's opportunities and potential.

### **7. Financial and Other Resources Implications**

7.1 The financial and other resources implications are set out in the main body of the report.

### **8. Legal Implications**

8.1 The Newcastle upon Tyne, North Tyneside and Northumberland Combined Authority (Establishment and Functions) Order 2018 specifies that the setting of the capital programme in relation to transport is a function exercisable only by the Joint Transport

Committee. Unanimous approval is required.

## **9. Key Risks**

9.1 Risks associated with the delivery of transport schemes by the key delivery bodies are factored into the risk management processes of those organisations.

## **10. Equality and Diversity**

10.1 There are no equality and diversity implications arising from this report.

## **11. Crime and Disorder**

11.1 There are no crime and disorder implications arising from this report.

## **12. Consultation/Engagement**

12.1 Projects being delivered by constituent authorities or in constituent authority areas are subject to local consultation and planning approvals.

## **13. Other Impact of the Proposals**

13.1 There are no other impacts arising from this report.

## **14. Appendices**

14.1 Appendix 1: Nexus Capital Programme 2022/23 to 2024/25

## **15. Background Papers**

15.1 JTC report 16 November 2021 – Capital Programme Update – [\(Public Pack\)Agenda Document for North East Joint Transport Committee, 16/11/2021 14:30 \(northeastca.gov.uk\)](#)

JTC report 19 January 2021 – 2020/21 Initial Capital Programme – [\(Public Pack\)Agenda Document for North East Joint Transport Committee, 19/01/2021 14:30 \(northeastca.gov.uk\)](#)

## **16. Contact Officers**

16.1 Eleanor Goodman, NECA Finance Manager, [eleanor.goodman@northeastca.gov.uk](mailto:eleanor.goodman@northeastca.gov.uk), 0191 433 3860

## **17. Sign off**

- The Proper Officer for Transport:
- Head of Paid Service:
- Monitoring Officer:
- Chief Finance Officer:

## **18. Glossary**

DfT – Department for Transport  
DARP – Digital Asset Renewal Programme  
JTC – Joint Transport Committee  
LTP – Local Transport Plan  
MARP – Metro Asset Renewal Programme  
TCF – Transforming Cities Fund  
TPCT – Tyne Pedestrian and Cycle Tunnel  
TSU – Transport Strategy Unit  
UTMC – Urban Traffic Management and Control

## Appendix 1 – Nexus Capital Programme 2022/23 to 2024/25

Asset Category	Proposed Budget 2022/23	Proposed Budget 2023/24	Proposed Budget 2024/25	Total
	£m	£m	£m	£m
<b>Metro ARP</b>	<b>32.762</b>	<b>38.133</b>	<b>38.045</b>	<b>108.940</b>
Capital Maintenance	4.148	3.898	2.705	10.751
<i>Capital Maintenance - Existing fleet and transition.</i>	3.223	3.223	1.700	8.146
<i>Infrastructure Vehicle Maintenance (RRV's, wagons, locos etc.)</i>	0.175	0.175	0.175	0.525
<i>Plain Line (Heavy Maintenance)</i>	0.500	0.500	0.500	1.500
<i>Rail Grinding</i>	0.250	-	0.330	0.580
Civils	4.963	2.550	1.750	9.263
<i>Tanners Bank Underbridge</i>	2.245	-	-	2.245
<i>Tunnels - repairs and asbestos maintenance</i>	0.068	0.400	0.400	0.868
<i>Howdon Viaduct - Track System Renewal</i>	0.500	0.500	-	1.000
<i>Stoddart Street bridges - repair/waterproofing</i>	0.200	0.200	0.500	0.900
<i>Cullercoats Footbridge</i>	0.400	0.100	-	0.500
<i>Multi Storey Car Parks refurbishment</i>	0.500	0.500	-	1.000
<i>Surface Car Parks Refurbishment</i>	0.500	0.250	0.250	1.000
<i>Bridges - condition and assessment led repairs/painting</i>	0.500	0.500	0.500	1.500
<i>Structural Assessments - overbridges</i>	0.050	0.100	0.100	0.250
Level Crossings	0.050	0.050	0.050	0.150
Crossing Upgrade / repairs	0.050	0.050	0.050	0.150
Mechanical and Electrical	1.900	0.610	0.300	2.810
<i>Lighting inverters</i>	0.200	-	-	0.200
<i>Station lighting and small power</i>	0.050	0.050	-	0.100
<i>Tunnel Lighting</i>	0.250	0.300	0.300	0.850
<i>Gas suppression</i>	0.100	0.200	-	0.300
<i>Escalator - 1/2 life refurb programme</i>	0.700	0.030	-	0.730
<i>Lifts - 1/2 Life Refurbishment</i>	0.400	0.030	-	0.430
<i>DC Circuit Breakers</i>	0.200	-	-	0.200
Overhead line	3.126	3.400	3.500	10.026
<i>OHL renewal - Continued from Phase 2 ARP</i>	3.126	3.400	3.500	10.026
Permanent Way (Plain line)	4.072	5.875	8.850	18.817
<i>Vegetation clearance / Off track remedial works</i>	0.500	0.300	0.300	1.100
<i>Track Works - Tyne Dock</i>	0.010	-	-	0.010
<i>Plain Line Refurbishment South Gosforth to Airport (Christon Road 1020A/B &amp; 1021 pts)</i>	0.132	-	-	0.132

Asset Category	Proposed Budget 2022/23	Proposed Budget 2023/24	Proposed Budget 2024/25	Total
	£m	£m	£m	£m
<i>Switches &amp; Crossings - Pelaw Chords 7016/17 pts</i>	1.400	0.200	-	1.600
<i>Switches &amp; Crossings - Prudhoe Street 6007A/B pts</i>	0.030	1.400	-	1.430
<i>Plain line - Tynemouth to Northumberland Park</i>	-	-	0.250	0.250
<i>Plain Line Refurbishment. SGF to Airport (Col)</i>	0.400	2.000	7.000	9.400
<i>Points Heater Controls Replacement</i>	-	0.075	-	0.075
<i>Switches &amp; Crossings - Chillingham Road 3014AB pts (Crosssover)</i>	-	0.100	0.800	0.900
<i>Switches &amp; Crossings - Monkseaton 2036B pts (Turnout), 2034 AB pts (Crossover), 2032 AB pts (Crossover)</i>	0.800	1.300	-	2.100
<i>PLW-SSS Underbridge Rail fastenings</i>	0.300	-	-	0.300
<i>Lookout Protection infrastructure works</i>	0.500	0.500	0.500	1.500
<b>Plant</b>	<b>1.468</b>	<b>2.140</b>	<b>0.950</b>	<b>4.558</b>
<i>Vehicle replacement Programme</i>	0.240	0.140	0.150	0.530
<i>Diesel Shunters Battery Locos (likely to be RRVs)</i>	1.228	2.000	0.800	4.028
<b>Risk Contingency</b>	<b>2.000</b>	<b>2.500</b>	<b>3.000</b>	<b>7.500</b>
<b>Signalling</b>	<b>3.095</b>	<b>6.910</b>	<b>6.040</b>	<b>16.045</b>
<i>Cable Testing and Replacement</i>	0.200	0.200	0.200	0.600
<i>Location Rewire</i>	0.200	0.200	0.200	0.600
<i>SCADA</i>	0.800	4.000	3.200	8.000
<i>Track impedance bonds(replace oil filled)</i>	0.090	0.090	-	0.180
<i>Cable Degradation relay rooms</i>	1.000	1.000	-	2.000
<i>Customer Information System (PID's) &amp; to IP</i>	0.050	0.500	1.000	1.550
<i>Ground shunt &amp; Subsidiary Signals</i>	-	0.100	-	0.100
<i>Relay Replacement &amp; relay room equipment</i>	0.100	0.100	-	0.200
<i>Relay rooms cooling and lighting at SGF</i>	0.030	0.080	-	0.110
<i>Treadle Replacement</i>	0.040	0.040	0.040	0.120
<i>Troughing</i>	0.100	0.100	0.100	0.300
<i>Signalling System replacement development</i>	0.200	0.500	1.300	2.000
<i>MM74DB DCCB Circuit breakers</i>	0.285	-	-	0.285
<b>Stations</b>	<b>3.075</b>	<b>4.500</b>	<b>6.750</b>	<b>14.325</b>
<i>Interchange station GHD (Design)</i>	0.010	0.200	0.200	0.410
<i>Whitley Bay (Canopy)</i>	1.000	1.000	-	2.000
<i>Platform Interchange Compliance</i>	0.165	-	-	0.165
<i>Byker</i>	0.500	1.500	1.200	3.200
<i>Manors</i>	-	-	0.200	0.200

Asset Category	Proposed Budget 2022/23	Proposed Budget 2023/24	Proposed Budget 2024/25	Total
	£m	£m	£m	£m
<i>Monkseaton (incl' canopy)</i>	0.500	0.300	-	0.800
<i>Simonside</i>	-	-	0.200	0.200
<i>St James</i>	-	-	0.250	0.250
<i>Halt Stations</i>	0.500	0.300	0.300	1.100
<i>Jesmond</i>	-	-	0.200	0.200
<i>Monument Scope and Design</i>	0.100	0.300	0.500	0.900
<i>Regent Centre Scope and Design</i>	0.300	-	-	0.300
<i>Heworth Scope and Design</i>	-	0.400	3.000	3.400
<i>Four Lane Ends interchange enhancement</i>	-	0.200	0.300	0.500
<i>Heritage Stations</i>	-	0.300	0.200	0.500
<i>Airport Stations</i>	-	-	0.200	0.200
<b>Business Applications</b>	<b>1.050</b>	<b>0.600</b>	<b>0.200</b>	<b>1.850</b>
<i>Asset Management Software Replacement</i>	0.300	0.200	-	0.500
<i>Finance System</i>	0.200	-	-	0.200
<i>HR/Payroll</i>	0.050	-	-	0.050
<i>Timetable &amp; Driver Rostering</i>	0.300	-	-	0.300
<i>Competency Management System</i>	0.050	-	-	0.050
<i>ArcGis Desktop</i>	0.025	-	-	0.025
<i>Finance System upgrades/developments</i>	0.025	0.100	0.100	0.225
<i>Business Applications</i>	0.100	0.300	0.100	0.500
<b>ICT Infrastructure</b>	<b>1.665</b>	<b>3.050</b>	<b>2.450</b>	<b>7.165</b>
<i>Microsoft SQL Server</i>	0.050	0.050	0.050	0.150
<i>Network Refresh</i>	1.000	0.500	0.500	2.000
<i>Digital Connectivity</i>	0.150	0.100	-	0.250
<i>Remote condition monitoring</i>	0.100	0.200	0.200	0.500
<i>Microsoft Sharepoint</i>	0.100	0.100	0.100	0.300
<i>Microsoft CRM</i>	0.100	0.100	-	0.200
<i>Paloalto (Firewall)</i>	0.165	-	-	0.165
<i>Virtual Server Platform</i>	-	2.000	-	2.000
<i>CCTV Storage Platform</i>	-	-	1.600	1.600
<b>Miscellaneous</b>	<b>1.550</b>	<b>0.950</b>	<b>0.700</b>	<b>3.200</b>
<i>Fare Collection Systems</i>	0.050	0.200	0.200	0.450
<i>Control Centre improvements (further)</i>	0.500	0.250	-	0.750
<i>Upgrade TVMs, gates/barriers, validators, TOMs</i>	1.000	0.500	0.500	2.000
<b>Power</b>	<b>0.600</b>	<b>1.100</b>	<b>0.800</b>	<b>2.500</b>
<i>DC Switch Boxes</i>	0.300	0.300	0.300	0.900
<i>HV Improvements</i>	0.300	0.800	0.500	1.600
<b>Fleet Replacement Programme</b>	<b>69.808</b>	<b>99.000</b>	<b>42.300</b>	<b>211.108</b>
<i>MSA</i>	40.884	90.754	41.160	172.798
<i>DCC</i>	22.329	4.545	-	26.874

Asset Category	Proposed Budget 2022/23	Proposed Budget 2023/24	Proposed Budget 2024/25	Total
	£m	£m	£m	£m
<i>Project Delivery</i>	2.767	2.126	1.001	5.895
<i>Risk Allowance</i>	3.827	1.575	0.139	5.541
<b>Metro Flow</b>	<b>83.498</b>	<b>1.075</b>	-	<b>84.572</b>
<b>Other Capital Projects</b>	<b>8.345</b>	<b>6.289</b>	-	<b>14.634</b>
<i>Callerton Car Park</i>	2.164	0.021	-	2.185
<i>Digital Car Park</i>	2.452	0.024	-	2.476
<i>Ferry</i>	3.729	6.244	-	9.973
<i>Ferry Vessels</i>	0.065	-	-	0.065
<i>Ferry North Landing Relocation</i>	3.334	5.893	-	9.227
<i>South Landing works</i>	0.330	0.351	-	0.681
<b>Total Capital Programme</b>	<b>194.413</b>	<b>144.497</b>	<b>80.345</b>	<b>419.255</b>

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## North East Joint Transport Committee

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**Date:** 18 January 2022

**Subject:** Transport Plan Progress Report

**Report of:** Managing Director, Transport North East

### Executive Summary

This report provides an update on progress made across a number of Delivery Plan categories in implementing the objectives of the North East Transport Plan and achieving the vision of 'moving to a green, healthy, dynamic and thriving north east.'

The UK government's IRP for the North and Midlands was published on 18th November 2021, however the outcome was very disappointing for the region. Likewise, the government's Union Connectivity Review does not propose any extra investment on the East Coast Main Line.

Progress continues with the installation of further electric vehicle charging infrastructure across the north east although one site needs to be changed.

Eight of the ten new taxi charging sites are now live and operational. However, as some work remains outstanding, the charge point supplier contract is being extended for a period of 12 months at no additional cost to NECA.

Preparatory work is starting on two further Transforming Cities projects, North Shields Transport Hub and the Regionwide ITS scheme.

A new 'Safer Transport Northumbria' app has been launched.

The Tyne Pass Scheme to introduce barrierless travel for Tyne Tunnel users went live on 8<sup>th</sup> November 2021. Work continues on the glass inclined lifts which are the last feature of the Tyne Cyclist and Pedestrian Tunnels refurbishment

### Recommendations

The Joint Transport Committee is recommended to note the contents of this report and, in respect of section 2.3, to give authority to the Managing Director, Transport North East, following consultation with the JTC Chair, to submit a response to the GBR call for evidence on behalf of the JTC by the deadline of 4<sup>th</sup> February 2022.

## 1. Background Information

1.1 The North East Transport Plan sets out a vision of ‘moving to a green, healthy, dynamic and thriving north east’ through the delivery of transport improvements under seven policy areas:

- Connectivity beyond our boundaries
- Making the right travel choice
- Active Travel
- Public transport: travelling by bus, ferry and on demand public transport
- Public transport: travelling by local rail and Metro
- Private transport: travelling by car and using road infrastructure
- Research, development and innovation

Progress under various categories is outlined below.

There are also five objectives, which are:



Carbon-neutral north east



Overcome inequality and grow our economy



Healthier north east



Appealing sustainable transport choices



Safe secure network

The symbols have been used below to denote how the listed schemes / actions contribute to the achievement of the various objectives.

## 2. Connectivity beyond our boundaries

2.1

**Rail update**



### UK Government Integrated Rail Plan (IRP) for the North and Midlands

The UK government’s IRP for the North and Midlands was published on 18th November 2021. The outcome is very disappointing as the North East is no longer proposed to be connected to the UK’s future high speed rail network. The removal of North East connections to both HS2 and NPR will have significant negative impacts on the strategic objectives of the Transport Plan, primarily reducing our ability to ‘Overcome inequality and grow our economy’.

The IRP also rules out government investment in the Leamside Line as a means of adding capacity to the ECML. The IRP does however discuss more limited potential improvements to the existing ECML route in our region and also suggests that the Leamside Line could be part of a “future city region settlement”.

## 2.2

### Union Connectivity Review (UCR)– final report



The final report of the UCR was published on 26th November 2021. However, it did not recommend any further investment for the East Coast section of the line. The report proposes new investment for the West Coast Main Line (WCML) but only recommends that an assessment be conducted for the East Coast Corridor.

The final report also proposes the creation of a UK-wide strategic transport network known as UKNET to guide future investment and policy decisions. The North East is included in UKNET via the multimodal East Coast and North Channel corridors.

The review recommends that, to support improved connectivity to, from and via Scotland, the UK Government should work with the Scottish Government to develop an assessment of the East Coast road and rail transport corridor from North East England to South East Scotland, including ECML improvements. However, earlier this year Network Rail completed a strategic study jointly with Transport Scotland on 'How can the railway between Newcastle and Edinburgh meet the needs of the 2030s and beyond?' Carrying out yet another study of capacity on the ECML will result in further delay in achieving the improvements we seek on the route.

## 2.3

### British Railways Call for Evidence (Whole Industry Strategy)

British Railways' (GBR) call for evidence was launched on 9 December 2021 and will be open for eight weeks until 4 February 2022. They are seeking support for a Whole Industry Strategic Plan (WISP), a 30-year strategy for the UK's rail system. They aim to use evidence to shape their Strategic Plan which will be a 30-year strategy for the UK's rail system. It will be shaped by a set of strategic objectives that have been developed by the UK Government for the benefit of rail passengers, freight users and taxpayers, and to support Britain's economic, environmental and social ambitions. The five objectives are listed below:

- meeting customers' needs,
- delivering financial sustainability,
- contributing to long-term economic growth,
- levelling up & connectivity,
- delivering environmental sustainability

The timeframes to be covered in the response to this call for evidence are as follows:

- The short term: 2022-2027 (the five-year period from publication of the Strategic Plan in 2022).
- The medium term: 2028-2037 (the next ten years, which is the timeframe in which it is expected to have moderate levels of certainty in project planning and sequencing).

- The long term: 2038 - 2052, which are highly uncertain and unpredictable, making it all the more important that the rail system is prepared for a number of different scenarios that will be able to adapt to the challenges that the future holds.

It is proposed to produce a response on behalf of the JTC and submit by 4 February 2022.

#### 2.4 North East Rail and Metro Strategy

Development of a new North East Rail and Metro Strategy is covered in a separate agenda item.

#### 2.5 Transport for the North (TfN) update



Following Board approval, Transport for the North launched its Decarbonisation Strategy – titled A Transport Decarbonisation Strategy for the North of England – on 8<sup>th</sup> December 2021, outlining the ambitious target of near-zero carbon emissions from surface transport by 2045.

Support from government for TfN’s transformational investment programme will be needed to assist in the progress towards decarbonisation.

### 3. **Making the right travel choice**

#### 3.1 **Local Growth Fund Electric Vehicle Infrastructure Project**



Progress continues with the delivery of ZEV charging infrastructure at seven sites across the region (one in each local authority). A separate agenda item seeks approval for a change in location of the Durham site, due to technical issues at the original site (Middleton in Teesdale).

#### 3.2 **Zero Emission Vehicle (ZEV)**



The North East Zero Emission Vehicle policy is being finalised and will be submitted to the March meeting of this Committee for approval.

#### 3.3 **Go Ultra Low taxi project**



Eight of the ten dedicated chargers for the taxi and private hire industry (funded by the Office of Zero Emission Vehicles) are now operational. There are outstanding issues impacting on implementing the final two sites – legal

constraints for Blandford Square in Newcastle, whilst the Coronation Street site in North Tyneside is currently being used as a Covid testing centre. Discussion are being held with the relevant authorities to seek to address these issues and extensions have been granted by DfT.

The existing contract with the procured chargepoint supplier, Swarco, is due to end in February 2022. Due to two sites still needing to be delivered, the framework contract is being extended for a period of 12 months at no additional cost to NECA. Engagement events to encourage the switch to EV in the taxi trade are planned for February 2022.

### 3.4 **Transforming Cities Fund**



Work continues on the two schemes currently in the delivery phase, Durham Bus Station and Sunderland Central Station. In November, JTC agreed for the early release of funding for the North Shields Transport Hub and the Regionwide ITS schemes, which is allowing preparatory orders/work to commence so that both schemes can start onsite in the new year and deliver within TCF timescales.

Ten business cases are due for approval before the end of this financial year. There are a large number of business cases to be reviewed over the coming months, which could cause delays to the appraisal process. TNE are working closely with the review consultants to programme in their time and provide advanced notice of business cases being submitted.

There is an ongoing risk of cost increases to schemes linked to availability of materials and inflationary pressures. There is also lengthening lead in times for the delivery of materials. Additionally, there are some larger projects within the programme that may be constructed simultaneously, that could have compounding impacts on the travelling public. These are both being closely monitored by TNE.

## 4. **Active travel**

### 4.1 **Active travel fund**



In Tranche 2, at the time of writing one scheme is under construction, which is the Durham Great North Cycleway scheme. The remaining seven schemes in Tranche 2 to commence on site before the end of the financial year.

The Department for Transport indicated that a funding announcement for Tranche 3 was likely to be made in November, with grant determination letters to follow and release of funds likely to occur in December 2021. At the time of writing, no funding announcement has yet been made, however an update was received on the 17<sup>th</sup> of December to say this decision will be made early in the

new year. Upon confirmation of our regional allocation a report will be presented to this Committee with details of our delivery proposals.

It should be noted that Tranche 3 is a competitive bidding process, therefore there is a risk of receiving a proportionately lower settlement than the regional bid.

A further risk is that timescales for project delivery or the scope of schemes could be impacted if scheme designs require amendment or enhancement following consultation feedback. In addition, the quantity of construction work required on the network may be challenging considering ATF timescales align with Transforming Cities Fund delivery timescales.

## 5. **Public transport, travelling by bus, ferry and on demand public transport**

### 5.1 **Bus partnership development**



The Enhanced Partnership has progressed to the operator's objection period and statutory consultation with key stakeholders is currently being undertaken. The operator's objection period ended on 12<sup>th</sup> January and the statutory consultation with key stakeholders end on 11<sup>th</sup> February.

### 5.2 **Zero Emission Bus Regional Area (ZEBRA) bid**



A separate agenda item seeks approval to submit the Business Case to secure funding for this project.

## 6. **Public transport: travelling by local rail and Metro**

### 6.1 **Metro funding**



DfT and HM Treasury have confirmed a £13.1m package of funding to support Metro until the end of the financial year. This will be the last package of funding available. Whilst promising patronage recovery had been seen, Nexus await the impacts of the December 'work from home' instruction on the recovery. If patronage does not recover during 2021/22 to fully cover Metro's operational expenditure from the 1<sup>st</sup> April 2022, an increase in funding from the Tyne and Wear levy or reductions in Nexus services may be required.

### 6.2 **Safer Transport Northumbria app**



A new app was launched on 10<sup>th</sup> December by Northumbria's Police and Crime Commissioner as part of an ongoing 'Safer Streets' commitment to tackle violence against women and girls and improve safety on public transport and help make our transport links the safest in the country.

The aim of the app is to make it easy for anyone travelling anywhere in the region to tell authorities that they are concerned for their own or another person's safety. To further improve everyone's safety the app also provides quick access up-to-date travel information to help with making travel plans.

The app launch forms part of an £800,000 investment in Safer Streets funding, which will also include:

- body-worn cameras for transport staff;
- Street Pastor-style safety volunteers patrolling the Metro network; and
- extra CCTV linked to control rooms.

## **7. Private transport: travelling by car and using road infrastructure**

### **7.1 Tyne Tunnel**



The Tyne Pass Scheme to introduce barrierless open-road tolling for Tunnel users came into full operation on 8th November 2021. Roadworks are in place around the former toll booths which are gradually being taken down and a new road layout is being put in place. These works will continue until March/April 2022.

There is a reputational risk to JTC if the Tyne Pass scheme produces adverse outcomes for users. Some users who have received an Unpaid Toll Charge Notice (UTCN) over the last few months under the interim Tyne Pass systems in place have been dissatisfied. It is therefore important that Transport North East continues to work with TT2 on clear messaging to users, distinctive signage and fair processes for UTCNs and appeals in order to provide customers with the best possible experience under the new Scheme. Officers will continue to work with TT2 towards these aims. Safeguards have been put in place via the Project Agreement with TT2 and via the processes for management of the Concession.

Tyne Cyclist and Pedestrian Tunnels (TCPT) are refurbished and open to the public 24/7 with free passage. Work continues on the glass inclined lifts which are the last feature of the refurbishment. There is no fixed date for completion of the inclined lifts as supplier issues mean that the end date is uncertain.

## **8. Estimated Change in Traffic Flow in Tyne and Wear**

8.1 The following chart shows that at the start of the pandemic traffic levels dropped considerably but have now recovered significantly towards pre-covid levels and at times above.

Estimated change in traffic volume compared to Pre-Covid in Tyne & Wear to  
Mid November 2021  
7 day moving average



**9. Reasons for the Proposals**

9.1 This report is for information purposes.

**10. Alternative Options Available**

10.1 Not applicable to this report.

**11. Next Steps and Timetable for Implementation**

11.1 Next steps are set out under each respective item.

**12. Potential Impact on Objectives**

12.1 Successful delivery of the various transport schemes and investment proposals outlined in this document will assist the JTC in delivering its objective to maximise the region’s opportunities and economic potential.

**13. Financial and Other Resources Implications**

13.1 The report provides an update and overview of progress against the seven Delivery Plan categories in implementing the objectives of the North East Transport Plan and achieving the vision of ‘moving to a green, healthy, dynamic and thriving north-east.’

13.2 The North East Transport Plan includes proposed / required investment totalling £7billion to achieve the aims and ambitions of the JTC, the majority of which is dependent on future funding decisions by central government. The financial and other resource implications aligned to the plan were agreed as part of the Transport Budget and Levies 2021/22 report to the JTC on 19 January 2021 and in subsequent reports to augment and amend the budget as appropriate.

**14. Legal Implications**

14.1 There are no legal implications arising directly from this report.

**15. Key Risks**

15.1 Appropriate risk management arrangements are in place for each programme of work overseen by the delivery agencies responsible. Key risks are set out under each respective item.

**16. Equality and Diversity**

16.1 Successful delivery of schemes to improve public transport, walking and cycling will help to address transport-related social exclusion and create a fairer society.

**17. Crime and Disorder**

17.1 There are no specific crime and disorder implications associated with this report.

**18. Consultation/Engagement**

18.1 Many of the schemes and proposals outlined in this report have been, or will be, the subject of engagement with appropriate stakeholders or the wider public.

**19. Other Impact of the Proposals**

19.1 No specific impacts.

**20. Appendices**

20.1 1 - Progress on Key Performance Indicators.

**21. Background Papers**

21.1 None.

**22. Contact Officers**

22.1 Toby Hughes, Managing Director, Transport North East  
[Toby.hughes@nexus.org.uk](mailto:Toby.hughes@nexus.org.uk)

**23. Sign off**

- The Proper Officer for Transport: ✓
- Head of Paid Service: ✓
- Monitoring Officer: ✓
- Chief Finance Officer: ✓

24. **Glossary**

All abbreviations or acronyms are spelled out in the report.

**Appendix 1**

**Progress on Key Performance Indicators**

<b><u>KPI</u></b>	<b><u>Direction of travel</u></b>	<b><u>Key insight</u></b>
<p><u>Sustainable Travel</u> 33% of journeys made by public transport, walking and cycling.</p> <p>Data Source: DfT National Travel Survey 2019, published August 2020.</p>	Increase	<p>Data in the National Travel Survey for 2020 shows that 37% of journeys are made by public transport, walking and cycling, which is an increase on the previous year.</p> <p>Other data sources have Metro and bus use remaining below pre-covid levels even after restrictions have been lifted in 2021, however cycling numbers are up in many locations. For the 7 days commencing 20<sup>th</sup> November Metro was at 89% of typical journey numbers, and bus was at 77%.</p>
<p><u>Public transport accessibility</u> 45% People within 25 minutes of key employment, education and retail sites by public transport.</p> <p>Data source: Commissioned analysis August 2020</p>	No Change	Data is not yet available to update, however, there have been no major changes to infrastructure.
<p><u>Climate action</u> CO2 emissions per</p>	No Change	Figures for 2019 have been released and

<p>capita: 1.7 tonnes CO2 emitted per persona annually using transport.</p> <p>Data source: UK local authority and regional CO2 emissions statistics: 2019, Department for Business, Energy &amp; Industrial Strategy, published June 2021</p>		<p>show no change in the amount of transport related CO2 emissions.</p>
<p><u>Take up of ultra-low emission vehicles (ULEVs)</u></p> <p>0.34% Proportion of licenced vehicles in our region that are classed as ultra-low emission (end of 2019)</p> <p>Data source: Department for Transport vehicle licensing statistics</p>	<p>Increase</p>	<p>0.48% of licenced vehicles in the region are classed as ultra-low emission (end of 2020). Data published May 2021.</p>
<p><u>Air quality</u></p> <p>For 2019, the highest, median, hourly nitrogen dioxide reading was 26.9ug/m3 occurring in the morning traffic peak.</p> <p>Data source: Department for Environment Food &amp; Rural Affairs Automatic Urban and Rural Network (AURN)</p>	<p>Decrease</p>	<p>For 2020, the highest, median, hourly nitrogen dioxide reading was 20.1ug/m3 occurring in the morning traffic, however this is expected to be unusually low due to lock down restrictions</p>
<p><u>Network performance</u></p> <p>In terms of efficiency, in 2019 our regional network scored 71.8%</p>	<p>No Change</p>	<p>Data is not yet available to update</p>

Data source: Department for Transport congestion data.		
<u>Motor vehicle traffic</u> Estimated vehicle miles per head in our region in 2019 5,077  Data source: Department for Transport National Travel survey, published August 2020	Decrease	In 2020 the estimated vehicle miles per head were 4,064. We can expect that 2020 will be unusually low.
<u>Road safety: numbers killed and seriously injured</u> Numbers killed and seriously injured (KSI) three year rolling average (2016-17 to 2018-19) 778  Data source: Traffic Accident Data Unit	Decrease	In the three-year rolling average from 2017 to 2020 there were 704 KSI.
<u>Road safety: number of slight injuries</u> Number of slight injuries three year rolling average (2016-17 to 2018-19) 3,275  Data source: Traffic Accident Data Unit	Decrease	In the three-year rolling average from 2017 to 2020 there were 2,934 slight injuries

## North East Joint Transport Committee

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**Date:** 18 January 2022

**Subject:** Zero Emission Bus Regional Areas – Business Case Approval

**Report of:** Managing Director, Transport North East.

### **Executive Summary.**

The purpose of this report is to seek approval for the submission of a Business Case to the Department for Transport for the delivery of 73 battery electric buses in the North East. The Business Case represents a total £40.1m investment, with £18.3m sought from the Department for Transport through the Zero Emission Bus Regional Areas fund and the remaining £21.8m provided in match funding from Go North East, Durham County Council and Northumberland County Council.

The package of investment aligns with our Bus Service Improvement Plan and was developed in consultation with all bus operators, Nexus and our Local Authorities. The Business Case has been developed to ensure a positive Benefit Cost Ratio, represents good value for money, addresses air quality challenges, looks to overcome inequalities and supports improved skills. The Business Case demonstrates that the proposed package of investment can be delivered in line with the proposed timescales from the Department for Transport (2 years from funding award).

### **Recommendations**

The North East Joint Transport Committee is recommended to:

- i. Approve the submission of a Full Business Case pursuant to a bid for funding to the Zero Emission Bus Regional Areas fund to deliver 73 battery electric buses and associated infrastructure.
- ii. Delegate authority to the Managing Director Transport North East to make minor modifications in order to finalise the business case and submit it to the Department for Transport ahead of the 31<sup>st</sup> January 2022 deadline.

## 1. Background Information

- 1.1 The Zero Emission Bus Regional Areas (ZEBRA) 2021-2022 scheme is a place-based scheme that will allow areas, led by Local Transport Authorities (LTAs), working in close partnership with bus operators or as consortia with more stakeholders, to bid for funding to purchase Zero Emission Buses (ZEBs) and the infrastructure required to support them. The Department for Transport (DfT) are seeking ambitious LTAs and bus operators to work together to submit proposals to begin the wide scale roll out of ZEBs.
- 1.2 Transport North East (TNE) prepared an Expression of Interest (EOI) to the ZEBRA fund for the delivery of 73 buses and associated infrastructure. The EOI was submitted in July 2021 and was successful. In August 2021, the region was invited to prepare and submit a Full Business Case by the 31<sup>st</sup> January 2022 to secure funds through ZEBRA.
- 1.3 A draft Business Case for the unchanged scope of 73 vehicles across a minimum of 4 depot sites was delivered to the DfT on 12th November 2021. TNE has reflected on their feedback and strengthened the Business Case. Through the spending review in Autumn 2021, the Government increased the allocation of the ZEBRA fund by £150m, the result is that £199m is now available in the current round and there are 17 local transport authorities bidding for funds.

## 2. Proposals

- 2.1 The regional package of investment outlined within the Business Case focuses on investment across a mix of commercial and tendered services, from circa 4 depot locations.

<b>Investment by Go North East</b>				
<b>Charger Location</b>	<b>Number of Chargers</b>	<b>Number of Buses</b>	<b>Routes</b>	<b>Bus Type</b>
Riverside Depot Gateshead	9	18	21 'The Angel'	18x Double Deck services
Consett Depot	7	14	V1 V2 V3 V4 V5 V9, 40 40A 40B, 700/1/2 and X5/X15	10 x single and 4 x double deck
Percy Main	9	17	309/310 & 311 'Cobalt & Coast'	17x double deck
Hexham*	5	10	74, 185, 680, 681, X81, 682, 683, 686, 687, 688, AD122.	10x single deck
<b>Subtotal</b>	30	59		

<b>Investment by Durham County Council **</b>				
<b>Charger Location</b>	<b>Number of Chargers</b>	<b>Number of Buses</b>	<b>Routes</b>	<b>Bus Type (Subject to procurement)</b>
Subject to Procurement TBC	7	14	PR1 and PR2	14x single deck
<b>Total</b>	<b>37</b>	<b>73</b>		

Table 1: ZEBRA Proposals.

- 2.2 The scheme will not reduce the frequency or capacity of any services, on certain routes it will increase capacity as a result of switching from midi bus to single deck operation. Of the 73 vehicles, 39 double deck and 34 single deck vehicles will be ordered. It will deliver improvements in journey quality and ambience as well as significant air quality benefits of switching to zero emission vehicles. This air quality effect is amplified across the region with a commitment that for every zero-emission vehicle ordered an older pre-Euro 6 diesel will be removed from service and existing Euro 6 vehicles will be redeployed.
- 2.3 Significant engagement has been undertaken in arriving at the proposals including undertaking an Equality Impact Assessment. This feedback has helped to inform the Business Case, including an action plan to improve the quality of the on-board environment and implementing noise devices on buses to denote their presence at stops. Benefits to skills and tourism have been developed and expressed in the Business Case including a commitment to grow an engineering apprenticeship programme locally. The Business Case also demonstrates the supply chain effects of the investment, including to local businesses. Letters of support have been attained from a significant range of stakeholders and a detailed communications strategy developed.
- 2.4 Go North East, Durham County Council and Northumberland County Council all have committed significant levels of match contributions towards the delivery of the vehicles and infrastructure outlined within the Business Case. All of the costs are fully met by these three parties (with financial officer approval) and there is no financial requirement from the Joint Transport Committee.
- 2.5 Proposals have been developed in tandem with the region's Bus Service Improvement Plan and emerging Enhanced partnership which sets targets for the decarbonisation of the entire North East bus fleet.
- 2.6 Legal advice has been attained regarding subsidy control, which confirms that the investments can be made in accordance with the provisions of the EU-UK Trade and Co-operation Agreement (TCA).
- 2.7 It is recommended that the Committee approve the submission and confer delegated authority to the TNE Managing Director, to finalise the detail of the Business Case to meet the deadline for submission of the 31<sup>st</sup> January 2022.

### **3. Reasons for the Proposals**

- 3.1 The scheme proposals will contribute to the delivery of the Bus Service Improvement Plan, which in turn will contribute to the delivery of the overarching regional objectives outlined in the North East Transport Plan. The proposed approval route for the Business Case is recommended to ensure the deadline set by DfT can be realised. If successful, it is expected that funding would be announced in Spring 2022 with all vehicles operational by Spring 2024.

### **4. Alternative Options Available**

- 4.1 As part of the Business Case development a range of delivery options were assessed against objectives and deliverability considerations. A preferred option was selected and progressed on the understanding that the approach offered the best mix of benefits against cost. The Business Case demonstrates why the chosen solution provides the best option in terms of meeting passenger needs, improving the environment, supporting the economy whilst also providing value for public money.
- 4.2 Two options are presented to the North East Joint Transport Committee.
- 4.3 Option 1 – The North East Joint Transport Committee accept the recommendations set out in this report, and approve the submission and confer delegated authority to the TNE Managing Director, to finalise the detail of the Business Case to meet the deadline for submission of the 31<sup>st</sup> January 2022.
- 4.4 Option 2 - The North East Joint Transport Committee do not accept the recommendations set out in this report, in which case the Business Case will not be submitted, and the region will not be eligible for funding.
- 4.5 Option 1, is the recommended option.

### **5. Next Steps and Timetable for Implementation**

- 5.1 Transport North East will submit the Business Case to the Department of Transport by the deadline for submission 31<sup>st</sup> January 2022 and will report the outcome of our bid to the Joint Transport Committee at an appropriate date.

### **6. Potential Impact on Objectives**

- 6.1 The proposal will contribute positively to the high-level strategic objectives in both the regional Strategic Economic Plan, Bus Service Improvement Plan and the North East Transport Plan.

### **7. Financial and Other Resources Implications**

- 7.1 The capital costs of this proposal will be met by the three promoters.
- 7.2 Committed match funding of £16.3m is coming from Go North East, £3.4m from Durham County Council and £516,000 per annum from Northumberland County Council. In addition, Go North East and Durham County Council will be responsible

for battery maintenance costs of circa £130,000 per bus when the buses are 8 years old. This funding will be secured separately.

7.3 If successful there will be a minor staffing cost associated with the management of the grant and associated monitoring and evaluation. However, it is considered that this can be subsumed into existing TNE resources.

7.4 There are no other Human Resources or ICT implications arising from the recommendations of this report.

## **8. Legal Implications**

8.1 Legal advice has been sought that this proposal complies with the provisions of the EU-UK Trade and Co-operation Agreement (TCA).

8.2 If successful, Grant Funding Agreements will be required in order to enable the scheme promoters to commence drawing down upon the funding allocation. A standard Grant Funding Agreement template has been prepared, this will be utilised to minimise any legal risks and ensure that NECA's obligations (on behalf of the JTC) to the Department for Transport in regards to the grant funding are met. These obligations will be appropriately transferred to the scheme promoters through the Grant Funding Agreement.

## **9. Key Risks**

9.1 The key risk for this Committee relates to the potential for the delivery of the proposals outlined within the Business Case to be delayed or overspent. The funding mechanism included within the Grant Funding Agreement ensures that risks to the Committee are appropriately mitigated, transferred, and borne by the scheme promoter.

## **10. Equality and Diversity**

10.1 The Business Case includes an Equalities Impacts Assessment which details the positive and negative impacts of this investment for persons with protected characteristics. This has been developed in consultation with a stakeholder group. An action plan has been developed to enhance positive effects and mitigate against any negative ones. All buses delivered by these funds will be designed in accordance with the Public Service Vehicle Accessibility Regulations with enhancements to ensure we go further.

## **11. Crime and Disorder**

11.1 The scheme will be designed to modern standards, appropriate consultation with statutory consultees has taken place through the design of the scheme, ensuring that any crime and disorder implications will be minimised.

## **12. Consultation/Engagement**

- 12.1 Stakeholder engagement has been undertaken in arriving at this proposal, detailed in our Business case. This report has been shared with the Transport Strategy Board, comments have been taken on board and integrated into this report.

### **13. Other Impact of the Proposals**

- 13.1 The ZEBRA scheme will deliver improvements in journey quality and ambience as well as air quality benefits associated with the provision of zero emission vehicles. These proposals will play a part in both the recovery of the public transport network and onward passenger growth through the provision of a cleaner fleet for the region.

### **14. Appendices**

- 14.1 ZEBRA Business Case Executive Summary

### **15. Background Papers**

- 15.1 None

### **16. Contact Officers**

- 16.1 Jonathan Bailes, Transport Programme Lead  
E-mail: [jonathan.bailes@transportnortheast.gov.uk](mailto:jonathan.bailes@transportnortheast.gov.uk)

### **17. Sign off**

- The Proper Officer for Transport: ✓
- Head of Paid Service: ✓
- Monitoring Officer: ✓
- Chief Finance Officer: ✓

### **18. Glossary**

- DfT – Department for Transport,
- Expression of Interest (EOI) – The expression of interest officers submitted in July 2021.
- Promoters – Durham County Council, Go North East and Northumberland County Council.
- Transport Assurance Framework – a framework for business case development and review that ensures good decision making, procurement and governance is in place for all projects, for schemes that can demonstrate good value for public money

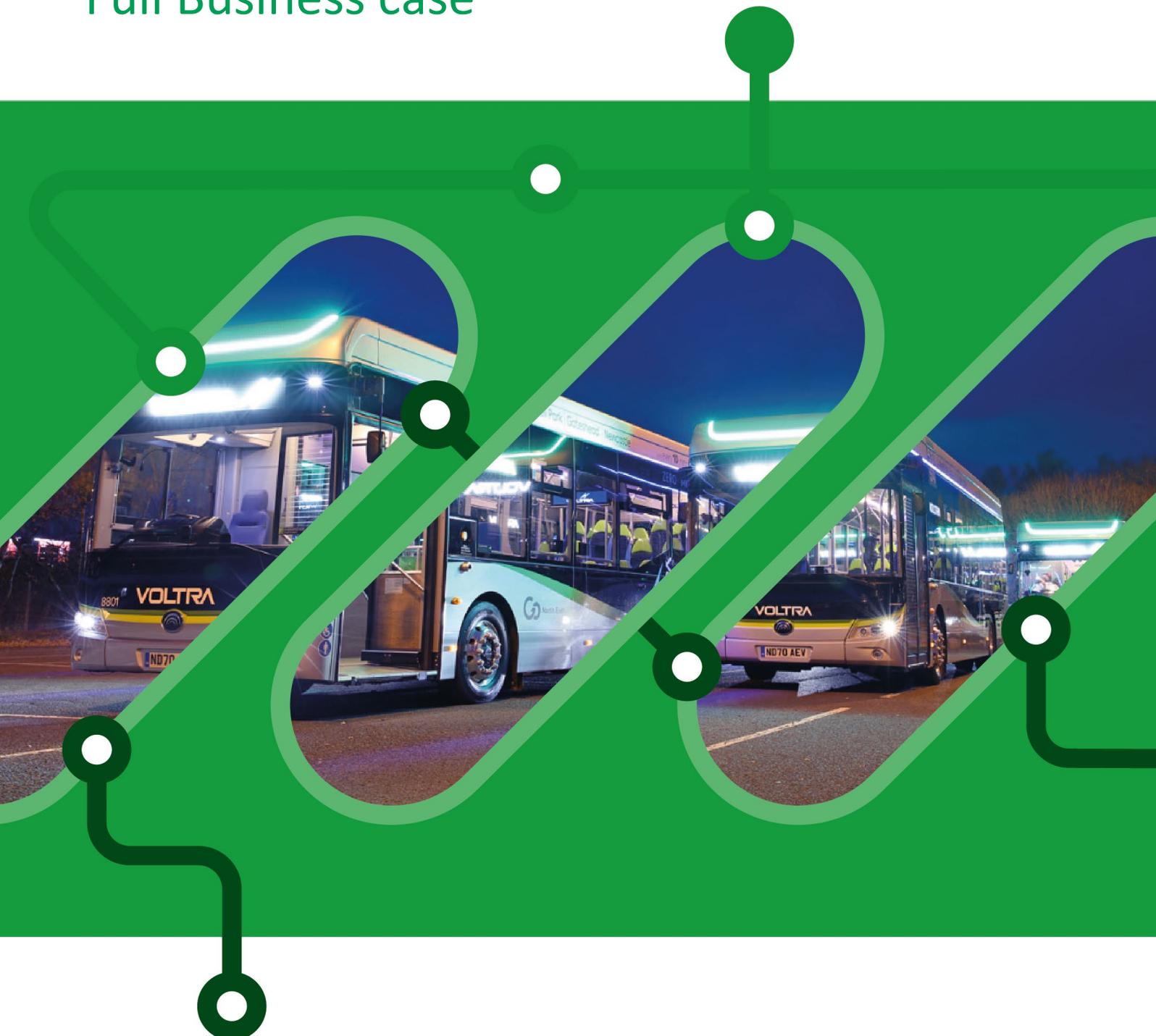
- ZEBRA – Zero Emission Bus Regional Areas, the fund for the delivery of zero emission buses.

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# Transport North East

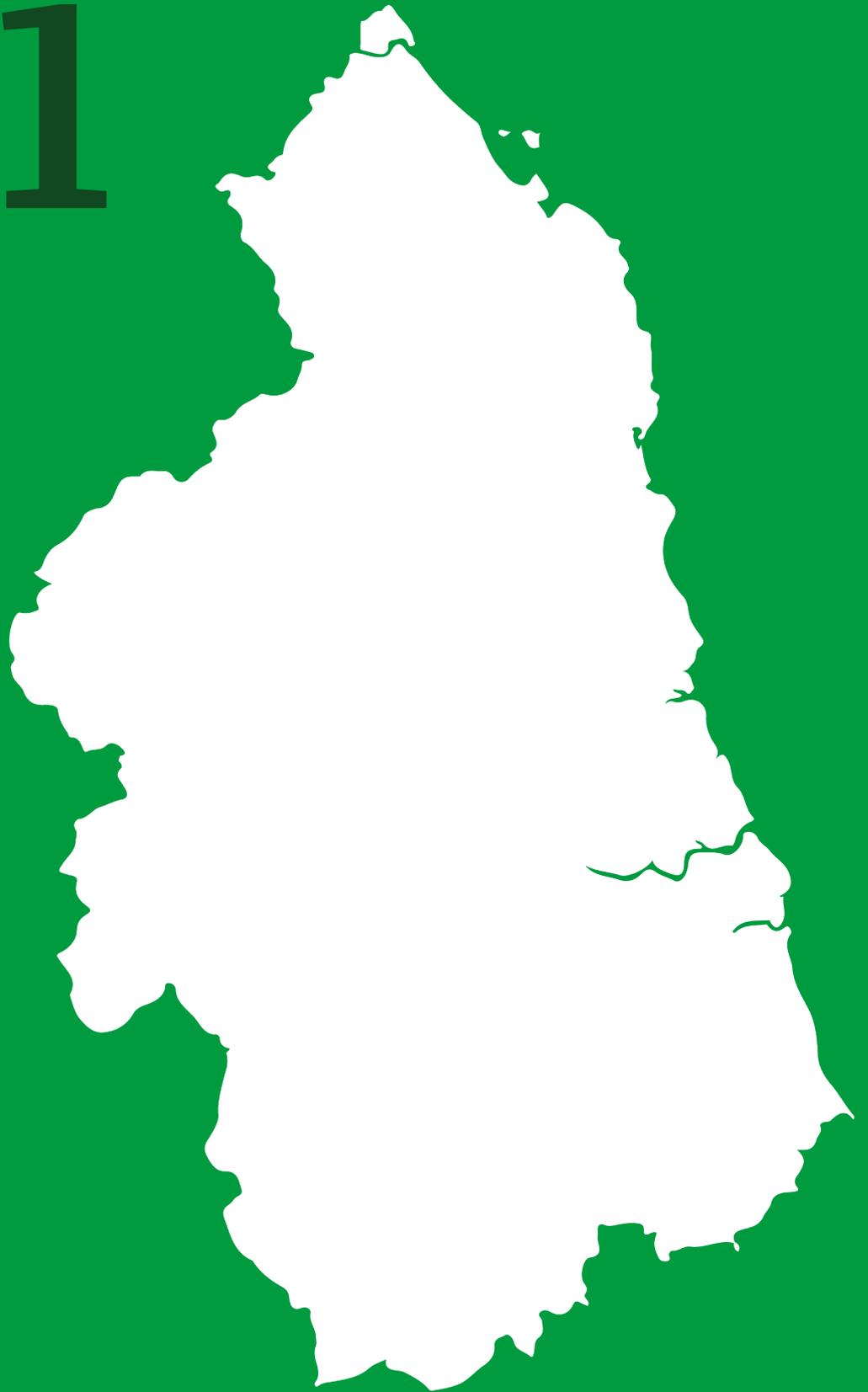
Zero Emission Bus Regional Area

Full Business case



# Executive Summary

# 01



# 1. Executive Summary

## 1.1 Introduction - Benefits of investing in the North East

- 1
- Executive Summary
- 1.1.1 Transport North East welcomes the opportunity to put forward to the Department for Transport a deliverable proposal for 73 battery electric zero emission buses on a mix of commercial and tendered services. A proportion of which could be funded through the Zero Emission Bus Regional Areas scheme. This proposal dovetails with our forthcoming enhanced partnership and our bus service improvement plan, acting as a phase of investment which we will look to expand in the future.
- 1.1.2 Following a submission of an Expression of Interest in July 2021, Transport North East was delighted to have been selected as a successful bidder to bring forward this Final Business Case. This iteration has been prepared for initial comment in November 2021. Following this submission, we will continue to work on the content of this business case, incorporating any comments from the department and its advisor Ernst and Young so it is ready for delivery in January 2022.
- 1.1.3 Our proposals would convert a network of local services in County Durham, The Durham to Newcastle Corridor, Newcastle to Blyth, Sunderland, Consett and west Northumberland to zero emission buses using the latest battery electric technology. We will serve our cities and most densely used bus corridors, address three of our most problematic air quality hotspots and progress a more sustainable access to our tourist hotspots. This project builds on the region's previous successful deployment of battery electric buses and is part of a wider plan to decarbonise the entire fleet.
- 1.1.4 This business case has been developed in partnership with,
- Confederation of Passenger Transport;
  - Durham County Council;
  - Gateshead Council (Legal);
  - Go North East;
  - NEBus (North east Bus Operators Association)
  - Nexus; and
  - Northumberland County Council
- 1.1.5 Ernst and Young, DfT's appointed contractor, have provided a strategic steer on this document. Support for the Economic, Equalities Impact Assessment and Financial case has been provided by appointed consultants, Everergi and AECOM.
- 1.1.6 On 15 March 2021, 'Bus Back Better: The National Bus Strategy' was published by the Department for Transport. The strategy sets out the Government's vision for bus services outside of London, including: cheaper and simpler fares, quicker and more reliable journeys and improvements to timetables. £3 billion has been allocated by Government to help drive these outcomes. The national strategy requires local authorities across the UK to formalise partnerships with bus

operators in the form of an Enhanced Partnership (EP) by April 2022, unless they have already started a statutory process to develop a franchising arrangement.

- 1.1.7 The North East Joint Transport Committee has given approval to proceed with preparing an EP Plan and Schemes with local bus operators, NEBus, and the project is ongoing. Our Bus Service Improvement Plan was published on the 31<sup>st</sup> October 2021.<sup>i</sup>
- 1.1.8 An EP is where local transport authorities and bus operators agree a detailed partnership plan (a Bus Service Improvement Plan) that is refined through consultation. A series of partnership schemes are built into the final agreed EP plan. This ZEBRA investment is an integral part of our Bus Service Improvement Plan and forthcoming Enhanced Partnership providing a method of transitioning to a zero emission North East bus fleet.
- 1.1.9 An enhanced bus network is key to achieving our aim of creating a green, healthy, dynamic and thriving North East. Buses are integral to achieving economic growth. Our vision will help people make greener and healthier travel choices, creating a network that can take everyone where they need to go for work, education, healthcare, shopping or other leisure activities at a price they can afford. This is an opportune moment to invest in buses and infrastructure across the North East.
- We will invest in a mix of commercial and tendered services demonstrating significant partnership working across the region, an example of our Bus Partnership in action;
  - We will build on an established brand and operation of electric buses;
  - Our investment will play a huge role in transforming air quality in areas where there are currently challenges;
  - All of our power will come from 100% renewable electricity;
  - We will deliver wider benefits for our communities including the creation of engineering apprenticeships; and
  - Our plans dovetail with our enhanced partnership and complementary investments to increase the reliability, frequency and services.
- 1.1.10 In our strategic case we demonstrate some of the background challenges and opportunities around this investment, including.
- A strong policy narrative across national, subnational, regional and local policy for investing to make change – this has informed our proposals;
  - The North East has a significant well used and relatively dense bus network, with 162m bus journeys pre pandemic, our Bus Service Improvement Plan includes a target of recovering to this level of patronage by 2023 with 10% growth in consecutive years thereafter with measures outlined as to how we achieve that;
  - The region is blessed with having miles of unspoilt coastline, UNESCO world heritage sites, a national park together with vibrant towns and cities, our investment will seek to connect these by electric buses;
  - Despite this, parts of our region face severe pressures around air quality, with a clean Air Zone due to be implemented in Newcastle / Gateshead in July 2022 and Air Quality Management Areas on these affected corridors. It's clear that the

contribution of public transport to this air quality challenge can be partially resolved with the switch to zero emission propulsion systems. At the same time this investment is critical to ensure we take steps to transition to an active travel and public transport led solution. This additionally locks in benefits tackling the deep-seated health inequalities that exist;

- Our bus fleet has an average age of 8.6years, made up of 1415 vehicles, over half the fleet (53%) is below Euro 5 or below demonstrating the need to act.
- The North East's economic challenges are profound around relative size, productivity and growth, relative to the rest of the UK. This was made clear in the pandemic; however, we have a strong recovery plan including the field of zero emission technology and are actively working on implementing these solutions;
- There are huge economic, social and environmental opportunities for the North East to contribute to new solutions that provide clean, secure and accessible energy. Our assets are categorised into three key areas: regional energy, offshore energy and subsea technology, demonstration and innovation;
- The North East is diverse, comprising a mix of urban and rural communities with a proud heritage and flexible economy that make our region an attractive place to live, learn and do business. We have a growing population circa 2m people but one that is ageing over time (average age 43.7). A range of transport issues has led to a contrast between rural isolation in our remoter areas and poor air quality and congestion in parts of our cities. Public transport provision is also poor in some of our more deprived urban areas. The 2019 Index of Multiple Deprivation (IMD) concluded that all areas of Tyne and Wear have above average levels of multiple deprivation; and
- Accessible public transport which allows people to reach employment, education and training opportunities outside of their immediate area can help to reduce these disparities. The working age population of the North East has a lower qualifications profile than England as a whole. A higher proportion of those aged 16 to 64 have no qualifications and fewer are qualified to degree-level or above (NVQ Level 4 or above). However, the North East has made progress on this since 2014, with the percentage of people with higher level qualifications increasing and the percentage with none decreasing. Our programme can have both primary benefits in upskilling the engineers of the future as well as connecting people to training and employment opportunities.

1.1.11 We have demonstrated through our strategic case the impact of not acting, including that, our transport network will underperform; traffic congestion will increase; we will fail to improve air quality in reasonable time; and our progress in social mobility and public health will stagnate.

1.1.12 To ensure that we appropriately design our interventions and as a basis of our selection process we have designed objectives for this scheme which are aligned to the overall ZEBRA objectives. These are,

- Increasing the proportion of Zero Emission buses in our fleet to 6.67% by July 2024;
- Support UK manufacturers on the deployment of new vehicles and associated infrastructure, and the North East automotive sector with enhanced skills;

- Contribute towards continued partnership working between local authorities and the bus industry;
- Innovate to deliver zero emission technology to all parts of the North East as a model for the UK;
- Contribute towards a sustainable economic recovery;
- Improve the air quality of the North East; and
- Increase patronage on the bus network and increased satisfaction.

1.1.13 These objectives have also informed our internal and external drivers for change which we have structured around a Political, Economic, Social, Technological, Legal and Environment (PESTLE) analysis, together with a constraints and interdependencies review.

1.1.14 This informed our options analysis and assessment to provide a package that supports the government’s commitment to decarbonisation / reduction in CO2 emissions, rolling out zero emission buses, supporting manufacturing and supply chain jobs, embedding this proposal in our forthcoming enhanced partnership, learning from the introduction of zero emission vehicles and supporting levelling up / addressing inequalities.

## 1.2 What has changed since the Expression of Interest?

1.2.1 The general scope of our proposals from EOI stage remains unchanged with respect to the number of vehicles, routes, delivery partners and contributions. As we have been through a period of development there are various elements of our proposals however that have changed, which we have summarised in the table below.

EOI	Final Business Case Draft – November 2020
<i>Strategic Case</i>	
Early reference to the Bus Service Improvement Plan which at the stage was starting as a project	Our Bus Service Improvement Plan has now been published and this has provided evidence throughout the business cases including the need to invest and objectives.
Our selection metrics referenced air quality impacts which we referenced qualitatively	We have sought to highlight the quantitative benefits, and this will be enhanced through the development of the business case.
The Clean Air Zone introduction timetable was uncertain and was referenced in the case	We now have confirmation that the Clean Air Zone will be introduced in July 2022
Planning Consents were referenced	Additional detail has been provided around the consents required and how we will achieve these.

An assessment of the impacts on people with protected characteristics was not undertaken	A draft Equalities Impact Assessment is attached with further development to follow
<b>Commercial Case</b>	
Initial Risks were presented in the July 2021	We have a detailed risk register that has been prepared
At the EOI stage the council were considering facilities at the new park and ride site at Stonebridge	This has been discounted owing to planning restrictions associated with the site. As such a depot-based solution is being pursued by the council.
Initial routes to procurement were identified	A detailed delivery and procurement plan has been prepared for the three delivery components.
<b>Financial Case</b>	
Initial costs were presented	A detailed review and cross check of these costs has taken place and will continue
<b>Economic Case</b>	
DfT Toolkit was undertaken	The Greener Bus Model and wider monetised and non-monetised benefits has been undertaken to derive a BCR and Value for Money category.
<b>Management Case</b>	
Assurance	Further details on assurance particular in relation to the objectives and a consideration of project management have been added
Initial Monitoring and Evaluation and communications strategies were presented	More detailed strategies have been incorporated.

Table 1.2-1 Main changes since the Expression of Interest

## 1.3 Our Proposal

1.3.1 To define investment areas, we worked across the entire Transport North East area (Northumberland, Durham and Tyne and Wear) and worked with our operators at NEBus and our seven local authorities to define priority locations for investment. This approach sought to define;

- Areas of high air quality exceedance;
- Current demand levels and forecast demand;
- Complimentary investments;
- Route length and technical feasibility

- Fleet profiling;
- Wider geographical impacts;
- Depot Locations and charging hubs;
- Preferred propulsion system;
- Affordability including value for money.

1.3.2 This resulted in a long list of options from our partners which we refined assessing the options against objectives.

1.3.3 As a result, our preferred option seeks to convert a network of 73 bus routes that operate on a wide variety of bus routes, from interurban workings, Park and Ride, rural and town services. In this deployment we will demonstrate a wide range of benefits from right across the North East.

<b>Investment by Go North East</b>				
<b>Charger Location</b>	<b>Number of Chargers</b>	<b>Number of Buses</b>	<b>Routes</b>	<b>Bus Type</b>
Riverside Depot Gateshead	9	18	21 'The Angel'	18x Double Deck services
Consett Depot	7	14	V1 V2 V3 V4 V5 V9, 40 40A 40B, 700/1/2 and X5/X15	10 x single and 4 x double deck
Percy Main	9	17	309/310 & 311 'Cobalt & Coast'	17x double deck
Hexham*	5	10	74, 185, 680, 681, X81, 682, 683, 686, 687, 688, AD122.	10x single deck
<b>Subtotal</b>	30	59		
<b>Investment by Durham County Council **</b>				
<b>Charger Location</b>	<b>Number of Chargers</b>	<b>Number of Buses</b>	<b>Routes</b>	<b>Bus Type (Subject to procurement)</b>
Subject to Procurement TBC	7	14	PR1 and PR2	14x single deck
<b>Total</b>	37	73		

*Table 1.3-1: Proposed Investment package*

\*Hexham services are tendered by Northumberland County Council and are subject to procurement of an operator partner.

\*\*Durham County Council are procuring an operator partner to operate these routes.

1.3.4 This investment is delivered by three distinct delivery partners,

- 1) Go North East – Delivery of 49 zero emission buses and associated infrastructure operating out of Consett, Riverside and Percy Main depots.
- 2) Northumberland County Council – Appointment of a delivery partner and associated onward delivery of 10 zero emission buses and infrastructure on routes from Hexham; and
- 3) Durham County Council Appointment of a delivery partner and associated onward delivery of 14 zero emission buses and infrastructure to operate on Durham's two Park and Ride routes.

1.3.5 Our vehicles will be charged at existing depots where electrical capacity exists. Transport North East has engaged with Northern Powergrid on the development of the package and conversations will continue towards business case development in January.

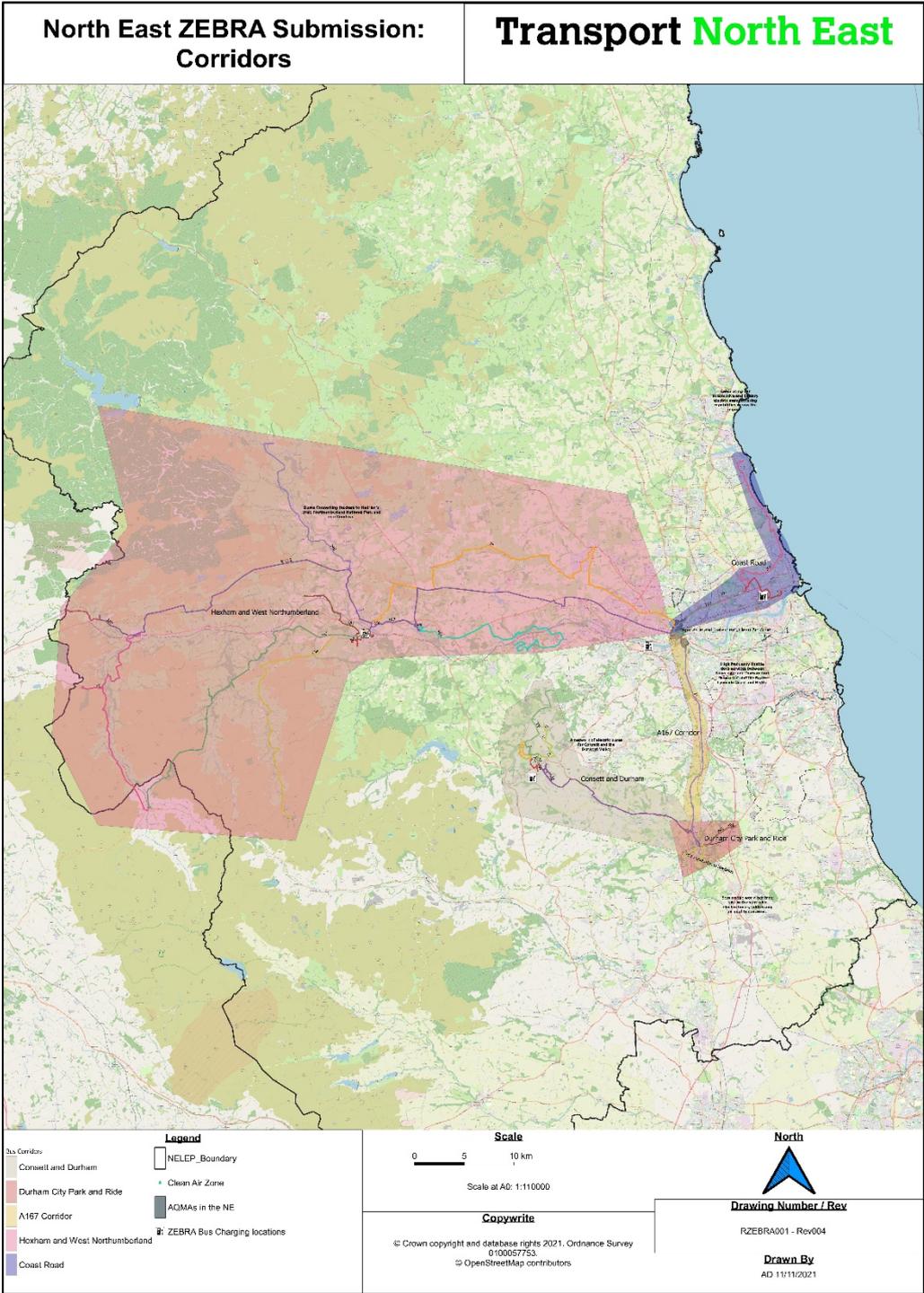


Figure 1.3-1: Our Proposal

- 1.3.6 In making this investment we can achieve significant benefits. We will assist in our efforts to clean up the region’s air, connect World Heritage sites and national parks by electric bus, provide reliable services to major employment destinations, two of our cities, towns and the growing low carbon sector at Blyth all by electric bus.
- 1.3.7 Our economic benefits are not confined to connecting members of the public to employment, education and training opportunities. An important dynamic of our

submission is its ability to support Bus Manufacturing and Electric charge points suppliers. This investment represents an £31m order for a range of suppliers including UK based manufacturers. We explore potential suppliers in our Commercial Case. Our ambition for a full fleet replacement by 2035 shows a significant further benefit. A consistent order book has the ability to drive down costs and achieve greater value for money. All the bus operators run bespoke apprenticeship and graduate management training programmes to attract and develop fresh talent into the profession, whilst also providing ongoing training and development to the wider workforce. As an example, around 90% of Go North East's engineering workforce started their careers as apprentices. The 253-strong team currently has 31 apprentices studying at varying levels of the four-year programme, which includes bespoke training using state-of-the-art equipment at Gateshead College's £5.5million Skills Academy for Automotive, Engineering, Manufacturing and Logistics based at Team Valley in Gateshead. Go North East is committed to this apprentice programme and will take forward circa 8 additional apprentices per annum associated with this investment, continuing to invest in bus engineers of the future. This is the North East directly investing in green jobs.

- 1.3.8 Bus services connect communities, helping support the growth of jobs and housing, and enabling access to education, employment, healthcare, retail, leisure, onward national transport and more. They are vital to a successful economy and society. Transport and socio-economic inequality are linked, with the provision of transport services strongly correlating with the areas in which people live, whether this be urban, suburban, rural or remote locations. This then creates socio-economic inequalities, with access to employment, healthcare and education being largely dictated by which area of the North East people live. We connect a significant population to economic hotspots via zero emission buses.
- 1.3.9 Our partners have tested experience of delivering zero emission buses including the recently deployed 53/54 Voltra services, in addition Go North East has undertaken in service trials of vehicles to test vehicles on these routes. We have applied this learning in the design of our interventions.
- 1.3.10 The development of our Bus Service Improvement Plan (BSIP) and the associated initiatives has been a collaborative effort between Local Authorities, Transport North East and bus operators. A whole range of needs have been set out in these discussions, including the provision of adequate services in rural areas. At the heart of these discussions, is designing interventions for the user. The delivery of replacement buses provides a significant opportunity to improve the quality of the onboard environment for passengers. In doing so we also have secondary effects including the cascade of existing Euro 6 vehicles to other routes within the North East replacing older vehicles. The North East's Bus operators have already taken great strides in delivering comfortable, convenient and accessible buses which operate on the region's network serving 162m passengers pre pandemic. This investment is no different and will build on the success of the Voltra operations in delivering on board and at stop technologies that aid smooth and efficient journeys.
- 1.3.11 Whilst the zero emission buses will not see significant uplifts in existing service patterns (aside from Durham Park and Ride), taken together with the Bus Service

Improvement Plan, the branding, new fleets and uplifted facilities will see increased patronage. Our proposals include a significant rural element which has the potential to demonstrate that battery electric buses can operate successfully in both urban and rural locations. As such we have plans to extract data from these operations and use it as a case study for future deployment.

- 1.3.12 We have assessed the risks for delivery of this project in the strategic case, with the top programme risks, surrounding,
- Supplier delivery timescales;
  - Infrastructure upgrades, cost and time;
  - Energy and Maintenance costs
  - Funding timescales; and
  - Procurement of suppliers.
- 1.3.13 We have designed robust mitigations for each of these risks and also identify these in our case.

## 1.4 What do our stakeholders think?

- 1.4.1 We are delighted to have the support of a wide range of stakeholders throughout the design and development of this project. We have undertaken targeted engagement with a range of stakeholders including MP's in the affected constituencies, local councils, operators, the energy industry manufactures, destination and tourism organisations and the Local Enterprise Partnership.
- 1.4.2 Comments range from support in connecting communities to opportunities, the benefits to public health and air quality, the need to invest to transition to a zero-carbon economy and the benefits for rural areas.
- 1.4.3 In addition, we have assessed communications and engagement associated with the Big Bus Conversation and Transport Plan and build this into our proposals.
- 1.4.4 To consider our proposals' positive and negative effects on people with protected characteristics we have initially undertaken a baseline equalities impact assessment. We are supplementing this with an engagement event and survey in late November 2021.

## 1.5 Achieving value for money

- 1.5.1 We have deployed the DfT's Greener Bus Model as well as capturing wider monetary and non-monetary benefits to demonstrate value for money.
- 1.5.2 The exemplification of a 53% level of match funding (see the Financial Case) allows us to spread the benefits of this investment with minimal cost to the public purse. Our investment dovetails with complimentary investments by the Bus Service Improvement Plan and through the Transforming Cities Fund.
- 1.5.3 Using the DfT Greener Buses Model – the Central Case Scenario for the Zebra Proposal by Transport for North East is 1.04 which translates according to the DfT Value for Money guidance as Low (VfM) and 1.49 for (High Non-Traded Carbon

Cost), with High scenarios for the Non-Traded Carbon Cost and High Damage Cost (NOx and PM2.5).

- 1.5.4 However, it is noted that the core BCR doesn't include aspects such as patronage growth benefits with the scheme, willingness to pay by consumers, associated benefits in relation to soft measures and air quality benefits, which would all be expected to add additional benefits. There is also the transformational impact which would be expected as a result of the process of upgrading the whole of the fleet, creating a step change in the perception of public transport across Transport for North East. Therefore, the value for the money scheme is likely to be greater than the BCR alone.
- 1.5.5 We have assessed risks and undertaken a number of sensitivity tests demonstrating the impacts through the provision of outputs of the Greener Bus Model. These demonstrate the robust nature of our assessment and the confidence that we can apply in achieving the BCR and VfM. We are working on the cost assumptions and are confident we can improve the BCR and associated VfM and will report this in the next iteration.

## 1.6 State Aid and Subsidy Control

- 1.6.1 We confirm we have received advice from Gateshead Legal on the relevant Procurement, State Aid and Subsidy rules.
- 1.6.2 The EU-UK Trade and Co-operation Agreement (TCA) sets out a framework for 'subsidy control' rules. The UK government published guidance to assist funding bodies in understanding what international subsidy control commitments and related obligations the UK has as of 1st January 2021.
- 1.6.3 This project will; be delivered in line with the obligations of the TCA and we have sought to undertake an assessment of the considerations and build an action plan associated with challenges. Further advice will be input into the January business case including considerations of grant management, partner selection and procurement elements.

## 1.7 How we will finance the proposals.

- 1.7.1 Our financial case demonstrates that this investment is affordable, deliverable and can achieve benefits together with financial approval from our delivery partners.
- 1.7.2 We provide a breakdown of the anticipated programme cost components and the time profile for the investment. It considers the capital costs that we are asking DfT to fund through ZEBRA programme, the yearly cost profile and identifies where match contributions will be obtained to meet the scheme costs.

			ZEBRA PROPOSAL		TOTAL
			2022	2023	
<b>New electric</b>	Number	Single	34	0	34

<b>buses (BEB)</b>	Number	Double	4	35	39
	Bus Cost (£m)		14.656	15.249	29.906
	ZEBRA Grant (£m)		5.554	4.948	10.602
<b>Infrastructure</b>	Infrastructure Cost (£m)		4.621	5.607	10.29
	ZEBRA Grant (£m)		3.466	4.205	7.672
<b>TOTAL PROJECT COST (£m)</b>					<b>40.135</b>
<b>TOTAL ZEBRA GRANT ASK (£m)</b>					<b>18.274</b>

Table 1.7-1: Financial Profile

- 1.7.3 The total capital cost of the project is £40,135,629 and the total ZEBRA Grant funding requested on this proposal is £18,274,747.
- 1.7.4 A significant sum of locally sourced funding is being allocated for the schemes, demonstrating our commitment to the successful delivery of the programme. The delivery partners of this project, in particular, the bus operators, will provide £21,860,882 in match funding of the capital costs for buses and infrastructure. This represents 54% of the overall project cost.
- 1.7.5 We have included in the capital cost estimate a full allowance for risks, contingencies, inflation and other cost variations that could arise. In addition, Optimism Bias has been included in the Financial model, in line with DfT advice at 3%, ensuring that we can safeguard against any price rises. We have secured cost estimates to inform all of our costs and will work to confirm these with suppliers over the coming months, so that upon the department's funding decision on this business case we will have fixed and final costs from all suppliers.
- 1.7.6 The financial profile considers:
- The emulation and optimisation of the entire bus fleet both as ICE and battery electric buses to determine the performance and energy requirements of the fleet and its associated costs. While considering each of the route schedules, and route characteristics (topography and climatic conditions);
  - Technology development and cost curves including battery, infrastructure and vehicle development, and battery replacement costs, capital vehicle costs (i.e. 2023), as well as fuel and electricity costs;
  - Detailed cost assumptions from supplier quotes for vehicles, infrastructure, upgrades and usage costings for the current fleet.

- 1.7.7 Whole Life costs are considered through the assessment. Across a 15-year period the scheme will cover £30,284,211 in total operating expenses. This includes battery refurbishment for all buses 8 years after deployment, fully met by our delivery partners.
- 1.7.8 These costs have been incorporated into future budgeting by all scheme promoters. The costs which have been considered include, but not limited to the following:
- Maintenance;
  - Running costs;
  - Energy consumption;
  - Additional farebox;
  - Operation; and
  - Additional resources.

## 1.8 How we will commercially deliver the proposals

- 1.8.1 We set out an output-based specification of the buses that will be procured, the performance metrics and point towards how we will monitor against these within the Management Case taking our objectives set out in the Strategic Case. As a reminder we have three distinct procurement routes each managed by the individual delivery partner which we establish through this case.
- 1) Go North East – Delivery of 49 zero emission buses and associated infrastructure operating out of Consett, Riverside and Percy Main depots.
  - 2) Northumberland County Council – Appointment of a delivery partner and associated onward delivery of 10 zero emission buses and infrastructure on routes from Hexham; and
  - 3) Durham County Council Appointment of a delivery partner and associated onward delivery of 14 zero emission buses and infrastructure to operate on Durham's two Park and Ride routes.
- 1.8.2 We have therefore set out the distinction between all three activities through the text. In addition, this is reflective in the advice we have received regarding Subsidy Control summarised in this chapter.
- 1.8.3 To inform our strategy, Transport North East and our partners have engaged with key stakeholders who will be responsible for the delivery of various components (buses, energy sector, chargepoint suppliers, delivery partners and financiers. A high-level overview of this engagement is set out in this case.
- 1.8.4 Go North East will own and maintain the infrastructure and buses and will have contracts in place regarding the warranty for their assets. Go North East will procure working within a fixed budget the installation of the chargers and supply of the buses. A cap on the funding allocation has been established, any risks of cost overruns will fall onto Go North East. This will be formalised through a Grant Funding Agreement between Transport North East and Go North East. There has been market engagement with regard to the charger specifications and the associated costs. The preferred solution is for DC plug in chargers as this optimises

charging time, can charge two buses at once and can offer rapid power transfer. GNE currently use the vehicle manufacturers recommended charger. This removes any issues that may arise around the charging of the vehicle. The charging software is supplied and managed by Zenobe and they can open then chargers to accept several different vehicle types.

- 1.8.5 This has been defined associated with the market engagement exercise for the buses and their requirements, together with Go North East's current operations using Pelican Yutong vehicles on services 53 and 54 (Voltra) in Gateshead. Options selection has been informed by additional in route market testing. Furthermore, Northern Powergrid have been engaged and have supplied estimates on the costs and timescales for delivering power to the depots. These have been inbuilt into the project plan and cost assumptions.
- 1.8.6 Having engaged with suppliers, studied zero emission bus operations elsewhere in the Go-Ahead Group and trialled vehicles in real-life operations in the North East, Go North east have identified the Yutong vehicle as offering the range, quality and image to deliver our services all day, every day with a single overnight charge. Existing operations and trials indicated that the Yutong vehicle can operate reliably and has a potential range of over 200 miles. This is based on our real-world experience of running the bus for 160 miles during operations on the 53 and 54 and ending the day with a quarter of the charge still remaining. For the double deck operation, in service trials and quotations have concluded Alexander Dennis Limited Enviro 400 is the most feasible for the double deck operations.
- 1.8.7 Once DfT funding is confirmed, Go North East will finalise the negotiations and seek to place orders for all vehicles and associated infrastructure works within one month.
- 1.8.8 The Durham Park and Ride Element is seeking 14 buses to operate Park and Ride services (PR1 and PR2) from four park and ride sites into Durham City Centre. Seven chargers are required for the fleet of 14 buses, early feasibility work has taken place with Northern Powergrid at locating these at a variety of locations. Market engagement with local bus operators has highlighted strong interest in operating the Durham P&R service with confirmation received that there is capacity to store and charge buses at the interested bus operator's commercial depots, once charging upgrades are installed funded by the grant.
- 1.8.9 An initial study to determine the feasibility of running the P&R service with electric buses along with the number of buses required to do so has been carried out by Durham County Council. A kWh per km output has been provided by bus manufacturers Volvo and Pelican Yutong and reflects the Go North East electric buses output of their existing electric bus services. When built into Durham's proposed timetabling to determine route lengths and number of bus trips, the service is shown to work over the 8-year contract period inclusive of battery degradation. The existing Go North East electric services used to define the data used in the feasibility study are comparable to the Durham P&R service in terms of topography and congestion experienced which affects battery performance. The distance to potential commercial bus depots was built into the feasibility study and

showed that all commercial depots within a 30km range of the P&R service would be suitable to successfully run the electric P&R bus service.

- 1.8.10 Fourteen 10.8m circa single deck buses will be in operation on the Durham Park and Ride routes. Early market engagement has taken place with Pelican Yutong (E10) and Volvo (7900e) to inform the financial model as presented in the financial and economic cases. This demonstrates both options are feasible for operation on these routes, based on potential depots, which are to be confirmed by the tender. Durham County Council would own the vehicles which would be leased to the operator handed back from the operator at the end of the tender period.
- 1.8.11 Northumberland County Council will tender for the operation of services in Hexham. This tender will be valid for a period of 7 years and will stipulate the use of zero emission battery electric vehicles for this contract period. This model has been included in the financial model associated with this submission. The detailed Project Plan in the management case includes all procurements for the scheme which will be carried out through a competitive tender process deploying statutory procurement processes including procurement conditions where applicable. This will ensure the scheme is fully compliant with relevant regulations to meet the project milestones as set out in the high-level Project Plan, outlined below.
- 1.8.12 We have identified resource within legal and procurement teams both at a programme management level and local authority base to develop and issue the tenders. It is intended that we will work these up at risk between January and March 2022 for immediate issue once funding has been confirmed.
- 1.8.13 All works for the charging infrastructure are located on land owned by the operators and as such no land purchase is applicable. The chargepoints and one substation upgrade will be subject to planning consent being obtained. We have built in the costs and timescales into the project as well as reflecting this risk in our risk register. Our mitigation will be to undertake pre-engagement with the 4 affected Local Planning Authorities, and we will evidence this in the next iteration of the business case
- 1.8.14 As we explore in our management case, the North East has a well-established assurance framework <sup>ii</sup>which we will deploy around the delivery of funding. This will ensure that the funds can be successfully administered, and that delivery is on time and to budget. We propose to add any relevant grant conditions from the DfT as well as a selection of regional conditions that link to our objectives in the Grant Funding Agreements that Transport North East will orchestrate with Durham County Council, Go North East and Northumberland County Council.
- 1.8.15 In addition, an output-based specification has been drawn up with key milestones and we have built these elements into our project plan to appropriately reflect the outputs we wish to achieve as well as a consideration of risks and the demonstration of these risks.
- 1.8.16 We have referenced stakeholder needs in the way that the contracts will be managed and the exact specifications of the vehicles, ensuring we are reflective of findings from our emerging EQIA. Finally, we have a method which links to our

communications strategy of showcasing the benefits of electric buses and what we will do in managing the grant allocation.

## 1.9 Managing / assuring delivery and achieving the benefits

- 1.9.1 The North East region has a well-developed governance structure and associated assurance process in place to agree and deliver transport policies, strategies and investment programmes. These existing structures will be deployed to deliver the ZEBRA programme.
- 1.9.2 We will report through our Joint Transport Committee to accept the grant and assure spend associated with the production of Grant Funding Agreements with the three delivery partners.

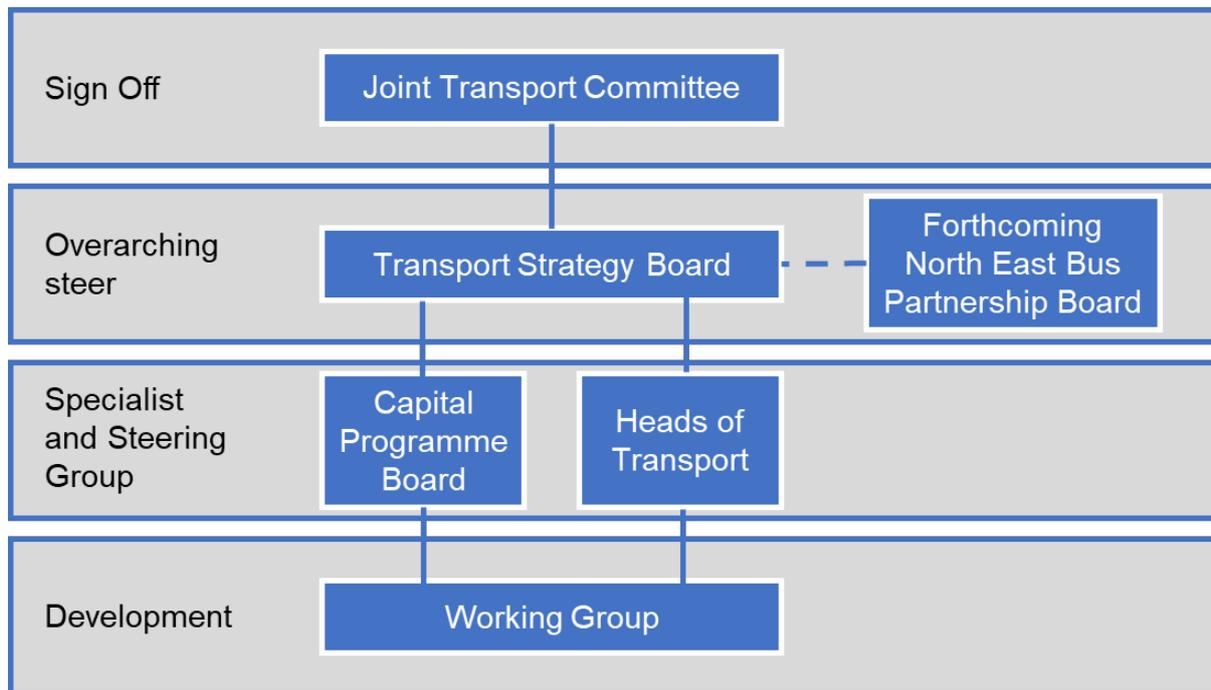


Figure 1.9-1: Governance Structure

- 1.9.3 Our established working group will continue to ensure that the grant is administered and delivered according to the project milestones we have set out in this business case. Transport North East has a successful Programme Delivery Team who will be responsible for the management and overview of the delivery of this programme. The team consists of the Project Sponsor, Project Manager and Assistant Project Manager, who report to the Senior Responsible Officer and Managing Director. The team will cover a range of tasks associated with delivering the programme in accordance with the Assurance Framework, assisted by colleagues in our Communications, Finance and Legal departments where

required, covering grant delivery, monitoring and evaluation, reporting and communications.

1.9.4 Delivery partners will be responsible for procuring services from the supply chain inclusive of Northern Powergrid, bus manufacturers, bus operator partners and chargepoint suppliers.

1.9.5 The following core milestones form a key part of this project

Milestone	Date	Status
Submit Expression of Interest to the Department for Transport	2 <sup>nd</sup> July 2021	Complete
Submit first draft of Full Business Case to the Department for Transport	12 <sup>th</sup> November 2021	Complete
Equalities Impact Assessment Consultation	W/c 22 <sup>nd</sup> November 2021	Complete
Submit second draft of Full Business Case to the Department for Transport	W/c 10 <sup>th</sup> January 2022	Complete
See approval from the North East Joint Transport Committee to submit the Full Business Case	18 <sup>th</sup> January 2022	Complete
Submit Full Business Case to the Department for Transport	31 <sup>st</sup> January 2022	Complete
Outcome of Full Business Case	March 2022	
Tenders Issued	December 2021 (Durham) March 2022 (GNE)	
Orders placed	March 2022 (Durham) August 2022 – May 2023 (GNE)	
Contract Extension (Hexham Tendered Services)	31 <sup>st</sup> March 2022	Underway
Contracts Commence (Durham Park and Ride)	November 2022	
Durham Park and Ride sites (TCF scheme) construction due to complete	December 2022	
Contracts commence for Go North East single decker vehicles and infrastructure at Hexham and Consett operational	July 2023	
Contracts commence for Go North East double decker vehicles and infrastructure at Percy Main, Riverside and Consett operational	March 2024	

Table 1.9-1: Milestones

1.9.6 With a wide range of stakeholders involved in and affected by this programme, it is vital to have a rigorous engagement plan in place and to communicate our plans effectively. As such, our Stakeholder Engagement Strategy was developed at

project inception. This was used a mechanism of guiding the development of the Expression of Interest and now with the development of this business case, and onwards into the delivery of the programme.

- 1.9.7 This Strategy provides a structure in order to ensure engagement with stakeholders is effective, coordinated and ultimately support delivery of a successful programme. The regularity and the detail of the information provided to each stakeholder going forward will be determined by which of the four categories we have allocated each stakeholder to.
- 1.9.8 A variety of methods will be used to communicate the progress of the delivery of this scheme, including regular briefings with Board and Committee members, press releases and social media updates. Core messaging has been defined and collateral is being developed that can be used in communications.
- 1.9.9 In addition to the above planned communications, we have thoroughly engaged with stakeholders throughout this project. In advance of the Expression of Interest, we worked with stakeholders to define the package of measures we wished to deliver, have kept stakeholders informed following the outcome of the EOI and have had ongoing engagement throughout the development of this Full Business Case. This has allowed us to create strong relationships with our stakeholders, and with this communications plan, will allow us to continue this into the delivery phase. This is evidenced in our letters of support.
- 1.9.10 The customer experience is vital during the delivery and implementation of this programme. As detailed later in Section 6.9, surveys will be carried out to ensure that customers are satisfied with the affected services.
- 1.9.11 All projects are subject to risks and uncertainties; however, it is possible to manage these appropriately to ensure successful delivery of the programme. We have experience of managing and delivering capital programmes including for electric buses and have reflected this in the management case.
- 1.9.12 We have a robust risk management strategy in place to minimise the potential impact of risks, whilst allowing maximum advantage to be taken of any opportunities. The earlier that risk management is applied to a project, the more opportunity there is to influence the outcome.
- 1.9.13 Our risk register details the core project risks and how we address each, the main risks are summarised as funding release, procurement and supplier timescales and costs. We are confident that we can implement the appropriate mitigations to manage, tolerate or treat these risks and will enhance our risk register for the January version of this business case.
- 1.9.14 Transport North East as the Local Transport Authority have a robust Monitoring and Evaluation Framework in place which the programme of interventions outlined in this bid will be required to adhere to. The Framework has been built around the particular monitoring and evaluation guidance set out for the ZEBRA fund.
- 1.9.15 TNE's approach to Monitoring and Evaluation is built on four pillars:
- Providing local accountability to the public, partners and local stakeholders
  - Complying with external scrutiny requirements

- Providing not only a summative, but a formative function
- Develop an evidence base for input into future interventions and services

1.9.16 This project will provide data on the performance, range, efficiency, maintenance needs, component lifetimes, and therefore whole-life costs of fully zero emission battery electric buses. By closely monitoring the buses over several years of operation we will gain insights into how they perform in all weather conditions and with increasing distance covered. This experience, together with the operational data, will for informed decision about investing in similar vehicles in future years.

1.9.17 The monitoring and evaluation for this programme will be the responsibility of Transport North East Programme Management Team who will liaise with the relevant stakeholders to collect, process and report the required data to internal stakeholders and the Department for Transport. We have ascribed roles for the monitoring and evaluation of this programme and the measures of success are summarised in the following table.

Transport North East ZEBRA Objectives	How we will Achieve it?
Increasing the proportion of Zero Emission buses in our fleet to 6.67% by July 2024.	Delivery of electric vehicles in the fleet, measured as a percentage of the overall vehicle fleet (monitored on a yearly basis).
Support UK manufacturers on the deployment of new vehicles and associated infrastructure, and the North East automotive sector with enhanced skills.	Fleet specification and a sustained order book (Monitored by the value of orders placed).  Extend an Engineering Apprentice Programme delivered at Gateshead College (6 to 8 new apprentices each year).
Contribute towards continued partnership working between local authorities and the bus industry.	Funding successfully deployed (identified by the funding deadlines being met) and complimentary investments being made by the sector.
Innovate to deliver zero emission technology to all parts of the North East as a model for the UK.	Successful and sustained deployment in rural locations and specific M&E undertaken. Case study reporting on a quarterly basis with specific indicators around energy performance, range and climatic conditions.
Contribute towards a sustainable economic recovery.  <i>Links to BSIP KPI 3: Modal share of bus use for journeys to work and education to grow by 1 percentage point in 2023/24,</i>	Routes to serve economic growth areas and areas that suffer from transport poverty and encourage and increase in the percentage of sustainable journeys.

and a further 1 percentage point in 2024/25.	Modal share of bus use for journeys to work and education to grow by 1 percentage point in 2023/24.
Improve the air quality of the North East.	Contribute to a reduction in CO2 and NO2 in four priority locations
Increase patronage on the bus network and increased satisfaction.  <i>Links to BSIP KPI 7: Overall bus passenger satisfaction to grow from a baseline of 91% to 92% in 2023/24 and to 93% in 2024/25.</i>	Increase patronage on the routes where electric buses are deployed (Monitored quarterly). Passenger satisfaction on these routes to increase to 93%.

Table 1.9-2: Objectives and measures

### 1.10 Additional work we will undertake

- 1.10.1 This submission is draft for the purposes of the November submission and between now and January, Transport North East has identified several areas of the case where we will take action to strengthen our assessment,
- Quantification of the air quality benefits and looking at an assessment of development impacts;
  - Equalities Impact Assessment engagement and survey with completion of the assessment;
  - Cost refinement and securing detailed project plans from suppliers and manufacturers;
  - Subsidy Control and Procurement advice to be finalised
  - Risk workshops and refinement of the risk register;
  - Updated financial and economic analysis as a result of any changes;
  - Cost approvals and member sign off.
- 1.10.2 We will undertake this work as well as any other strands that arise as part of the ongoing gap analysis.

## North East Joint Transport Committee

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**Date:** 18 January 2022

**Subject:** Transforming Cities Fund Tranche 2 – Grant Funding Agreements

**Report of:** Managing Director, Transport North East.

### Executive Summary.

The purpose of this report is to seek delegated authority to approve and allocate funding from the Transforming Cities Fund (TCF) Devolved Pot to two schemes: The South Tyneside Council, Healthier Metro Neighbourhoods scheme and the Sunderland City Council, A690 Corridor Strategic Cycle Network scheme.

Business Cases for both schemes are currently being considered in accordance with the region's Transport Assurance Framework with scheme appraisal being conducted by Transport North East's retained independent consultants.

It is necessary to expedite approval of both schemes following the anticipated conclusion of appraisal in January 2022 given the lack of Joint Transport Committee date in February, in order to meet the construction programmes outlined within both Business Cases within TCF timelines. Delegated authority is sought from the Joint Transport Committee for the Transport North East Managing Director, in consultation with the Section 73 Officer and Monitoring Officer, subject to successful appraisal of scheme Business Cases and due diligence in line with the Transport Assurance Framework, to approve both the Healthier Metro Neighbourhoods scheme and the A690 Corridor Strategic Cycle Network scheme and enter into Grant Funding Agreements (GFA) for the delivery of both schemes with South Tyneside Council and Sunderland City Council.

### Recommendations

The North East Joint Transport Committee is recommended to:

- i. Delegate authority to the Transport North East Managing Director, in consultation with the Section 73 Officer and Monitoring Officer, to approve the release of £2,380,000 from the TCF Devolved Pot to the Healthier Metro Neighbourhoods scheme, subject to successful appraisal in line with the Transport Assurance Framework.

- ii. Instruct officers to prepare and sign a Grant Funding Agreement with South Tyneside Council for the Healthier Metro Neighbourhoods scheme, if approved.
- iii. Delegate authority to the Transport North East Managing Director, in consultation with the Section 73 Officer and Monitoring Officer, to approve the release of £4,406,400 from the TCF Devolved Pot to the A690 Corridor Strategic Cycle Network scheme, subject to successful appraisal in line with the Transport Assurance Framework.
- iv. Instruct officers to prepare and sign a Grant Funding Agreement with Sunderland City Council for the A690 Corridor Strategic Cycle Network scheme, if approved.

## 1. **Background Information**

1.1 In March 2020 the North East region was awarded £198m from the Government's Transforming Cities Fund to aid the delivery of sustainable transport capital measures. In total, £94m of this funding is allocated to the Nexus led Metro Flow scheme, with the remaining £104m allocated to the region to spend on smaller sustainable transport schemes.

1.2 A programme of schemes was considered by this Committee in May 2020, and the local authority promoters of those schemes have since been advancing the design of their schemes and preparing Business Cases for investment.

1.3 As they come forward, the Business Case for each scheme in the programme is considered using the regionally agreed Transport Assurance Framework and reviewed by an independent consultant retained by Transport North East (TNE) to ensure:

- the level of analysis undertaken by the scheme promoter is appropriate to the size of the scheme;
- the scheme gives good value for public money;
- the risks associated with delivery of the scheme have been identified and where possible mitigated; and
- the appropriate governance and procurement processes are in place to complete the scheme by March 2023, a key requirement of DfT's grant funding conditions.

1.4 The Business Cases for both the Healthier Metro Neighbourhoods scheme and the A690 Corridor Strategic Cycle Network scheme have now come forward and are currently being considered in accordance with the region's Transport Assurance Framework, with appraisal being conducted by TNE's retained consultants.

## 2. **Proposals**

2.1 The Healthier Metro Neighbourhoods scheme focuses on two Metro stations within South Tyneside: Chichester and Tyne Dock, though access to Bede and Simonside are also considered. The scheme aims to improve connectivity to these stations for sustainable travel, particularly walking and cycling, alongside public realm improvements outside Chichester and Tyne Dock Metro stations.

2.2 The Healthier Metro Neighbourhoods scheme will deliver improvements in journey quality and ambience as well as the physical activity benefits associated with a modal shift to cycling and walking. In addition to supporting active travel uptake, this scheme also seeks to improve connectivity to Metro and the benefits this brings for both passengers (access to work, education and leisure opportunities) and the operator (ticket revenue). Public realm improvements delivered through the scheme including lighting, security and will improve the overall perception of station

entrance to encourage patronage.

- 2.3 In total, the Healthier Metro Neighbourhoods scheme will cost £3,008,407 of which £2,380,000 is provided by the TCF Devolved Pot with South Tyneside Council contributing the remaining £628,407 as a local match funding contribution.
- 2.4 The programme for the delivery of the scheme is on a critical path, mobilisation for construction is required in February 2022, in order for South Tyneside Council to complete within the TCF Programme timescales, the current programme of construction demonstrates that the scheme is capable of financial completion by 31<sup>st</sup> March 2023, however, this programme of delivery would be at risk if swift approval of the Healthier Metro Neighbourhoods Business Case is not forthcoming following appraisal and works start date is pushed back.
- 2.5 The A690 Corridor Strategic Cycle Network scheme will see the construction of new cycleway links along the A690 between Tyne and Wear's boundary with County Durham and Herrington. The proposed cycle route will be constructed along the existing A690 dual carriageway. Originating at the boundary with County Durham in East Rainton and running approximately 3.3 miles to the north-west. The overarching aim of the scheme is to encourage the use of active travel, whilst creating a safer cycling environment along this main strategic corridor.
- 2.6 The A690 Corridor Strategic Cycle Network scheme will bring about a modal shift towards active and sustainable travel promoting cycling as a more attractive mode of transport and will lead to an improvement in air quality due to a reduction in the number of length of trips made by motorised vehicles. This scheme will deliver high value for money realising benefits in terms of health, journey quality and modal shift.
- 2.7 In total, the A690 Corridor Strategic Cycle Network scheme will cost £5,609,000 of which £4,406,400 is provided by the TCF Devolved Pot with Sunderland City Council contributing the remaining £1,202,600 as a local match funding contribution.
- 2.8 The programme for the delivery of the scheme is also on a critical path, the contract length for the delivery of the scheme is 15 months and therefore needs to be underway in February 2022, in order for Sunderland City Council to complete within the TCF Programme timescales, the current programme of construction demonstrates that the scheme is capable of financial completion by 31<sup>st</sup> March 2023, however, this programme of delivery would be at risk if swift approval of the A690 Corridor Strategic Cycle Network Business Case is not forthcoming following appraisal and works start date is pushed back.
- 2.9 Given the aforementioned time constraints associated with the programme of delivery for both schemes and the lack of an available Committee date in February, delegated authority is sought to approve the scheme Business Cases subject to a positive appraisal outcome. It is vital that the decision-making process required to enable both South Tyneside Council and Sunderland City Council to enter into a Grant Funding Agreement (GFA) for scheme delivery with NECA can be expedited so as not to forestall critical early stages of delivery.

- 2.10 It is recommended that the Committee confer delegated authority to the TNE Managing Director, in consultation with the S73 Officer and the Monitoring Officer, to prepare and sign a GFA with both Councils subject to the successful appraisal of scheme Business Cases in line with the agreed regional Transport Assurance Framework. That Agreement will provide both South Tyneside Council and Sunderland City Council as scheme promoters, permission to draw down funding from the TCF Devolved Pot associated with each scheme which is held by NECA on behalf of the JTC and meet the deadline for TCF scheme completion, 31<sup>st</sup> March 2023.

### **3. Reasons for the Proposals**

- 3.1 Both scheme proposals will contribute to the delivery of the Transforming Cities Fund programme, which in turn will contribute to the delivery of the overarching regional objectives outlined in the North East Transport Plan. The proposed approval route for the schemes is recommended to ensure works can commence in February 2022 following successful appraisals. This start date is essential for both schemes to meet the programme of construction and ensure financial completions by the 31st March 2023 deadline for TCF expenditure.

### **4. Alternative Options Available**

- 4.1 As part of the Business Case development for both the Healthier Metro Neighbourhoods scheme and the A690 Corridor Strategic Cycle Network scheme a range of delivery options were assessed against value for money, risk and deliverability considerations. A preferred option was selected and progressed on the understanding that the approach offered the best mix of benefits offset against a comparably lower level delivery risk. The Business Cases demonstrate why the chosen solutions provide the best options in terms of meeting passenger needs whilst also providing value for public money.
- 4.2 Two options are presented to the North East Joint Transport Committee.
- 4.3 Option 1 – The North East Joint Transport Committee accept the recommendations set out in this report, and confer delegated authority to the TNE Managing Director, in consultation with the S73 Officer and the Monitoring Officer, to prepare and sign GFAs with both South Tyneside Council and Sunderland City Council subject to successful appraisals in line with the agreed regional Transport Assurance Framework, enabling the Healthier Metro Neighbourhoods scheme and the A690 Corridor Strategic Cycle Network scheme to deliver within TCF programme timescales.
- 4.4 Option 2 - The North East Joint Transport Committee do not accept the recommendations set out in this report, in which case the Healthier Metro Neighbourhoods scheme and the A690 Corridor Strategic Cycle Network scheme may not be able to deliver in line with the TCF programme timescales and the user benefits outlined within the Business Cases of the schemes will not be realised.

4.5 Option 1, is the recommended option.

## **5. Next Steps and Timetable for Implementation**

5.1 Grant Funding Agreements will be prepared by officers subject to successful appraisals and will be subsequently agreed with both South Tyneside Council and Sunderland City Council, after which scheme delivery can commence. TNE will require that both scheme promoters provide quarterly monitoring update reports that will detail progress, expenditure and risks

## **6. Potential Impact on Objectives**

6.1 The proposals will contribute positively to the high-level strategic objectives in both the regional Strategic Economic Plan and the North East Transport Plan.

## **7. Financial and Other Resources Implications**

7.1 The TCF allocation proposed in this report amounts £6,786,400. The financial summary for the TCF Devolved Pot can be updated as follows:

- Total TCF Funds (exc. Metroflow): £103,797,542
- Funds Committed (inc. Healthier Metros and the A690): £26,725,714
- Advanced Funding Approved: £7,740,000
- Remaining Devolved Pot: £69,331,828
- Total TCF ask: £120,994,063
- Over-programming: £17,196,521

7.2 There are no Human Resources or ICT implications arising from the recommendations of this report.

## **8. Legal Implications**

8.1 Grant Funding Agreements are required in order to enable the scheme promoters to commence drawing down the funding allocation associated with the Healthier Metro Neighbourhoods scheme and the A690 Corridor Strategic Cycle Network scheme. A standard Grant Funding Agreement template has been prepared for all TCF schemes that is utilised to minimise any legal risks and ensure NECA's obligations (on behalf of the JTC) to the Department for Transport in regards to the TCF devolved funding, these obligations are appropriately transferred to the scheme promoters through the Grant Funding Agreement.

## **9. Key Risks**

9.1 The key risk for this Committee relates to the potential for the construction of these schemes to be delayed or overspent. The funding mechanism included within the Grant Funding Agreement ensures that risks to the Committee are appropriately mitigated, transferred, and borne by both scheme promoters.

## **10. Equality and Diversity**

10.1 Both schemes will be designed to modern standards and compliant with appropriate legislation, ensuring that any equality and diversity implications are minimised.

## **11. Crime and Disorder**

11.1 The schemes will be designed to modern standards, appropriate consultation with statutory consultees has taken place through the design of both schemes, ensuring that any crime and disorder implications will be minimised.

## **12. Consultation/Engagement**

12.1 This report has been shared with the Transport Strategy Board, comments have been taken on board and integrated into this report. The scheme promoters have managed all consultation requirements pertaining to the scheme itself.

## **13. Other Impact of the Proposals**

13.1 The Healthier Metro Neighbourhoods scheme will deliver improvements in journey quality and ambience as well physical activity benefits associated with modal shift to cycling and walking. In addition, there is likely to be very small increase in Metro patronage as a result of the scheme, improving walking and cycling connectivity will also support greater access to opportunities for residents, particularly with the onward connectivity via Metro.

13.2 The AA690 Corridor Strategic Cycle Network scheme provides links into employment areas to the south of the A19 by providing new facilities to move north or south over the Herrington Interchange. The cycleway connects to employment centres, both in the City Centre and at Rainton Bridge Business Park along with existing housing estates and new housing developments. The route will also provide connections to existing cycle routes in the area, creating a larger cycle network to the west of the city centre.

## **14. Appendices**

14.1 Not Applicable.

## **15. Background Papers**

15.1 None.

## **16. Contact Officers**

16.1 Jonathan Bailes, Transport Programme Lead  
E-mail: [jonathan.bailes@transportnortheast.gov.uk](mailto:jonathan.bailes@transportnortheast.gov.uk)

## **17. Sign off**

- The Proper Officer for Transport: ✓
- Head of Paid Service: ✓
- Monitoring Officer: ✓
- Chief Finance Officer: ✓

## **18. Glossary**

- DfT – Department for Transport
- TCF Devolved Pot – the Transforming Cities Fund allocation from DfT that is available to spend on the prioritised schemes identified in our November 2019 TCF Strategic Outline Business Case submission
- Transport Assurance Framework – a framework for business case development and review that ensures good decision making, procurement and governance is in place for all projects, for schemes that can demonstrate good value for public money

## North East Joint Transport Committee

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**Date:** 18<sup>th</sup> January 2022

**Subject:** Local Growth Fund Electric Vehicle Infrastructure Project

**Report of:** Managing Director, Transport North East

### Executive Summary

Using funding of £390,000 allocated through the Local Growth Fund (LGF), JTC are currently in the process of delivering a number of new Electric Vehicle Charging Points (EVCPs) around the north-east, one in each local authority, based on a prioritisation process set out in an Enabling Study completed last year.

However, an issue has arisen with the proposed site in Middleton in Teesdale and Durham County Council have requested that this charging point is installed in Crook instead, at a site not referred to in the Enabling Study.

The North East LEP have stated that they are supportive of the change of site and approval will be requested from JTC in January to effect this change.

We have also been made aware of one other change in the programme, as Sunderland City Council have requested a reduced number of chargers be installed at the St Mary's car park site.

The purpose of this report is to request approval from JTC to change the location of the charge point in Durham from Middleton in Teesdale to Crook and to reduce the number of charge points at St Mary's car park, Sunderland from six to four.

### Recommendations

The North East Joint Transport Committee is recommended to agree:

- i) To change the location of the charge point in Durham from Middleton in Teesdale to Crook,
- ii) Reduce the number of charge points at St Mary's car park, Sunderland from six to four.

## **1. Background Information**

- 1.1 In 2020, £600,000 was awarded from the Local Growth Fund for further progress on electric vehicle charging infrastructure in the region. £100,000 of this was spent on an Enabling Study (“Enabling Electric Vehicle Charging in North East England 2021 to 2025”) that was intended to identify and prioritise the best locations for new EVCPs in North East England. The study was carried on behalf of Transport North East by consultants Urban Foresight who were procured for this purpose.
- 1.2 As part of this task, behavioural studies which focussed on electric vehicle ownership were undertaken to ensure the challenges and demands of the end users were considered. In addition, there was an extensive process of engagement with the region’s seven Local Authorities to ensure that their priorities were addressed and fed directly into the site selection process. A number of other key stakeholders were also consulted during this process, these included the Office for Zero Emission Vehicles, Nexus, North East Local Enterprise Partnership (NELEP), NETPark, Metrocentre and Northern Powergrid.
- 1.3 The final part of the project was a 3 Tier assessment process to identify and filter sites into a final priority list of 25 sites. Seven Phase 1 priority sites, comprising one in each local authority area, were identified for initial investment with additional Phase 2 and Phase 3 sites identified for investment in subsequent years, as funding became available. The Phase 1 site identified for County Durham was in Middleton in Teesdale.
- 1.4 Using the remaining funding of £500,000 earmarked from the Local Growth Fund, it was agreed to proceed with delivery of the Phase 1 sites and, following a procurement process, Swarco were commissioned to progress the work. As the winning tender was circa £350,000, it was agreed to retain £40,000 contingency funding and return £110,000 to the overall LGF budget. The current budget available for the EVCP programme is therefore £390,000.
- 1.5 **Proposed change of site from Middleton in Teesdale to Crook**
- In October 2021, following liaison with the Independent Connections Provider, Swarco advised that, as there is little or no capacity on the electrical grid at this location, the installation of a charge point at Middleton in Teesdale would have required significant reinforcement to the network which would involve a six-figure sum.
- Following consultation with Durham County Council to discuss an alternative site, we were advised that, since the Enabling Study was carried out in 2020, their corporate strategies and plans had moved on and investment in Crook is now a corporate priority for the council. A masterplan for Crook was approved by the council’s Cabinet in November 2021.
- Durham County Council have requested that it is not possible to proceed with a rapid charger at Middleton in Teesdale and funding should be transferred to the Crook site. The authority advises that, were the Enabling Study carried out today, it is very likely that Crook would be included as a priority site.
- 1.6 **The case for a rapid charger at Glenholme Close, Crook**
- Crook, Willington and Tow Law are subject to a Durham County Council Masterplan called ‘The Three Towns Masterplan’ that received Cabinet approval in

November 2021.

The Masterplan seeks to stimulate development and investment in and around 'The Three Towns' and is related to the Council's levelling up aspirations in the County. Investment in Crook is regarded as a high priority because:

- Crook is a market town of 10,000 people. While it is one of the smaller towns in the County, it acts as a service and employment centre for many rural hinterland communities (including Tow Law and Willington) - many of which suffer from being areas of multiple deprivation.
- Although Crook has a rapid chargepoint at a new Lidl store, a site has been identified at Glenholme Close as part of the masterplan - specifically for the purpose of a new rapid public ECVP. This could be the first step towards a full EV charging station and would help provide the first rapid EVCP on public land, in the town centre.
- Crook is situated off the A68, which is a strategic north-south connection with relatively high traffic flows. It is also a gateway to the Durham dales. With the exception of the rapid chargepoint at Lidl Crook, there are no other EVCPs in close proximity to the A68 between Darlington and Hexham. A new EVCP here would benefit both local residents and visitors to the area.

#### 1.7 **Other sites listed in the Enabling Study**

Five other sites in the county were listed in the Enabling Study for delivery in Phase 2 and Phase 3. The Council have outlined why they have prioritised the Crook site ahead of these other sites.

##### Spennymoor

In Spennymoor, since the Enabling Study was carried out, the Council have delivered 3 public charge points in the last 12 months, as part of its Scaling On-Street Charging Infrastructure (SOSCI) project.

It is recognised that the EVCPs delivered are 'only' fast chargers, so there may be a case for a rapid EVCP at Spennymoor Leisure Centre. However, after a recent meeting with the Centre, it is understood that electrical reinforcements may be required to install a charger at the Leisure Centre.

##### Crimdon Coastal Hub / Shotton Colliery/Peterlee

Whilst the Crimdon Dene site has not received any new EVCPs, either public or private sector, the Council state that there are many EVCPs located in both Peterlee to the North and Hartlepool to the South of Crimdon. Four of the Peterlee EVCPs are being delivered by the Council. Crimdon will also not have as much passing demand as Crook as the demand would be primarily from holiday makers rather than local residents.

##### Jade Business Park / NET Park

These Durham sites were also listed in the Enabling Study, however the cost of each site is significantly higher than the original Middleton site and would therefore exceed the available budget.

#### **North East Local Enterprise Partnership (LEP) consultation**

We have engaged with the North East LEP who manage the Local Growth Fund programme. The matter has been discussed by their Technical Officers Group, who are supportive of the proposed change of site.

### **Change in number of chargers to be installed at Sunderland site**

We have also been notified of a change in the number of chargers to be installed at the St Mary's car park site in Sunderland. Following discussion with the contractor, Sunderland City Council have requested that only four chargers be installed on site, rather than the six specified in the Enabling Study.

## **2. Proposals**

2.1 North East Joint Transport Committee is asked to grant approval to:

- i) change the location of the charge point in Durham from Middleton in Teesdale to Crook,
- ii) Reduce the number of charge points at St Mary's car park, Sunderland from six to four.

## **3. Reasons for the Proposals**

3.1 It has been advised that Middleton in Teesdale is no longer a suitable location for the charge points as the Independent Connections Provider has found that there is little or no capacity on the electrical grid at this location. The installation of a charge point at Middleton in Teesdale would require significant reinforcement to the network which would involve a six-figure sum. Durham County Council have put forward Crook as an alternative location.

3.2 Sunderland City Council has asked for the number of charge points due to be installed at St Mary's car park to be reduced from 6 to 4. This will result in a small cost saving of approximately £4,000.

## **4. Alternative Options Available**

4.1 Option 1 – The North East Joint Transport Committee may accept the recommendation set out in paragraph 2.1 above.

Option 2 – The North East Joint Transport Committee may choose not to accept the recommendation set out in paragraph 2.1 above.

## **5. Next Steps and Timetable for Implementation**

5.1 Following approval from Joint Transport Committee:

- Work will begin to install electric vehicle charging infrastructure at Crook instead of Middleton in Teesdale; and
- Work will proceed to install four charge points at St Mary's car park, Sunderland.

## **6. Potential Impact on Objectives**

6.1 Delivery of additional electric vehicle charging infrastructure will help to achieve the vision of 'Moving to a green, healthy, dynamic and thriving North East' and support the delivery of the Transport Plan objectives, particularly, carbon neutral North East, overcome inequality and grow our economy and healthier North East.

## **7. Financial and Other Resources Implications**

7.1 The installation of a charge point at Middleton in Teesdale would require significant reinforcement to the electric network which is expected to involve a six-figure sum. Installing electric vehicle charging infrastructure at Crook is expected to be within the project's budget.

7.2 Reduction in the number of charge points installed at St Mary's car park will result in a saving of approximately £4,000.

## **8. Legal Implications**

8.1 There are no known legal implications arising from this proposal.

## **9. Key Risks**

9.1 Installing charging infrastructure at Middleton in Teesdale will no longer be achievable within the current budget for this project. This risk is being mitigated through the identification of an alternative site at Crook.

9.2 Delivery timescales may slip as a result of the change in site. The LEP have been made aware of this as they are managing the Local Growth Fund programme.

## **10. Equality and Diversity**

10.1 The installation of charging infrastructure in Crook is expected to improve access to electric vehicle chargers for rural communities.

## **11. Crime and Disorder**

11.1 There are no crime and disorder implications arising from the proposals.

## **12. Consultation/Engagement**

12.1 As the North East Local Enterprise Partnership are managing the Local Growth Fund programme for the region they have been consulted on the proposals outlined in this report.

## **13. Other Impact of the Proposals**

13.1 The proposal to install charging infrastructure in Crook will improve access to electric vehicle charging points for rural communities and is expected to support Durham County Council's 'Three Towns Masterplan' to stimulate development and investment.

## **14. Appendices**

14.1 None

## **15. Background Papers**

15.1 JTC report: North East Electric Vehicle Infrastructure – Agreement of Local Growth Fund Project 16 March 2021

[\(Public Pack\)Agenda Document for North East Joint Transport Committee, 16/03/2021 14:30 \(northeastca.gov.uk\)](#)

## **16. Contact Officers**

16.1 Rachelle Forsyth-Ward  
Strategic Transport Lead, Transport North East

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**17. Sign off**

- 17.1
- The Proper Officer for Transport:
  - Head of Paid Service:
  - Monitoring Officer:
  - Chief Finance Officer:

**18. Glossary**

- 18.1
- EV – Electric vehicle
- EVCPs - Electric Vehicle Charging Points
- LEP – Local Enterprise Partnership
- LGF – Local Growth Fund

## North East Joint Transport Committee

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**Date:** 18<sup>th</sup> January 2022

**Subject:** North East Rail and Metro Strategy

**Report of:** Managing Director, Transport North East

### Executive Summary

The North East is in a unique position in that it runs its own local railway (the Tyne and Wear Metro) and seeks through this strategy to better integrate the local rail services to operate as one network to better serve North East residents and businesses. Increasing the number of people and goods using rail and Metro will help to tackle a number of the key North East Challenges, More rail and Metro use will:

- Reduce Carbon emissions through more efficient transfer of people and goods (modal shift)
- Improve connectivity to opportunities for work, training, education and leisure
- Improve Health outcomes by incorporating active travel as part of the journey
- Ensure a more secure financial future to operate key services

Following the publication of the North East Transport Plan (NETP) and the commitment to publish a suite of sub-strategies, the North East Rail and Metro Strategy (NERMS) has been developed which sets out how Rail and Metro can play a significant part towards achieving the region's transport vision and objectives.

As part of the drafting process, we have worked closely with our colleagues at Nexus and engaged with key partners to ensure alignment across the industry.

The main commitments which are set out in the Strategy include (in no prioritised order);

- Increasing the capacity & resilience of the East Coast Main Line and Durham Coast Line improving connectivity for passengers and freight;
- Extending the reach of local rail and Metro, upgrading existing networks & services, adding new routes & stations including the Northumberland and Leamside lines;
- Working with Great British Rail to seek greater influence over local rail to match the flexibility and accountability of Metro;
- Maintaining and updating the Metro assets, including resignalling;
- Introducing new trains, more efficient electric ones on the Metro and electric / battery/ hydrogen ones on local rail and modal shift from road to rail on freight;

- Improvement of existing station including Sunderland station, Newcastle Central station and development of new stations including Gateshead East.

The strategy also considers the implications of the recently published Integrated Rail Plan and sets out the regions commitment to continue to work to strengthen the case for investment in our main rail artery.

This report seeks agreement from Joint Transport Committee to move the draft of North East Rail and Metro Strategy to a phase of public consultation. It is recommended that public consultation should commence on 24th January 2022 and run until 25th March 2022. Our consultation approach is centred around working in partnership with local authorities and Nexus to encourage respondents to submit their views on the Strategy.

We will seek approval to publish the final version of the Strategy at NEJTC in June 2022.

### **Recommendations**

The Joint Transport Committee is recommended to agree to progress the draft North East Rail and Metro Strategy to public consultation.

## 1. Background Information

- 1.1 Formally approved in March 2021, the North East Transport Plan (NETP) identifies a suite of sub-strategies to be directly aligned to the overall vision and objectives, including a North East Rail and Metro Strategy (NERMS) to be delivered.
- 1.2 Led by Transport North East, and co-authored with Nexus, the NERMS has the following overarching requirement as set out in the NETP - “A refreshed North East Rail and Metro strategy detailing how we will deliver passenger and freight rail improvements the region needs, helping to make the network bigger and better, more accessible and useable for all.”
- 1.3 Following insight feedback as part the development process in the summer, extensive work has been undertaken to redraft the strategy to better reflect regional needs and requirements.

## 2. Key Points

- 2.1 The North East Rail and Metro strategy (which is set out in Appendix A of this report), lays out how Rail and Metro can play a significant part towards achieving the region’s transport vision and five overarching objectives. In addition, we also focus on Integration as a key objective to link public transport across Metro and rail and further linking these to bus through the interworking with the Bus Service Improvement Plan and Enhanced Partnership scheme, and a chapter which focuses on Metro Operations, Maintenance and Renewals.
- 2.2 Central to this strategy is to seek further devolved powers to achieve long-term funding streams so we have the freedom and flexibility to plan ahead and deliver a more seamless, co-ordinated and integrated transport system across the North East. For local rail, this means getting new regional powers to specify and manage services on a common footing and integrated with Metro.
- 2.3 The main body of the Strategy focuses not only how Rail and Metro can contribute to meeting our objectives but also sets out key commitment statements. These include-
  - Increasing the capacity & resilience of the East Coast Main Line and Durham Coast Line improving connectivity;
  - Extending the reach of local rail and Metro, upgrading existing networks & services, adding new routes & stations including the Northumberland and Leamside;
  - Working with Great British Rail to seek greater influence over local rail to match the flexibility and accountability of Metro;
  - Maintaining and updating the Metro assets, including resignalling;
  - Introducing new trains, more efficient electric ones on the Metro and electric / battery/ hydrogen ones on local rail and modal shift from road to rail on freight;
  - Improvement of existing station including Sunderland station, Newcastle Central station and development of new stations including Gateshead East.

The strategy also considers the implications of the recently published Integrated Rail Plan.

2.4 Transformation of the network, and the benefits to our region which will flow from that cannot be achieved without increased levels of investment and new ways of working. This strategy must therefore be underpinned by:

- Investment in the East Coast Mainline to support resilience and capacity in this crucial link between our region and other major UK economies;
- Availability of funding to our region to develop and deliver the schemes in this strategy, including system expansion such as the Leamside Line;
- Security of future capital and revenue funding for our metro system to maintain the successful contribution of this crucial asset to our region's economy;
- Structures which enable formalised collaboration and partnership with Great British Railways to bring service specification and decision making closer to our region.

2.5 Key Performance Indicators have also been included which link directly back to the main objectives and have been designed to monitor the overall progress of the Strategy.

2.6 The Strategy also includes a programme of interventions to be delivered by 2035

## 2.7 Consultation

Consultation with stakeholders including the public and partners will begin on 24<sup>th</sup> January 2022 for a period of 8 weeks. We will work with our partners to ensure the consultation is shared widely across local authority and Nexus channels to expand the reach of the consultation by using partner communication channels where possible to boost visibility of the campaign.

Robust communications and marketing tactics will be ongoing throughout the 8-week consultation period alongside significant stakeholder engagement activity to ensure as many people as possible are aware of the consultation.

Planned marketing, intended to raise the profile of the consultation process, will include social media advertising and local media advertising including newspaper and radio adverts.

We will reach out directly to stakeholders including the public, national and local Government agencies, business organisations, community and interest groups as well as our extensive network of partners and operators to inform them of the consultation and to gather feedback.

Respondents will have the opportunity to engage with us using a variety of methods including phone, email and video call meeting as alternatives to face to face engagement.

### **3. Reasons for the Proposals**

- 3.1 The purpose of this report is request agreement from members to consult on the draft North East Rail and Metro Strategy.

### **4. Alternative Options Available**

- 4.1 To not proceed to consult on the North East Rail and Metro Strategy.

### **5. Next Steps and Timetable for Implementation**

- 5.1 Next steps will involve progressing to the consultation period which, providing JTC approval is granted, will start 24th January 2022 and close 25<sup>th</sup> March 2022 January 2021. Consultation feedback will be brought to a future JTC meeting for review. Subject to JTC's approval, the North East Rail and Metro Strategy will be published June 2022.

### **6. Potential Impact on Objectives**

- 6.1 The North East Rail and Metro Strategy (NERMS) has been developed which sets out how Rail and Metro can play a significant part towards achieving the region's transport vision and objectives.

### **7. Financial and Other Resources Implications**

- 7.1 All costs associated with the development of the Strategy including the consultation process are being met from Transport North East's Rail Unit in-year budget

### **8. Legal Implications**

- 8.1 At this stage, there are no foreseen legal implications from the approach we are taking in progressing to consultation with the NERMS.

### **9. Key Risks**

- 9.1 No key risks identified at this stage.

### **10. Equality and Diversity**

- 10.1 The NERMS is intended to positively address equality and diversity issues within the region by enhancing transport provision for all users.

### **11. Crime and Disorder**

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

## **12. Consultation/Engagement**

- 12.1 All local authorities across the NECA and NTCA areas have been engaged in the development of the strategy to date. Through the proposal to consult wider on the Strategy, it will give stakeholder the opportunity to provide feedback.

## **13. Other Impact of the Proposals**

- 13.1 No specific impacts.

## **14. Appendices**

- 14.1 Appendix A- North East Rail and Metro Strategy- Consultation draft

## **15. Background Papers**

- 15.1 Item agenda 8, North East Rail and Metro Strategy- Progress update North East JTC, 13<sup>th</sup> July 2021

## **16. Contact Officers**

- 16.1 Derek Gittins, Head of Heavy Rail. [Derek.gittins@transportnortheast.gov.uk](mailto:Derek.gittins@transportnortheast.gov.uk)

## **17. Sign off**

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

## **18. Glossary**

TNE- Transport North East

NETP- North East Transport Plan

NERMS- North East Rail and Metro Strategy



South Hylton 8 min  
South Shields 17 min  
Board train after warr

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# North East Rail and Metro Strategy

Moving to a green, healthy, dynamic and thriving North East



Transport North East

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# Foreword

The North East invented the railways and once produced the trains that were exported across the globe. Fast-forwarding to the modern day, our rail network still provides vital economic links to the rest of the country, but the infrastructure suffers from a chronic lack of long-term investment, and as a result, services often do not provide what we need either to connect communities or to offer a sustainable alternative to road transportation of people or goods.

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The locally-owned Tyne and Wear Metro system however provides excellent connectivity for those who can access and use it in the urban area. Although the Metro itself is in need of a long-term funding commitment from the government to allow for future investment, it provides many valuable lessons about local decision-making and engagement, and about local delivery of rail improvement schemes, from which we can learn.

On behalf of the North East Joint Transport Committee, I am proud to present a new North East Rail and Metro Strategy. I hope that people and stakeholders throughout the region will take this opportunity to comment on what we propose to do to improve our rail network.

The case for improvement and expansion of Local rail and Metro is simple – the more people who travel, the greater the benefits to the region. For example, every journey made is worth £8.50 to our region through the wider benefits it delivers – we need more of this, it benefits us all.

Over the coming years we have a clear opportunity to transform rail connectivity to, from and within our region. We want to use this strategy to secure investment for new routes, new stations and continued renewal and modernisation of our railways.

Whilst we think that this strategy sets out an ambitious, yet achievable connectivity vision for the North East's railways, we want to know what the public think about our plans and whether we've got this right.

I urge local people to get involved in our public consultation to help us deliver a rail and Metro network that is right for our people.



**Cllr Martin Gannon,  
Chair of the North  
East Joint Transport  
Committee**

# Executive Summary

### Executive summary

Building on the on North East Transport Plan published in 2021, this strategy outlines the future for rail and Metro in our region. Modal shift is woven through out this document, as that is what our rail and Metro system must achieve, for both passenger and freight, if it is to contribute to the objectives of that Transport Plan.

Transformation of the network, and the benefits to our region which will flow cannot be achieved without increased levels of investment and new ways of working. This strategy must therefore be underpinned by:

- Investment in the East Coast Mainline to support resilience and capacity in this crucial link between our region and other major UK economies;
- Availability of funding to our region to develop and deliver the schemes in this strategy, including system expansion such as the Leamside Line; Security of future capital and revenue funding for our Metro system to maintain the successful contribution of this crucial asset to our region's economy;
- Structures which enable formalised collaboration and partnership with Great British Railways to bring service specification and decision making closer to our region.

The North East is in a unique position in that it runs its own local railway (the Tyne and Wear Metro) and seeks through this strategy and working with the Great British Railways transition team to better integrate the local rail services to operate as one network to better serve North East residents and businesses.

Using our Transport Plan objectives as a guide, this document outlines the specific passenger and freight rail improvements the region needs, as well as setting out how and when they need to be delivered.

We want to use this strategy to build business cases for investment for new routes, new stations and continued renewal and modernisation of our railways.

Central to this strategy is to seek further devolved powers to achieve long-term funding streams so we have the freedom and flexibility to plan ahead and deliver a more seamless, co-ordinated and integrated transport system across the North East.

For local rail, this means getting new regional powers to specify and manage services on a common footing and integrated with Metro. We believe this will enable us to improve services and grow their usage.

**The overarching vision of the North East Transport Plan is: 'Moving to a green, healthy, dynamic and thriving North East'.**

### The five key objectives of the Transport Plan are:

- **Carbon-neutral transport.**
- **Overcome inequality and grow our economy.**
- **Healthier North East.**
- **Appealing, sustainable transport choices.**
- **Safe, secure network.**

In addition, we also focus on Integration as a key objective to link public transport across Metro and rail and further linking these to bus through the interworking with the Bus Service Improvement Plan and Enhanced Partnership scheme.

Rail and Metro will need to play a leading role in enabling us to achieve these over the period to 2035.

Despite the impacts of the Covid-19 pandemic on the region and its rail and Metro network, our strategy makes the case that we need solutions to cope with and recover from the pandemic. We aim to restore faith in our rail and Metro networks, improving services further encourage new and returning passengers onto the network, and to expand its regional reach.

The starting point for our strategy is to introduce the rail and Metro networks in our region and beyond before undertaking a wider review of how people and goods travel within and beyond the North East. We consider pre covid trends and current covid recovery data. Rail and Metro journeys account for less than 5% of total transport journeys in the North East thus there is tremendous scope to encourage modal shift with all its benefits.

The strategy then highlights the important contribution the Tyne and Wear Metro plays in the local economic, environmental, and social well-being of the region. It follows that we make the case for continued long term support and investment for its operation, maintenance, and future renewal.

Each of the subsequent chapters relate to the Transport Plan objectives and set out where we are, where we want to get to and how we propose to get there. In each of these chapters we also set out our key commitment statements.

### **Metro Operations, Maintenance and Renewals**

Tyne and Wear Metro is at the heart of the sustainable transport network for the region. Before the pandemic the network carried around 38m passengers per year and each journey contributes £8.50 to the local economy. Two major projects; the introduction of the new fleet and Metro Flow will improve the punctuality and reliability of the network and enable increased frequencies.

However, in the short-term, the network needs revenue support to further enable our recovery from the pandemic. We also need long term surety of capital funding to maintain and renew the aging infrastructure, including the replacement of the signalling system to allow the Metro network to support the delivery of the Transport Plan targets and objectives, and to allow continued operation of Metro.

### **Key Commitment Statements**

- Enhance the Metro timetable made possible by the introduction of the new fleet and Metro Flow
- Deliver an asset renewal programme to maintain a high quality service in terms of passenger requirements
- Further deliver improved energy efficiency and encourage mode shift from cars to enable more people to travel sustainably

- Deliver a re-signalisation scheme to ensure continued safe operations of the Metro and enable future expansion plans
- Improve the customer experience through refurbished and enhanced stations, passenger information and integration with the wide public transport network
- Build on our work to enhance safety and security across the network, to reduce negative perceptions
- Put the Metro at the heart of our integrated transport system.

### **Overcome inequality and grow our economy**

Research has shown that every additional passenger journey on local rail and Metro is worth an additional £8.50 to the North East's economy.

By providing greater access and connectivity to opportunities to jobs, training, education, health and tourism, rail and Metro can help people improve their lives.

To spread the benefits of accessibility and connectivity to more people we outline plans to increase the reach of local rail and Metro and increase the connectivity beyond our borders to regional and national social and economic hubs.

### **Key Commitment Statements**

- Extending the reach of local rail and Metro, upgrading existing networks & services, adding new routes & stations.

- Increasing the capacity & resilience of the East Coast Main Line and Durham Coast Line, improving connectivity.
- Ensuring freight can travel sustainably by rail and delivering additional capacity where required.

### Carbon Neutral Transport

Reducing the harmful effects of transport emissions is a key national and local priority. Making rail and Metro more appealing to use and attracting new passengers is essential to reduce the overall carbon impact of transport.

We also consider improvements the industry can make in terms of reducing the use of diesel trains and improving the efficiency of the existing non diesel fleet (e.g. Metro).

### Key Commitment Statements

- Increasing the number of people travelling on rail and Metro in preference to the private car.
- Increasing the share of goods transported by rail
- Introducing new trains, more efficient electric ones on the Metro and electric / battery/ hydrogen ones on local rail and modal shift from road to rail on freight (Government Net Zero Strategy)
- Improving stations and depots.

### Healthier North East

Improving the health of the North East's residents is another key local and national priority. As a result of the pandemic more people have been cycling and walking as part of their daily routine. We want to further stimulate this increase in active travel through improved access to stations for all and where practicable on trains too in order to enable these good habits to continue. As people return to our towns, cities, and businesses we wish to make active travel part of peoples integrated journey.

### Key Commitment Statements

- Improving walking and cycling links to existing and new stations.
- Increasing the number of people travelling on rail and Metro in preference to the private car.

### Safety and Security

An area that is regularly raised as a barrier to using rail and Metro is Safety and Security. This is closely linked to the customer experience and considers not only passengers' perceptions of how safe and secure the network is but also cleanliness.

### Key Commitment Statements

- Maintaining and updating Metro assets, including resigalling.

- Maintaining enhanced presence on trains and at stations.
- Providing safer routes to stations.
- Raising the security standards at stations and on trains.
- Undertaking targeted initiatives and campaigns to improve passenger safety.

### Appealing and Sustainable Travel

To maximise the economic, environmental and social benefits of public transport use we need to ensure both rail and Metro provides the service people and businesses need leading to increased patronage.

Improving the customer experience is the key thread that underpins this chapter. Research has shown that failing to meet customer expectations has twice the negative impact as delighting customers has a positive impact.

Thus, this chapter explores the varied elements of a journey that combine to make a positive experience. This includes planning the journey (including product choice), access to stations, the station itself, onboard experience and better communication if things go wrong. Initiatives and interventions are proposed to make the existing experience more appealing to new and existing passengers. To keep the customer experiences high, we must also invest in the infrastructure to ensure trains and Metro cars can run reliably and minimise service failures.

### Key Commitment Statements

- Improve the customer experience through refurbished and enhanced stations, passenger information and integration with the wide public transport network.
- Integrating fares and ticketing across rail, Metro and bus.
- Improving reliability and punctuality of services.

Extending the reach of local rail and Metro to serve more communities.

### Integration

Integrating the full journey across all public transport modes be that bus, Metro or rail is considered a key outcome this strategy will help to achieve. Integration cuts across all the Transport Plan objectives and is the glue that can bind the various pieces of the jigsaw together.

We consider the opportunities that might arise from the reshaping of the rail industry and how local rail can become more aligned with North East priorities and work in tandem with Metro and local bus services. The strategy aligns with the regions emerging Enhanced Bus Partnership.

### Key Commitment Statements

- Working with Great British Rail (GBR) to seek greater influence over local rail to match the flexibility and accountability of Metro.
- Coordinating services and improving interchange between all modes of transport.
- Integrating fares and ticketing across rail, Metro and bus.

We want to use this strategy to build business cases for investment for new routes, new stations and continued renewal and modernisation of our railways.

Central to this strategy is to seek further devolved powers to achieve long-term funding streams so we have the freedom and flexibility to plan ahead and deliver a more seamless, co-ordinated and integrated transport system across the North East. For Metro and local rail, this means getting new regional powers to specify and manage services on a common footing and integrated with Metro. We believe this will enable us to improve services and grow their usage.

### Measures of success (KPI)

We have developed a set of Key Performance Indicators (KPIs) that are designed to monitor the overall progress of our Strategy with respect to our key objectives.

#### We will measure the following:

- Annual passenger flows;
- Access to employment sites by rail and Metro within 30 minutes and 60 minutes of a station;
- The economic contribution of Metro and Local rail to the North East;
- The number of households within 1200m of a Metro or Local rail stations;
- Passenger satisfaction;
- The greening of the region's train fleet;
- Rail freight modal share against lorry use;
- Numbers of people cycling to stations;
- The number of stations that meet 'Healthy streets' accessibility standards.

### How we will deliver this Strategy

Central to this strategy is a clear live programme of investment. All the proposals in the strategy are consistent with the North East Transport Plan objectives and have a degree of deliverability.

### They are presented as schemes to be delivered in specific time horizons:

2022 – 2028

2029 – 2035.

Maps at the end of this document clearly set out exactly what, where and when the investments need to happen.

### Our investments proposed are:

- A mix of customer experience enhancements,
- New local infrastructure (to extend the reach of local rail and Metro),
- Enhanced East Coast Mainline to improve regional and national connectivity),
- Asset maintenance and upgrades (to future proof the network e.g. re-signalisation of the Metro),
- Cleaner and greener trains and Metros,
- More accessible and welcoming stations,
- Greater integration of public transport through a unified local operating structure.

Transport North East and Nexus will work in collaboration with Central Government, Network Rail (and in time Great British Railways), Transport for the North, transport operators, our constituent local authorities, the North East Local Enterprise Partnership (LEP), businesses, the third sector (particularly the Community Rail Partnerships), and crucially local people to deliver the aims set out in this strategy.

### 2022 network and 2035 network.

As part of our route map for delivery we have included diagrams our rail and Metro network as it exists now and what we want it to look like by 2035.

# 1. Introduction

**The North East is in a unique position in that it runs its own local railway (the Tyne and Wear Metro) and seeks through this strategy and working with the Great British Railways (GBR) transition team to better integrate the local rail services to operate as one network to better serve North East residents and businesses.**

Central to this strategy is to seek further devolved powers to achieve long-term funding streams so we have the freedom and flexibility to plan ahead and deliver a more seamless, co-ordinated and integrated transport system across the North East.

For local rail, this means getting new regional powers to specify and manage services on a common footing and integrated with Metro. We believe this will enable us to improve services and grow their usage.

We want to use this strategy to build business cases for investment for new routes, new stations and continued renewal and modernisation of our railways.

### North East Transport Plan

The North East Transport Plan published in 2021 provided our region with the strategic framework to enable us to deliver an improved, more seamless, co-ordinated and integrated transport system across the region.

This North East Rail and Metro strategy sets out how rail and Metro can play a significant part towards achieving the region's transport vision and objectives.

Using our Transport Plan objectives as a guide, this document outlines the specific passenger and freight rail improvements the region needs, as well as setting out how and when they need to be delivered.

The overarching vision of the Transport Plan is: **'Moving to a green, healthy, dynamic and thriving North East'**.

#### **The five key objectives of the Transport Plan are:**

- Carbon-neutral transport.
- Overcome inequality and grow our economy.
- Healthier North East.
- Appealing, sustainable transport choices.
- Safe, secure network.

Rail and Metro will need to play a leading role in enabling us to achieve these over the period to 2035.

To realise our joint ambitions and deliver this strategy, Transport North East and Nexus will work in collaboration with Central Government, Network Rail (and in time Great British Railways), Transport for the North, transport operators, our constituent local authorities, the North East LEP, Newcastle International Airport, businesses, the third sector (particularly the Community Rail Partnerships), and crucially local people. Chapter 13 sets out delivery in more detail.

To keep track of our progress as we work to make the network bigger and better, more accessible, and useable for all, this Strategy contains a list of key indicators which people, businesses and other stakeholders across the region can monitor.

Our view is that we can make much more of our region's railways to tackle the environmental, economic, health and social challenges we face.

Over the coming years we want to expand the reach of local rail and Metro into more communities, benefiting more people's lives and unlocking access to opportunities such as education, employment, training, leisure and tourism. This will also facilitate opportunities for modal shift from single car occupancy journeys and moving more goods from road to rail as key drivers for change.

To do this, we need to improve the passenger experience on existing services, restore passenger services on disused lines and expand the network, upgrade existing stations and open new ones. This will enable the North East to gain from the economic and social benefits of rail and Metro and address our regional challenges around exclusion.

Every journey on our Metro and Local rail network brings an £8.50 direct benefit to our economy.

The region has a recent and strong reputation for successfully delivering major rail investment programmes on-time and on-budget. For example, in 2020, we worked with partners to open a new local rail station in Horden, County Durham on the Durham Coast Line. Nexus has overseen a £350m Metro Asset Renewal Plan programme between 2010-2021. Nexus also owns and manages the Tyne and Wear Metro, and is managing a £300m contract for Stadler to build 46 new trains, confirming the region's strong track record of running railways and managing major projects successfully.

**A key outcome from this strategy is to help people to make the right travel choice and encourage more people to use rail and Metro rather than other modes of transport such as the private car by making rail and Metro more attractive and affordable for both current and non-users. Transitioning the number of journeys people make onto more sustainable and public transport**

**modes such as rail and Metro will drive our economy and improve our environment, helping to achieve the region's agreed transport objectives. Strong rail links at regional and national level are also crucial to delivering our ambitions for growth and addressing our challenges around connectivity and exclusion.**

With the publication of the Integrated Rail Plan (IRP) in November 2021, the government's view of the long-term future planning of the East Coast Main Line has been set. Although this is a major setback to our long term high speed connectivity needs, we will continue to work to secure maximum benefit for the region in the short term whilst continuing to set out our case for increased connectivity to reduce economic disparity in the longer term.

It is our view that North East rail infrastructure does not have enough capacity for today's growth in traffic, let alone for the future. For example, the East Coast Main Line in our region currently combines long distance, regional, local and freight traffic on the same two tracks. It also needs to be made faster and more resilient, having last seen major investment three decades ago.

Improved national rail links enable the North East to welcome new businesses and organisations to be based here. That is why this strategy also sets out our passenger and rail freight priorities for improvements, which the region needs such as urgent infrastructure investment on the East Coast Main Line and Durham Coast line.

### Area covered

This strategy has been developed by Transport North East and Nexus (the Tyne and Wear Passenger Transport Executive). It therefore covers the seven local authority areas in the North East, comprising of two Combined Authorities, brought together by the North East Joint Transport Committee:

**The North East Combined Authority**  
(Durham, Gateshead, South Tyneside and Sunderland)

**The North of Tyne Combined Authority**  
(comprising Newcastle upon Tyne, North Tyneside and Northumberland)

However, as rail lines and services aren't constrained by administrative boundaries this Strategy also sets out how we will work with partners and neighbouring areas to achieve our joint aspirations. Through the **North East Rail Management Unit (NERMU)** a collaborative grouping we work closely with the Tees Valley Combined Authority, North Yorkshire County Council and Cumbria County Council. NERMU enables a united approach on common areas of economic and social priorities to influence decision making for local rail services through Department for Transport (DfT) and Transport for the North (TfN).

The North East is in a unique position, the area benefits from a high frequency Metro service (running on mostly its own infrastructure) covering the Tyne and Wear urban core, coupled with a self-contained local rail service covering the wider North East (including Tees Valley).

Significantly, this strategy sets out our aspirations to reform the railway and create a fully integrated public transport network within the North East, by crucially integrating local rail services with the Metro. This is an unprecedented time of change for the rail industry with the UK starting to recover from

the worst effects of the Covid-19 Pandemic and the reformation of the railways through the creation of Great British Railways (GBR). The North East wishes to play its full part in maximising the benefits for local communities and businesses from these significant changes that are happening over the next few years.

Closer integration has proven successful on other networks such as London Overground where the establishment of a prominent, unified network has increased awareness of travel opportunities and helped to increase passenger numbers.

## Definitions

### Metro

The Tyne and Wear Metro is a high frequency light rail network which provides rapid links between town and city centres across the urban core of the region. Opened in 1980 it has been part of everyday life in our region ever since. Metro serves 60 stations along 77.5km of track. The 89 Metrocars in the current fleet allows Metro to run a 12-minute network wide frequency. The 'green' and 'yellow' routes overlap between South Gosforth and Pelaw stations to provide a train every 6 minutes and additional peak services increase the frequency to a train every 3 minutes through this 'central area'.

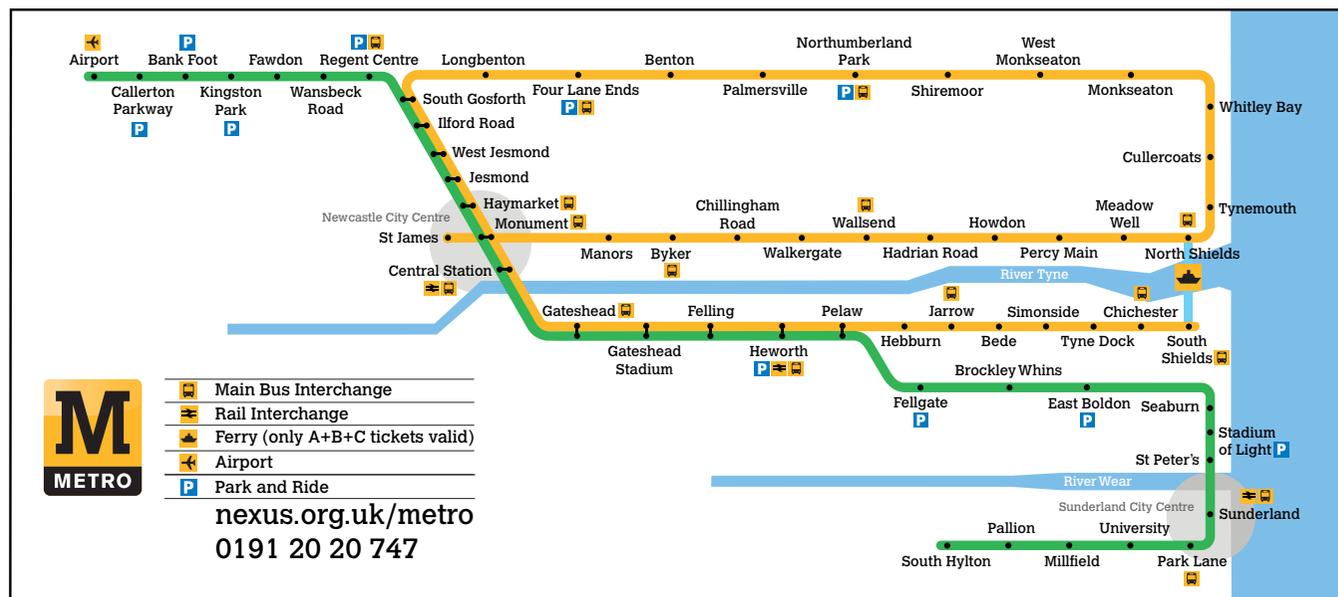
From 2023/24, 46 new Metro trains will begin entering passenger service, delivering a step-change in quality, reliability and environmental performance. As well as this, from late 2022, the £100m 'Metro Flow' track dualling scheme will increase the network wide service frequency to 10 minutes, as well as reducing journey times, improve reliability, and unlock the door to expansion of the network.

The Metro system (both track and train) is managed and operated by Nexus (the Tyne and Wear Passenger Transport Executive) an executive body of the North East Joint

Transport Committee. The operation and maintenance of the trains are managed through Stadler Rail.

The track and control systems are maintained and enhanced through the Nexus Rail division of Nexus. This enables close coordination across the business for the benefit of the local passengers.

As of November 2021, passenger journeys have recovered to just over 90% of normal (pre-Covid) mobility (w/c 15th November 2021).



### Local Rail

The North East's Local rail services are operated by Northern Trains Limited and managed through the Rail North partnership (joint DfT/TfN). Some functions are devolved further to the North East Rail Management Unit (NERMU) but these are very limited. The region has a relatively self-contained local rail network covering the wider North East (including Tees Valley). There are no through 'local' services to other regions covered by Northern eg York, Leeds or Manchester and the North East is served by its own depot, meaning that the North East local rail services effectively work independently of the rest of the Northern services.

There are 533 route km of rail lines in the North East, however, none of our local lines are currently electrified, meaning that local trains operating across the region are diesel-powered. Investment in services and trains has lagged behind the rest of the North. Although the troublesome 'pacer' trains have gone, they have been replaced with similar-aged trains that are only somewhat more reliable. In 2019, they were refurbished with improved seating, at-seat power, fully accessible toilets, free wi-fi, digital customer information screens, sustainable lighting and improved CCTV.

Despite this, the trains are showing their age and lag behind modern passenger needs and expectations. There are 31 rail stations in the region ranging from remote rural stations to major intercity stations. The level of passenger facilities varies considerably. The local stations carry five million passengers per annum around the North East each year pre-Covid.

Local rail services presently comprise:

- Durham Coast Line - linking Newcastle, Sunderland, Hartlepool and Middlesbrough.
- Tyne Valley Line – linking Newcastle, Gateshead Metro Centre, west Northumberland and Carlisle.
- Tees Valley and Bishop lines – linking South Durham with Darlington and the Tees Valley.
- A local service utilising the East Coast Main Line north of Newcastle – linking Northumberland towns and villages to Newcastle, the main station being at Morpeth.
- On the East Coast Main Line south of Newcastle three northbound-only morning services are operated by Northern – including calls at Chester-le-Street.

### National Rail

We are served by the East Coast Main Line (ECML) which connects us to London and Edinburgh, as well as the other main cities in the North and Midlands.

The ECML is a vital artery for our region carrying commuters, tourists, business travellers and freight to, from and through the North East, but is in urgent need of investment.

Between Northallerton, Newcastle and Berwick there is only one track running north and one running south. The line currently combines long-distance, regional, local and freight rail traffic on the same two tracks. The potential for new and existing freight paths on the ECML is increasingly constrained without extra capacity and investment.

As well as the ECML, Sunderland has national rail connections to London, with journeys taking 3 hours 45 minutes. However, better pan northern and national connectivity is sought. The station, which is located underground in the city centre, is in urgent need of redevelopment and is a capacity constraint for future growth.

As of January 2022, the current ECML train operators serving the region are:

- London North Eastern Railway (LNER)
- Cross Country
- Trans Pennine Express
- Grand Central – Open access services between London and Bradford, Teesside and Sunderland.
- Lumo – Open access services between London, the North East and Edinburgh.

### Rail Freight

Freight operators run a wide variety of services in the region including container trains, aggregates and energy flows. The number of services operating can fluctuate at short notice subject to the demands of customers. Freight services are less regular and visible than passenger services but are equally important in contributing towards our objectives. The major operators are:

- DB Cargo – general freight operators
- Freightliner – bulk flows such as wood pulp, coal, cement
- Direct Rail Services (DRS) – nuclear flask trains operating between Teesside and Sellafield.

Other freight operating companies may also operate in the North East at short notice.

### The importance and benefits of local rail Devolution

Lack of service integration between our Metro and local rail networks - which continue to operate separately - must be addressed in order to give the North East a single railway identity. Achieving full devolution of local rail services is central to the North East being able to integrate and expand the reach of Metro and local rail into more communities.

We believe it is essential to move the local rail network further along the devolution path so that, along with Metro and local bus services, it meets the needs of local people and economies. We want to provide a single coordinated public transport service that can maximise connectivity and mobility for business, training, education and tourism, thus boosting the local economy.

Metro is specified, managed and operated locally and is thus hard wired to local accountability. The potential for further devolution from Government to the North East to specify and manage the operations of our current local rail network, in line with Nexus' responsibility and ownership of the Metro,

will enable our region to deliver a responsive, integrated and accountable system with improved services and reach.

### Great British Railways and the route to local rail Devolution

The Williams-Shapps Rail Plan has set in progress a reorganisation of the rail industry, with the setting up of Great British Railways (GBR).

Change is desperately needed on the railways and so the North East welcomes these proposals and will align this strategy, and future iterations, to them. As a region we have a bold vision for integrated transport as originally outlined in the North East Transport Plan and expanded upon in this strategy.

We welcome the commitments to giving local leaders greater control over local ticketing, timetables and stations.

Railways connect our communities to jobs and education, link us to the rest of the UK, and provide sustainable arteries for freight. Secondary routes that are hugely important to our towns and cities such as the Durham Coast Line have deteriorated while pre-pandemic companies competed ferociously for profitable passengers on the ECML trunk routes.

Devolved railways will be strengthened, with closer collaboration with GBR. Improving services, consistency and co-ordination with the rest of the railway is a key objective of our region.

Much of the current passenger rail network is run under contract to or in partnership with city-region and sub-national transport authorities, and they and their constituent authorities have also invested in rail assets, especially stations. It is important that the reorganisation and the legislation underpinning the reformation of the railways recognises this and also safeguards the reformation of the railways contracts and investments.

The region already benefits from partial devolution through Transport for the North (TfN) and the North East Rail Management Unit (NERMU), which offers us informal oversight of our rail geography, but we believe this needs to go further to realise the full benefits of a truly integrated North East public transport system.

We believe that both geographically and structurally, we are already well positioned and willing to expand the role of NERMU. We want to integrate and expand the coverage of the - already devolved – Metro system, working alongside the local rail network, to bring benefits to more communities in the North East.

The North East rail network (with the exception of the East Coast Main Line) is very self-contained. This provides a significant opportunity to better-reflect the local needs of the area and be less impacted by rail operations elsewhere in the wider ‘whole North’ railway geography

There are various potential options as to how rail devolution could be extended in the North East region and these will be investigated and assessed in terms of their costs and benefits and how they work under the wider GBR rail model.

Devolution will increase local accountability for local rail services and better integrates those services with Metro and local buses to provide a single, coordinated public transport resource.

Greater partnership working with GBR/TfN will also help to ensure that local needs are met to provide specific integration accountabilities.

## Structure

We have tried to ensure that this document is easy to follow. It is divided into thematic chapters which set out in detail how rail and Metro can help achieve each of our region’s transport objectives.

### Each chapter sets out:

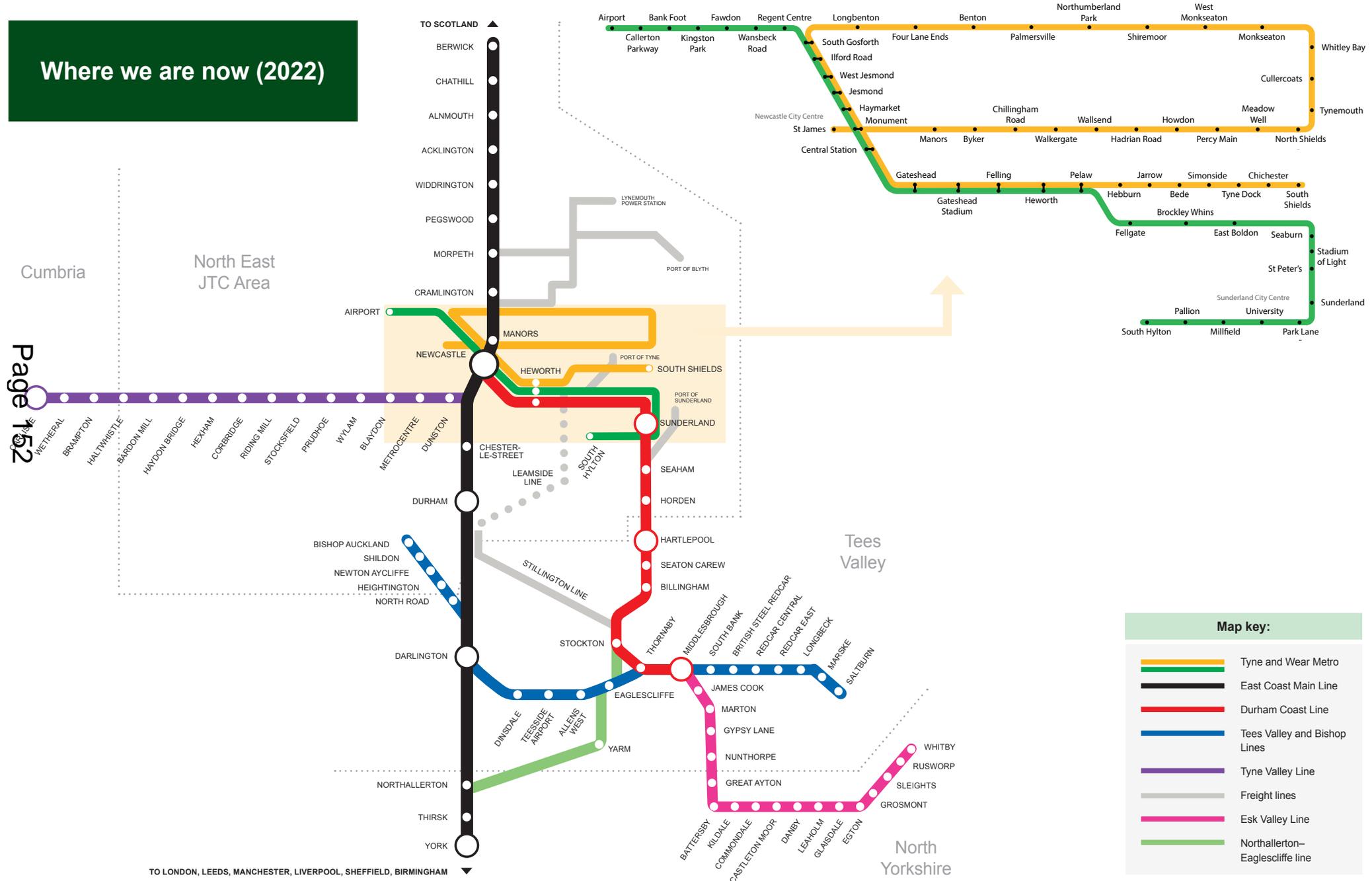
- Where we are now (2022)
- Where we want to be (2035); and
- How we will get there

For Metro, Local rail, National rail, and rail freight in each section.

We have also included maps of where we are now and where we want our rail and Metro network to be in the years ahead.

At the end of the Strategy, we also have included illustrative maps with specific rail and Metro schemes and interventions which we want to see delivered, subject to business case development, approvals and funding.

Where we are now (2022)



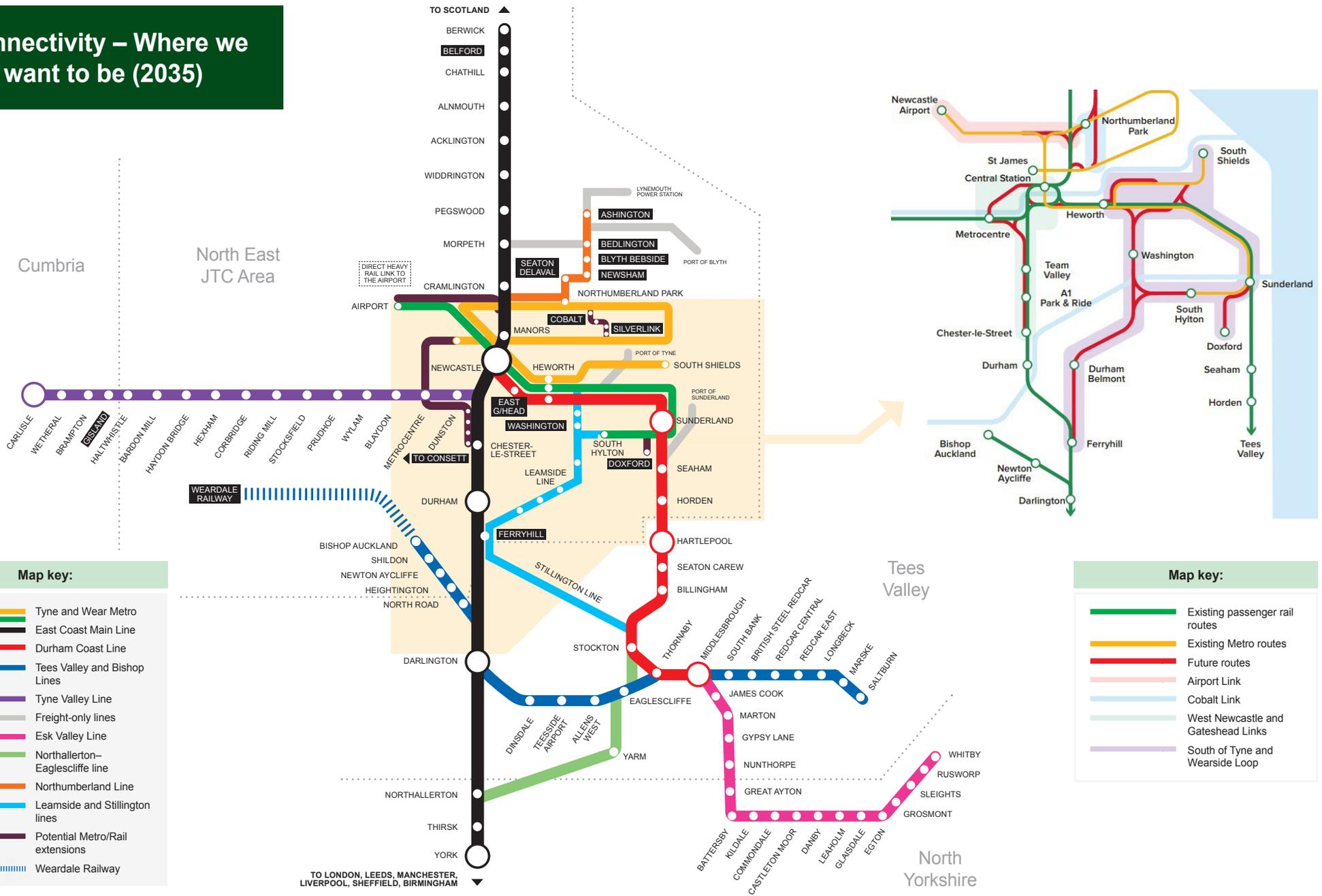
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**Map key:**

- Tyne and Wear Metro
- East Coast Main Line
- Durham Coast Line
- Tees Valley and Bishop Lines
- Tyne Valley Line
- Freight lines
- Esk Valley Line
- Northallerton-Eaglescliffe line

# Connectivity – Where we want to be (2035)

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## 2. North East Transport Plan – Our guiding objectives

In March 2021, the North East Transport Plan was formally adopted by the leaders of our 7 local authorities. The Plan provides the strategic framework to enable us to deliver an improved, more seamless, coordinated and integrated transport system across the region.

The overarching vision of the Transport Plan is:

‘Moving to a green, healthy, dynamic and thriving North East’.

The five key objectives of the Transport Plan are:



**Carbon-neutral North East**



**Overcome inequality and grow our economy**



**Healthier North East**



**Appealing, sustainable transport choices**



**Safe, secure network**

The objectives for the Transport Plan set the standard of what we want to achieve and where we want our region to be by 2035. Rail and Metro have a central role to play in helping to achieve these objectives. The Plan recognises the tasks aimed at recovery and reducing the reliance on financial support from government and local authorities as the UK emerges from the COVID-19 pandemic.

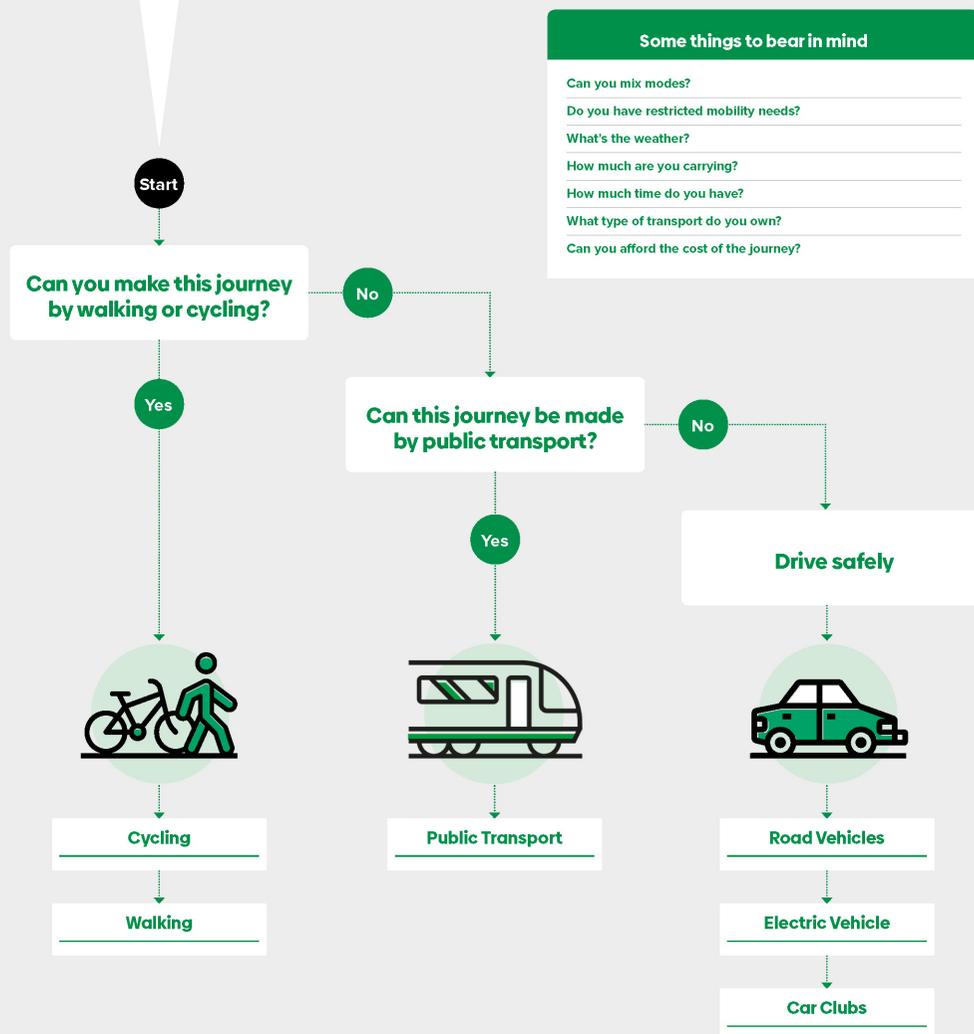
Beyond this, it sets out the need to make rail and Metro more attractive and more efficient by improving reliability, availability and affordability by reconnecting communities and socio-economic hubs.

**A Transport Plan for our regions’ diverse geography.**

Our Transport Plan includes initiatives to support all of our region’s communities including those in rural settings. Responses to the consultation told us better connectivity is needed, particularly in rural areas. There was also a feeling new developments and neighbourhoods could be designed so they are less car-reliant from the outset.

Our Metro and local rail networks can provide the ‘backbone’ of transport connectivity across our region, linking with other sustainable transport opportunities wherever possible to extend the reach.

## How to make the right travel choice



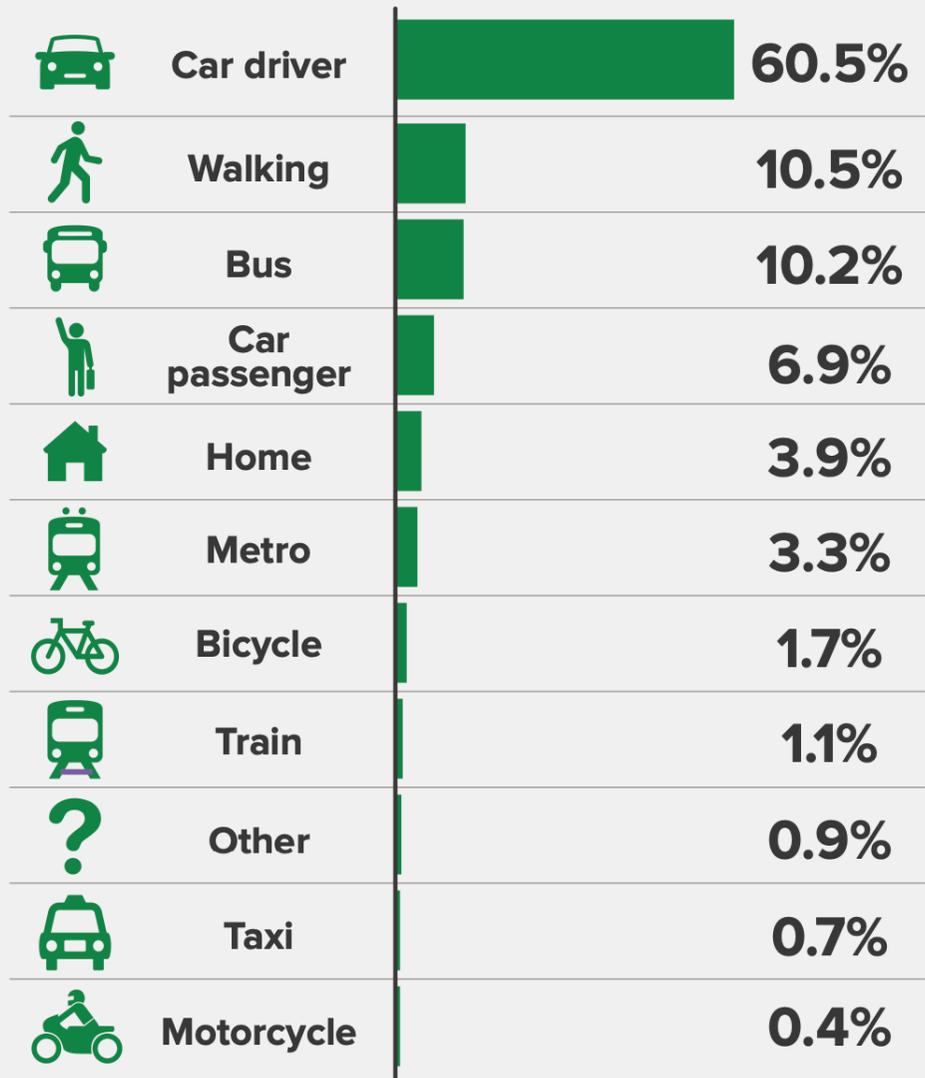
Encouraging modal shift towards our Metro and local rail services will support all our objectives in the Transport Plan, delivering passenger and freight rail improvements the region needs for further economic growth.

We aim to make the network bigger and better, more accessible and useable for all.

Our Transport Plans' overarching policy is about "Making the right travel choice".

We will enable people to make greener and healthier travel choices whenever they can and ensure our sustainable network takes everyone where they need to go at a price they can afford. We must ensure all our actions improve transport across the region and deliver to the objectives of this Plan, so we are greener, more inclusive, healthier, safer and our economy thrives.

### 3. How do people and goods travel



## Introduction

Travel has been significantly impacted by the Covid-19 restrictions introduced at various points during 2020 and 2021, and there may be long-term implications of the behavioural and structural changes resulting from the pandemic.

Metro travel was significantly impacted by the Covid-19 lockdown; April 2020 saw passenger levels fall by 95.5% in comparison with the same month in 2019. In mid-2020, the system was operating at a loss of approximately £0.9m per week, excluding costs associated with making the system Covid secure.

Local and regional train operators quickly moved to introduce emergency 'key worker timetables' in late March and early April 2020. Passenger numbers were considerably down according to onboard train staff's ad hoc train counts from late March 2020. There were very low numbers travelling onboard local rail services in the North East (with between 0 and 9 passengers onboard the trains at the height of the lockdown).

As with Metro, numbers have started to return but at a slower rate. The uncertainty of the shape of the UK recovery from the Covid-19 pandemic, together with government messaging about only using public transport where essential, makes passenger projections and forecasts uncertain.

Getting passengers back on the network safely is our first priority. The pandemic has had major consequences for patronage on public transport across the country; rail (light and heavy) services were the most affected mode with passenger levels falling to as low as 4% of pre-lockdown levels in April-May 2020.

### Pre-pandemic transport use

Although transport use has decreased during the pandemic, pre-pandemic there was consistent growth in the use of rail and Metro. Since 2000/2001, there has been a 84% increase in local rail use in the North East. Between 2000 to 2010 there was a growth of 25%, however this then declined again to a similar figure in 2019 as it was in 2000 at 33 Million passengers per annum.

Nationally the use of private cars has decreased by 31% over the last 20 years, however this has been less severe in the North East at only a 3% drop.

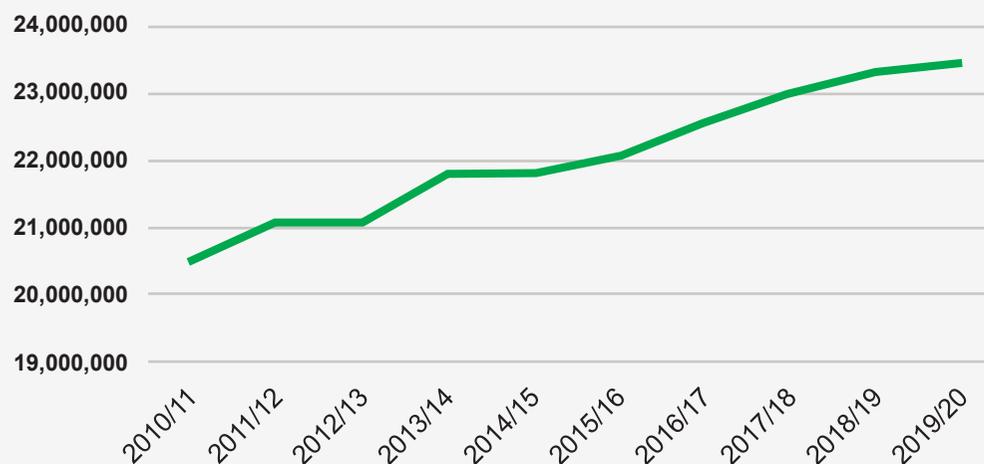
Nationally surface rail has been consistent at only 3 trips per person per year. However, rail travel in the region had been steadily growing in both long distance and local travel. Between 2010 and 2019, long distance trips grew from

7.7 million to 10.4 million passenger journeys per year and local rail travel increased from 5.4 million to 5.9 million passenger journeys per year.

The local rail links in the region have always been key in supporting the North East economy and the social mobility of its inhabitants to be able to make longer journeys to the towns and cities that are spread across our region.

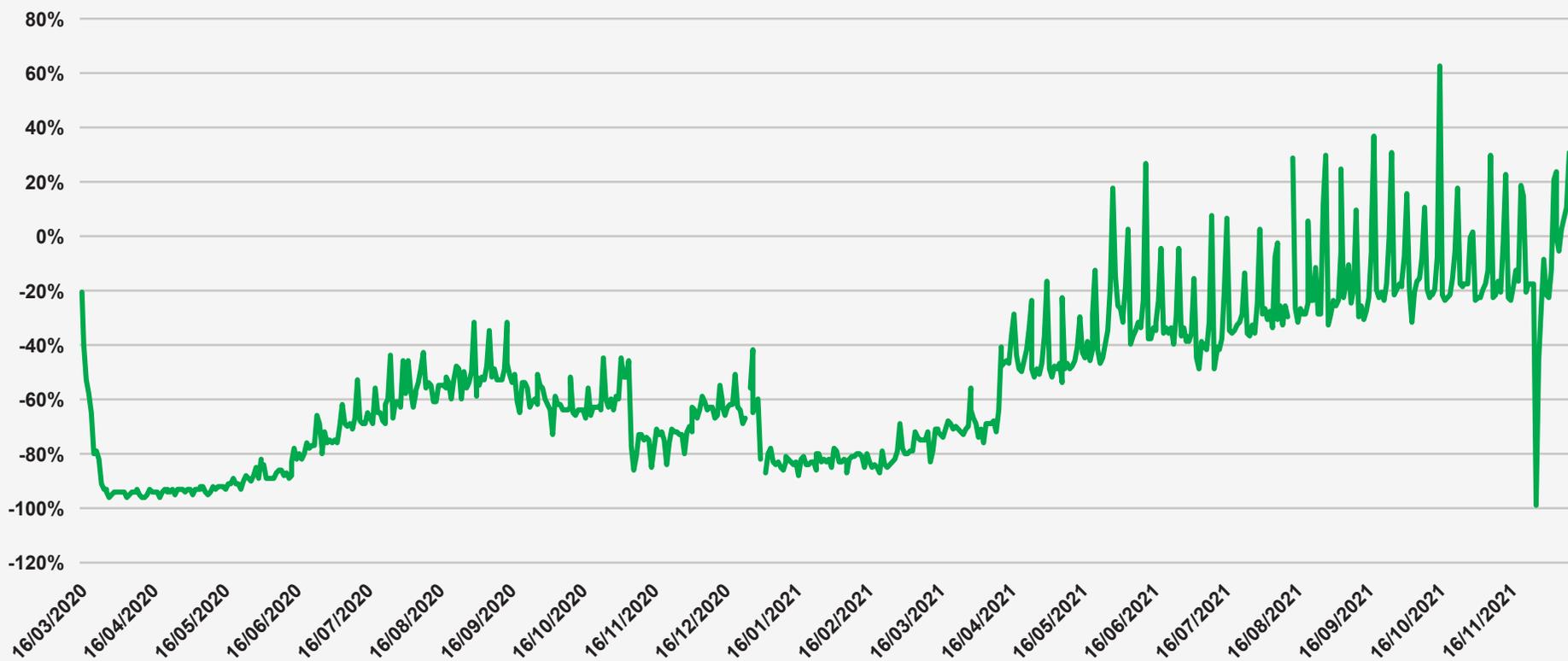
Despite total journeys by any mode decreasing in the region, footfall in our local train stations has increased by over 2 million between 2010 and 2019. Further showing the importance of the rail links in the area. On top of these rising figures, there was further predicted growth on the North East rail network. However, analysis showed that this growth could not be accommodated due to the already cramped timetables and constrained capacity available on the network. This is especially the case on the ECML and the Durham Coast line.

Chart showing increase in footfall in North East rail stations



Metro Passenger Journeys – % decline

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### Freight Links

The need to carry heavy freight traffic, primarily coal, was one of the key factors in the development of the rail network across North East England. In recent years, the volume of freight movement and associated rail infrastructure has reduced, reflecting the contraction in coal traffic and the loss of other heavy industries. Other flows, such as biomass, are replacing these historic markets.

**However, the region's current rail freight market is subdued following structural changes in heavy industry and the decline of coal.** Most freight traffic currently uses the Durham Coast Line. However, there are still operations on the constrained ECML network between York and Newcastle. Strong growth is forecast in the intermodal market (where two or more modes of transport are used to transport goods) via domestic and international container services. North of Newcastle, rail freight flows mostly comprise a mix of container traffic, cement and nuclear cargos. **Biomass has taken up many of the paths formerly used by coal trains.**

Unlike other parts of the United Kingdom, the North East lacks a Strategic Rail Freight Interchange (SRFI) where goods can easily be transferred between road and rail.

- Freight accounts for 9% of the UK's GDP
- Over 33% of goods entering the UK do so through Northern ports
- The freight market in the North is heavily dominated by road with 87% of the tonne kilometres transported using road
- The freight market in the North is expected to grow by over 30% until 2050 across all modes
- Freight train movements typically take about 23% longer than they would do if there were no capacity constraints
- Running one additional freight train per hour over the Pennines could save over 10,000 lorry journeys a week.

### Post Pandemic transport recovery

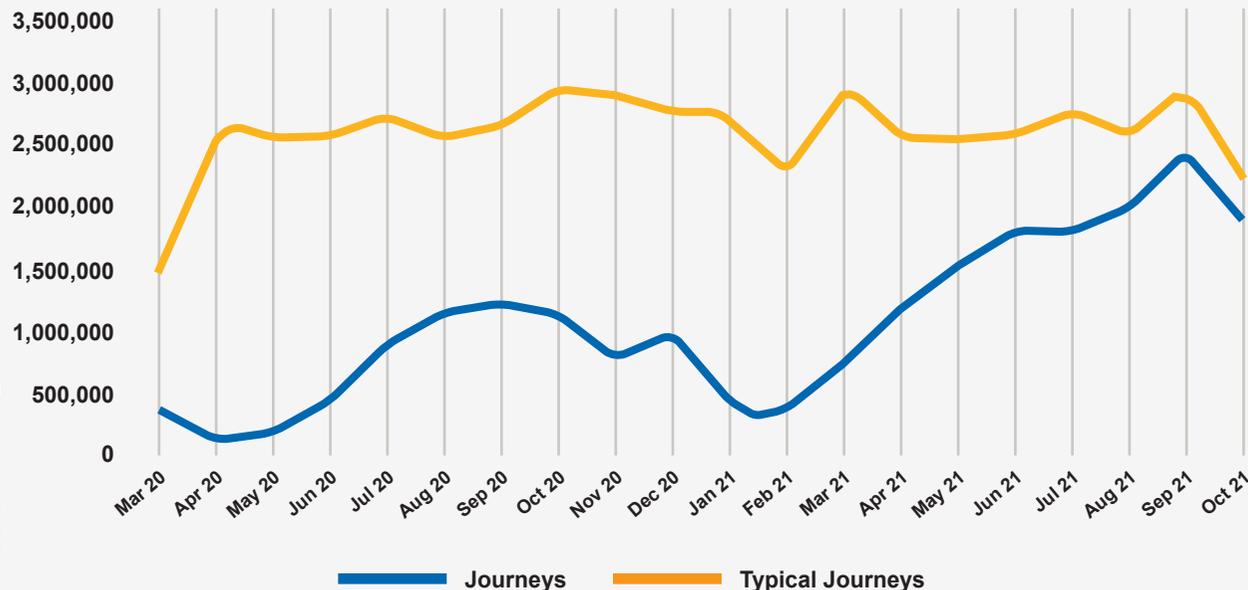
As the region recovers, transport use still suffers from the legacy of the strong government messaging during the lockdown periods to avoid public transport. Instead, where people are travelling, more are choosing to use private car travel.

Data shows nationally that car use is almost back to pre-pandemic levels at 97% of in September 2021 where rail usage was only at 64%.

This shift has been driven by a number of reasons, one of the major factors is the prevalence in flexible working practices brought in over the pandemic. This has led to those who would previously have commuted to work on rail/Metro 5 days per week, now being able to work from home for part or all of the week. A recent survey by Nexus showed 87% of respondents working were from home at least 1 day a week.

Another factor affecting public transport use is the perception that some means of travel are unsafe and individuals can be at risk if suitable Covid measures aren't in place. This is partly driven by the announcements made by government during the lockdowns to avoid public transport but there is lingering thought in the public that trains are still unsafe. 37% of people surveyed who had not taken a train in the last week believed they would not take the train because they are too unsafe.

Actual against typical Metro journeys



Despite these challenges significant recovery is happening as seen on the Metro system, where passenger numbers average around 87% compared to typical patronage for September 2019. Northern Rail have advised that they are seeing on average weekly a recovery of 75% of patronage with the caveat that they are seeing close to or over 100% of pre Covid levels on a weekend.

Passenger data provided by Nexus shows that their weekday patronage levels are currently at approximately 80% of pre-pandemic levels, whereas the weekend patronage is often above 100% of pre-covid levels showing that commuters are not all returning to previous travel habits, but leisure users are. This has also been reflected in data provided by Northern on their passenger flows.

Making sure that freight can travel sustainably by rail is also an important element of our Transport Plan. This means ensuring a fair allocation of network capacity and delivering additional capacity where required including facilities for transfer of goods between road and rail. We will work with partners to identify how rail freight can benefit the region and what assets and interventions need to be realised to enable it.

Metro travel patterns	2019/20	2019/20	20/21 P7-13	21/22 YTD
Commuting & Business	34%	32%	45%	27%
Leisure	32%	42%	10%	38%
Retail	13%	11%	18%	21%
Education	9%	4%	15%	5%
Visiting friends/relatives	8%	5%	7%	6%
Other	4%	7%	5%	3%

Significant flows to leisure destinations, including the Tyne Valley and Durham Coast routes recording crowded trains.

## 4. What do people think?

**It is the people and communities of the North East who are at the centre of our Transport Plan and all our related strategies. To enable us to know what we are doing well and where there is room for improvement, we listened to those who use our transport network.**

In late 2020, we consulted upon the North East Transport Plan which asked people across the North East a series of questions on what they wanted to see from transport in the future. We received almost 3,400 responses to our consultation which provided us with details of what our users truly require from transport (including the rail and Metro network). Their experience of, and aspirations for, the North East's rail and Metro networks are a fundamental part of developing this strategy.

We found four key themes which are important to our residents when travelling across the region:

1. Connectivity
2. Health, wellbeing and safety
3. Sustainability
4. Value for Money

Our rail and Metro services have an important role to play in all of these themes.

### Connectivity

Connectivity is very important to the North East and participants told us better connectivity is needed, particularly in rural areas.

There was the idea for new developments and neighbourhoods to be designed so they are less car-reliant from the outset.

Chapter 7 of this document on overcoming inequality and growing our economy details how we proposes to improve connectivity.

### Health, wellbeing and safety

Some respondents told us they would like to see more done to encourage more active travel. Chapter 9, Rail and Metro for a Healthier North East looks at this area

Our residents also told us they want to feel safe when travelling on public transport, in particular whilst using stops and stations. Chapter 10 Safe and Secure Public Transport deals with his concern.

### Sustainability

Protecting the environment was a key theme and rail and Metro will be vital in meeting our community's needs. Chapter 8 Carbon Neutral Rail and Metro in the North East and Chapter 11 Appealing sustainable Choices cover sustainability issues.

### Value for money

Our residents feel public transport fares are expensive and it is perceived to be cheaper to travel by car. Respondents also felt an integrated public transport network across the region would provide better Value for Money.

Chapter 12 Integration covers this topic area.

### Punctuality and reliability

While not outlined by the feedback from the Transport Plan consultation, punctuality and reliability are highly important to passengers on the rail and Metro network. The Spring 2020 Transport Focus Customer Satisfaction Survey found that 72% of Northern Rail customers were satisfied with the punctuality and reliability of their service within the North East.

Chapter 11 Appealing Sustainable Choices explores punctuality and reliability.

"I'd like to have a region where buses run at the same time when trains arrive at stations, so you don't have to wait too long to make a connecting journey."

Male, 35-44, Gateshead

"Promote walking routes and improve cycling paths wherever possible to encourage more people to get out of their cars."

Male, 35-44, Spennymoor

"Look at the map of the railways in the area... there's so many freight lines and unused railway lines and unused railway rights of way, if we're going to tap into them with the Metro, it would improve transport in the area so much."

Male, 25-34, Newcastle

"Building of new houses should be linked to public transport availability - there is too much building going on where the only viable transport is by car which is increasing our carbon footprint hugely. Need better linkage of strategies."

55-64, Northumberland

"I think we should have public transport at a cheaper rate so that more people can use it and it will reduce carbon footprint in town centres where people don't take the car."

Female, 55-64, Sunderland

"A lot of people feel insecure about traveling when it's dark, this is because they feel the stations are dangerous with little security. This isn't so much about the transport, but what you do before getting on the transport."

13-18, Newcastle

“I think the Metro system is crucial to the North East’s prosperity and it should be maintained, developed, extended. Perhaps we could have a restriction on cars into the city centres, more park and ride, more Metro and include some cycle lanes in that as well.”

Male, 65-74, Sunderland

“I think on the whole, transport should be accessible and affordable for everyone... they should still be able to get out and about and enjoy the region without having to worry about how they’re going to get there.”

Female, 25-34, Sunderland

“Better public transport - thus more frequent, less expensive and more reliable - to reduce our reliance on cars.”

65-74, Newcastle

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“The North East is in a prime location to be at the forefront of [hydrogen] technology in the UK, with hydrogen being developed in Teesside and the likes of Blyth Port discussed as another suitable location. I would really like to see the local government pushing this agenda more and making people and businesses aware of the technology.”

35-44, Blyth

“I’ve lived abroad in countries who have got a coherent rail system, small towns can really profit just as much as the big cities because they tap into them, it’s all about network effects, we have to tap into all that... We need integrated ticketing, one ticketing system across the whole area so you can jump off a bus onto a Metro without having to buy another ticket.”

25-34, Newcastle

“There has been huge underinvestment in our local railways and there is so much untapped potential to improve connectivity for many communities throughout the region by improving rail links.”

Male, 35-44, Spennymoor

“It would be great for there to be cheaper fares on public transport to make it more appealing.”

35-44, North Shields

“We need cleaner and greener transport. Electrification of rail lines currently used by diesel trains should be investigated.”

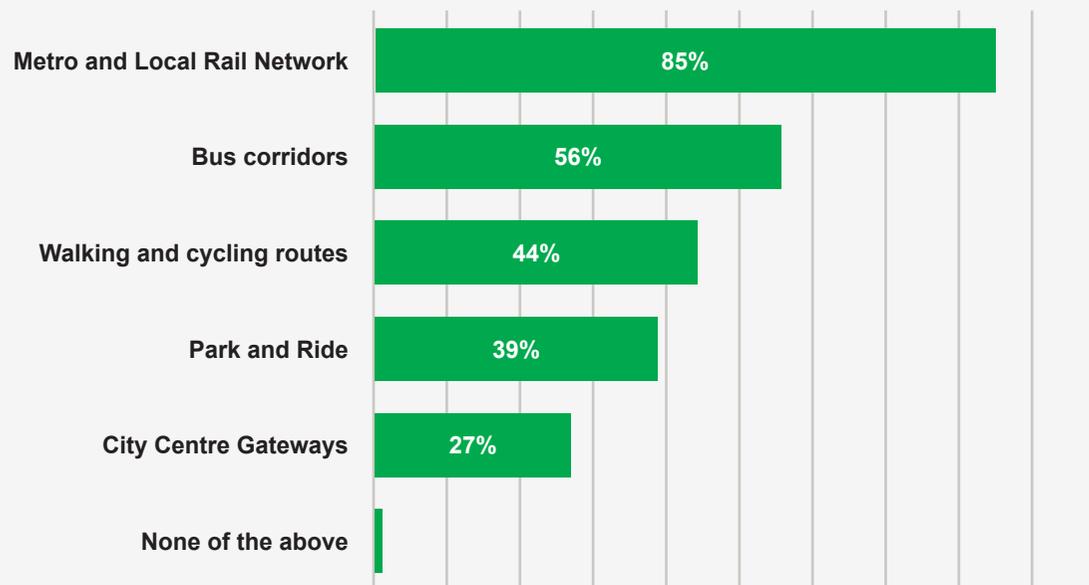
Male, 35-44, Spennymoor

### Importance of the rail and Metro network

It is necessary to have an understanding of the importance of our rail and Metro network and the key impacting factors on making the network as perfect as possible for passengers. Nexus conducted a survey to understand the importance of public transport and the necessary factors that make up a 'perfect' transport network.

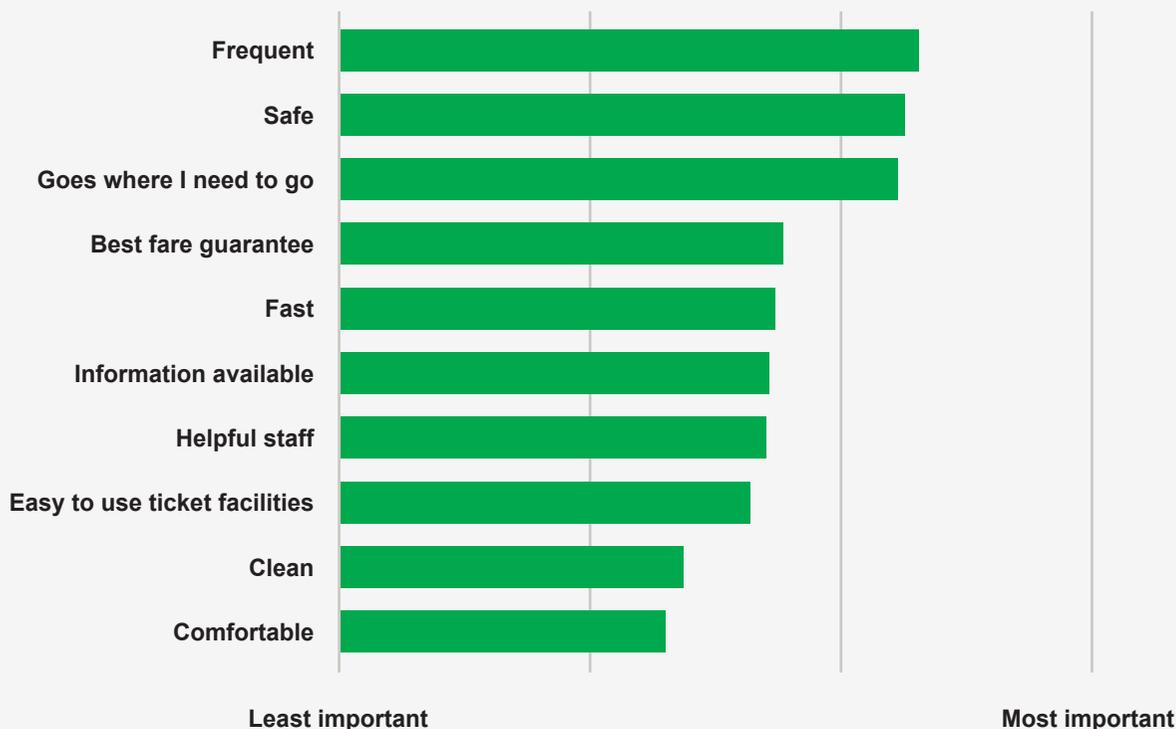
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Majority of respondents believe investing in Metro and the Local Rail Network would benefit the region most



Q. What three things do you believe would benefit the region most? Percentages are over 100% as more than one choice could be made.

Imagine you are creating a perfect public transport system for the area you live in. It would be 100% reliable and at a reasonable cost but in addition it could have just three of the following. Which three would you choose?



**Key Insight** – Improved connectivity, safety, sustainability, value for money, punctuality and reliability were rated as the most important factors for moving to travelling via rail and Metro.

## Policy Drivers

During the drafting of this strategy we also considered a number of national, regional, local and industry strategies and plans.

## Department for Transport (DfT) Draft Priority Outcomes (November 2020)

The DfT have a set of priority outcomes for transport interventions:

- Improving transport for the user: Work with the sector to enhance transport users' experience to make the transport network attractive, safe, resilient and inclusive.
- Decarbonising Transport: Tackle climate change and improve air quality by decarbonising transport.
- Levelling-up the Economy: Improve connectivity across the United Kingdom and level-up the economy by enhancing transport, by region and across the union.
- Increasing our global impact: Boost our influence and maximise trade by having an innovative, outward-facing approach.

### Network Rail

The Traction Decarbonisation Network Strategy (TDNS) sets out the rail sector's response to the Government's climate challenge by outlining how the direct emissions from trains on the network can be removed. Network Rail strategic advice to improve capacity along the ECML Northallerton to Newcastle and Newcastle to Edinburgh in an effort to deliver a Connected North East.

### The Williams-Shapps Rail Plan

To provide a reorganisation of the rail industry, with the setting up of Great British Railways. Devolved railways will be strengthened, with closer collaboration with GBR. Improving services, consistency and co-ordination with the rest of the railway is a key objective of our region.

### Transport for the North

The Long-Term Rail Strategy supports the Vision of Transport for the North's Strategic Transport Plan for:

**“A thriving North of England, where modern transport connections drive economic growth and support an excellent quality of life.”**

The objectives set out are:

- Increase efficiency, reliability and resilience in the transport system - Improve the performance and integration of the North's strategic transport network by making the case for interventions that improve its efficiency, reliability and resilience.
- Transforming economic performance- Secure investment in transport between the important urban and rural economic centres and assets to support sustainable transformation of the North's economic performance.

- Improve opportunities across the North- Ensure that the Strategic Transport Plan works for everyone who lives and works in the North through improved access to opportunities for all across the North.
- Promote and support the built and natural environment- Ensure that transport interventions across the strategic transport system protect and enhance the natural and built environment.

### North East LEP – Strategic Economic Plan

Key rail deliverables:

- Continued participation in Transport for the North and Rail North to identify pan-northern connectivity priorities.
- Agreement with Northern Powerhouse Rail and others on approach to East Coast Mainline improvements.

### North East Climate Emergencies

All of the Local Authorities (LA's) in the North East have declared a Climate Emergency; meaning they've acknowledged that the Council needs to act on the causes and impacts of climate change.

This has led to many of the LA's working to reduce their emissions including a push for a modal shift to more sustainable methods of travelling, including rail and Metro.

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### Integrated Rail Plan (IRP) for the North and Midlands

In November 2021 the UK government's long-awaited 'Integrated Rail Plan' (IRP) for the north and midlands was published. The outcome for the region was severely disappointing as the North East will no longer be fully connected to the UK's high speed rail network (neither HS2 nor NPR) and there is less committed rail investment in the plan than we believe is needed for the area.

We are also concerned about possible significant economic consequences for the region given that rail connectivity will transform between many English centres, but the North East will be almost untouched by these benefits. However, as outlined in this strategy, we will work with Network Rail and the Government to secure maximum benefit for the region and to secure the significant rail investment we believe is needed for the North East.

## 5. Data led interventions

**In the proceeding chapters, we have started to build a picture from the policy drivers and the evidence gathered from users and industry data as to areas for improvement. In the next chapters we concentrate on developing solutions grouped under the Transport Plan objectives headings plus a key complementary objective of Metro operations, maintenance and renewals and Integration ‘One Network for the North East’.**

### **Metro Operations, Maintenance and Renewals**

The North East is in a unique position having its own Metro light rail services on which to build an integrated public transport system to benefit our communities and businesses.

To operate, maintain and renew the Metro requires significant resources.

There are two sides to the story here, through growth in Metro passenger numbers a significant benefit arises covering the North East Transport plan objectives and thus projects and initiatives to grow patronage are covered in detail in the other objective based chapters. The other side is that to retain and grow passenger number we need to operate and maintain a safe and reliable railway.

Nexus operate and maintain the system to keep it running effectively and efficiently. However it is an ageing network having just passed its 40th birthday, many of the components that make up the Metro system are starting to fail and contributing to reduced levels of performance and restricting potential growth. To keep the level of performance expected by todays passengers and to encourage more to make the sustainable travel choice in the future, requires both cyclical maintenance and investment to renew redundant equipment.

Nexus continue to prove they can deliver, given the required financial backing, major changes to improve the quality, reliability and attractiveness of the Metro. The new Fleet is coming soon and significant repairs and renewals have taken place over the last decade.

This chapter therefore reflects on this excellent work to date, looks at the current projects and set out the future needs.

### **Overcome inequality and grow our economy**

As mentioned previously the majority of data we have to draw upon relates to existing users on existing networks. In order to spread the benefits of accessibility and connectivity to more people we have plans to increase the reach of local rail and Metro and increase the connectivity beyond our borders to regional and national social and economic hubs.

Research has shown that every additional passenger journey on local rail and Metro is worth an additional £8.50 to the economy.

By providing greater access and connectivity opportunities to jobs, training, education, health and tourism, more people can improve their lives.

### Carbon Neutral Transport

Reducing the harmful effects of transport emissions is a key national and local priority. This chapter focusses on improvements the industry can make in terms of reducing the use of diesel trains and improving the efficiency of the existing non diesel fleet (e.g. Metro).

This is only part of the story though as rail and Metro as a percentage of overall travel in and through the region is relatively small. Thus, making rail and Metro more appealing to use, and attracting new passengers will reduce the overall carbon impact of transport, meeting the sustainability goals expressed in the data sources.

### Healthier North East

Improving the health of the North East residents is another key local and national priority. As a result of the pandemic more people have been cycling and walking as part of their daily routine. What we aim to do as part of this strategy is improve access to stations and where practicable on trains to enable these good habits to continue. As people return to our towns, cities and businesses we wish to make active travel part of peoples integrated journey.

### Safety and Security

Another area that is regularly raised as a barrier to using rail and Metro is the perception of Safety and Security. This is tackled under its own specific objective and is closely linked to the customer experience and thus passenger numbers.

### Appealing and Sustainable Travel

Taking note of the responses to passenger surveys and previous consultations there are some key areas to tackle under this objective. Improving the customer experience is the key under this objective. Research has shown that failing to meet customer expectations has twice the negative impact as delighting customers has a positive impact.

Thus, this chapter explore the varied elements of a journey that combine to make a positive experience. This will cover planning the journey (including product choice), access to the station, the station itself, on the train experience and better communication if things go wrong.

Therefore, initiatives and interventions are being proposed to make the existing experience more appealing to new and existing passengers.

In order to keep the customer experiences high, we must also invest in the infrastructure to ensure trains and Metro cars can run reliably and minimise service failures.

### Integration

The final chapter in this part of the strategy looks at integrating the full journey across all public transport modes be that bus, Metro or rail. The aim is linked to the other Transport Plan objectives and is the glue that can bind the various pieces of the jigsaw together.

In this chapter we also consider the opportunities that might arise from the reshaping of the rail industry and how local rail can become more aligned with North East priorities and work in tandem with Metro and local bus services.

## 6. Metro Operations, Maintenance and Renewals

**The North East is in a unique position having its own light rail network (Metro) on which to build an integrated public transport system to benefit our communities and businesses.**



Thus, it is important to not only integrated Metro's role within the main body of the Rail and Metro Strategy but also to highlight some of the key elements that will require ongoing government support to ensure the people of the North East continue to enjoy the benefits of the Metro long into the future. This section therefore focuses on Metro operations, maintenance and renewals. The importance of Metro in delivering the North East Transport objectives is detailed within the main objective chapters showing how Metro and particularly local rail can work together as part of an integrated system.

To operate, maintain and renew the Metro requires significant resources. The fares from passengers contributes significantly to cover the day-to-day operating costs as do annual levy contributions from the Tyne and Wear local authorities, but there is a continued need for government grant to cover the annual shortfall and to ensure a continual programme of maintenance and renewals akin to the cyclical and major investment programmes undertaken on the heavy rail network.

There are two sides to the story here, through growth in Metro passenger numbers a significant benefit arises covering the North East Transport plan objectives and thus projects and initiatives to grow patronage are covered in detail in the main body of the strategy. The other side is that to retain and grow passenger number we need to operate and maintain a safe and reliable railway. This requires both cyclical maintenance and investment to renew redundant equipment. Nexus continue to prove they can deliver, given the required financial backing, major changes to improve the quality, reliability, and attractiveness of the Metro.

**This chapter therefore reflects on the excellent work to date, current projects, and future needs.**

Between 2010-2021, more than £350m of capital investment has been spent renewing and improving network infrastructure and between 2021 and 2024 a £362m+ new train fleet and depot will replace the current Metro trains and Metro Flow will add more capacity and improved frequency to the service.

A report commissioned by Nexus in 2018 concluded that every year, Metro, and local rail contributes around £165.6m of Gross Value Added (GVA) to the North East economy.

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In a wider measure of GDP and welfare benefits, the overall contribution increases to £367.6m per annum, which equates to an economic value of around £8.50 per passenger journey (under normal economic circumstances).

This value captures the benefits accruing to individuals, businesses, and wider society from more efficient travel, greater productivity through better business connectivity, and selected social and environmental impacts which can also be more readily monetised.

Metro is part of everyday life in Tyne and Wear, an essential part of the fabric of the region and accessible to over 40% of the population. Pre-pandemic, nearly 14 million commuter journeys were made on the Metro each year, and over 4 million journeys connect residents to education. Nearly 50% of Metro journeys are made for leisure, shopping and socialising, allowing residents and visitors to the region to enjoy seaside towns and vibrant city centres. Metro serves Newcastle International Airport directly. Metro's existence is integral to the region's ability to host high profile special events that generate considerable contributions to the regional economy.

In 2018, The Tall Ships event and International Airshow at Sunderland generated £19 million for the wider economy; the Heineken Cup rugby final in Newcastle generated an estimated £35 million and each year the Great North Run (which relies on Metro to transport over 90,000 runners and spectators) is worth at least £26 million. Each week, Metro supports regular sporting events such as football at St James' Park and the Stadium of Light, and rugby union at Kingston Park.

Metro was the UK's first modern light rail service, the first to be designed with disabled people in mind, the first to be non-smoking and the first to provide mobile phone and internet reception throughout its underground sections. From the outset, Metro was designed to be accessible for wheelchair users, with lifts and ramps and level boarding on to Metrocars. Accessibility standards have risen and significant expenditure in the Asset Renewal Plan focused on meeting and in many cases surpassing national station access standards and through the refurbishment of the Metrocars to meet the requirements of the Rail Vehicle Accessibility Regulations 2010.

The Metro network has unique parameters. These are: 1500V DC overhead line voltage, and 3.15m vehicle car-body height – which is considerably lower than vehicles used on similar networks. No other light rail vehicles are currently utilising High-Floor vehicles of a similar structural gauge. Typically, other LRV networks have car-body heights of around 3.6m – 3.7m, 500mm more than the Metro fleet. This means that a lot of the equipment for Metro has to be specially designed and bespoke for the network.

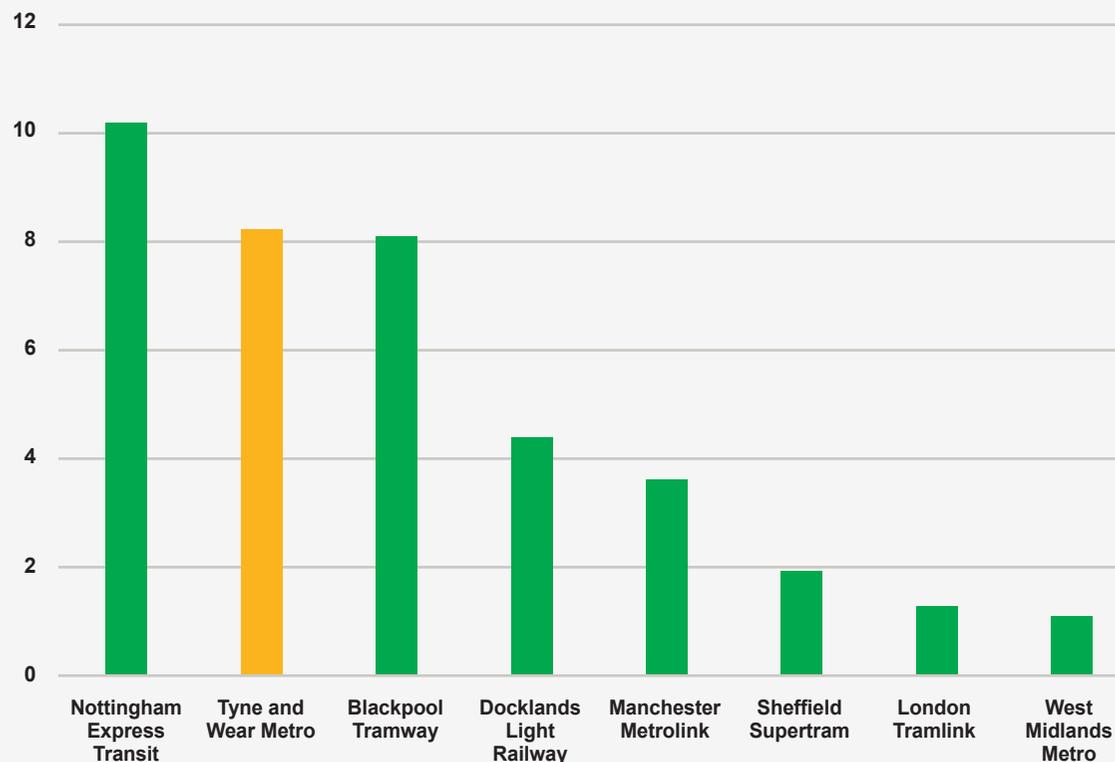
## Where are we now?

### Value of the Metro and local rail network

In terms of the value of Metro and local rail, there is independent evidence that quantifies the economic value of the region's network.

Following the pandemic Metro is now the second most used light rail network outside of London, by head of population. Highlighting the importance of the role it plays in getting people to work and education and supporting key workers and frontline services. Prior to 2020, the moving annual total of Metro journeys was 36 million trips. Most services had adequate capacity, with some peak-time services having heavy passenger loadings. Research into network capacity carried out in 2019 to assess the feasibility of introducing clean air zones and associated road user charging in Gateshead, Newcastle upon Tyne and North Tyneside showed that whilst some trains were regularly very busy, there was sufficient capacity to accommodate some modal shift from car to Metro.

Passenger journeys per head of Population 2020/21



### **Metro delivers economic benefits in the following ways:**

- Providing labour market access and mobility
- Supporting businesses, inward investment, and economic growth
- Improving long term productivity growth.

For more information on the economic benefits of Metro please see the Overcoming inequality and growing our economy chapter.

### **Outside of these core channels, Metro also:**

Supports economic inclusion across socio-economic groups - despite some areas of strength there are fundamental challenges within the labour market relating to persistently high levels of economic inactivity, worklessness, and/or income-linked deprivation which COVID-19 will only accentuate in the short term. Metro services play a very important role in providing good levels of accessibility from these areas to jobs, education, training, retail and health facilities, as part of a more inclusive economic model that drives productivity.

- Supports land utilisation in and around stations as well as supporting the regeneration and renaissance of town centres, which have been particularly hard-hit by the effect of measures required to control the spread of the virus.
- Enhances the North East's quality of life attributes – Metro provides efficient access to urban centres and encourages people to live and work in our region. Use of Metro also contributes towards town centre regeneration by acting as a gateway and providing access to services. It also helps to reduce road traffic and harmful emissions, road traffic accidents and community severance.

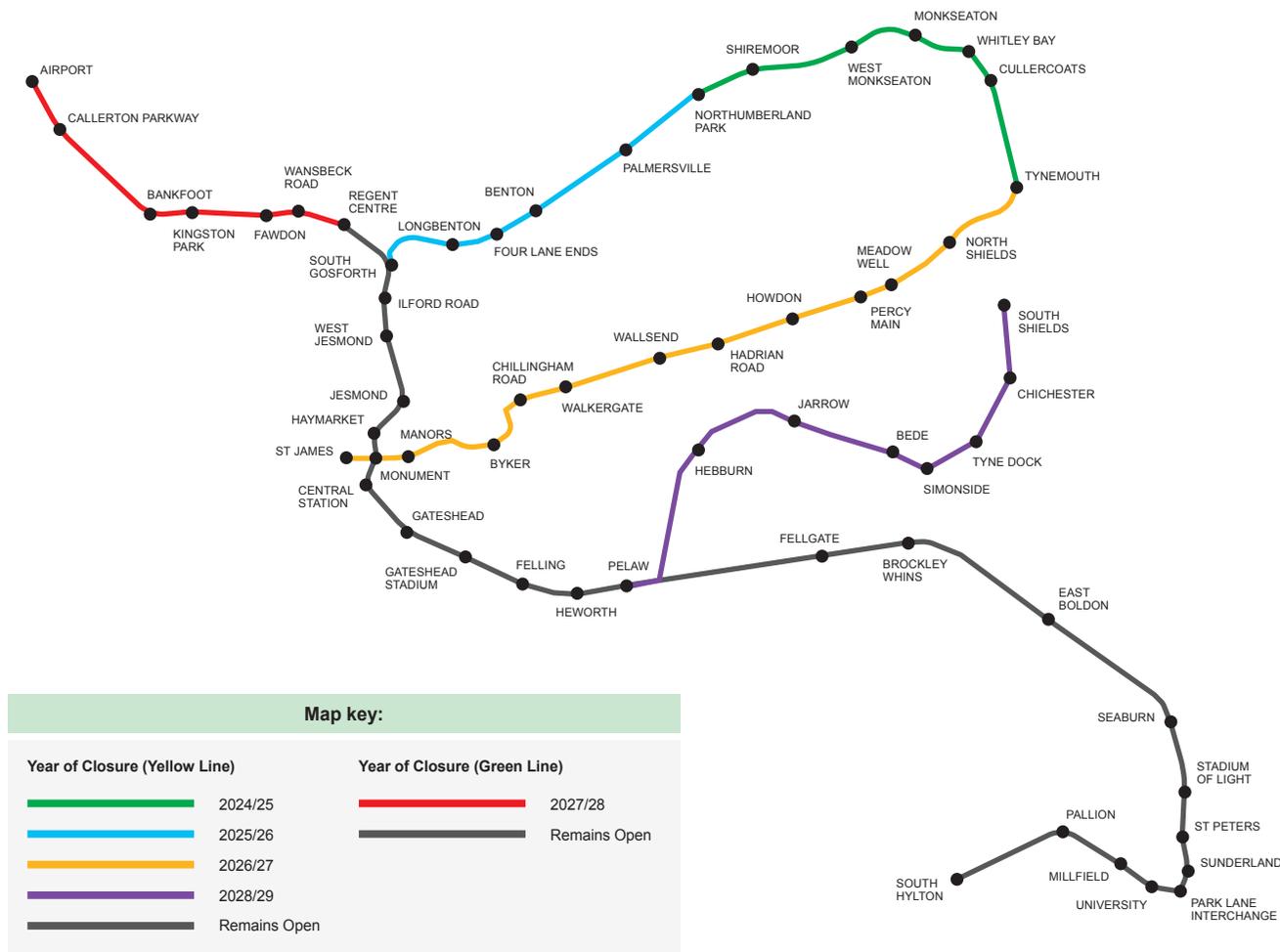
The narrative above shows that by improving transport connectivity, Metro can play a greater role in the future in delivering economic growth for the North East alongside positive social and environmental benefits. By identifying suitable potential expansion, the Metro network is likely to deliver at least the same economic value per passenger as the current network. With geographic expansion of the network, the benefits will be distributed across a wider cross-section of the North East's residential and business populations. These benefits could include:

- Increased inward investment by improving access to labour, suppliers, and consumers.
- Helping more people get to work and access services each day.
- Making key economic centres easier to reach and reduce congestion.
- Bringing existing businesses closer together, boosting productivity.
- Supporting regeneration and redevelopment around stations and in city centres.
- Encouraging more people to live and work in the North East, improving people's quality of life.

### Impact of lack of capital funding

If there is no investment in Metro, the service will deteriorate to a point where journey times become unsatisfactory, customer experience and satisfaction deteriorates, and reduced reliability will make the network unattractive for customers. A reduction in the number of people using Metro will inevitably lead to a significant increase in road-based travel, adding to existing congestion, reducing productivity and increasing harmful emissions. The map below, shows an estimate on what may happen, if Metro receives no further funding for capital investment. Bit by bit, the network will start to close down.

### Potential line closures if there is no capital investment

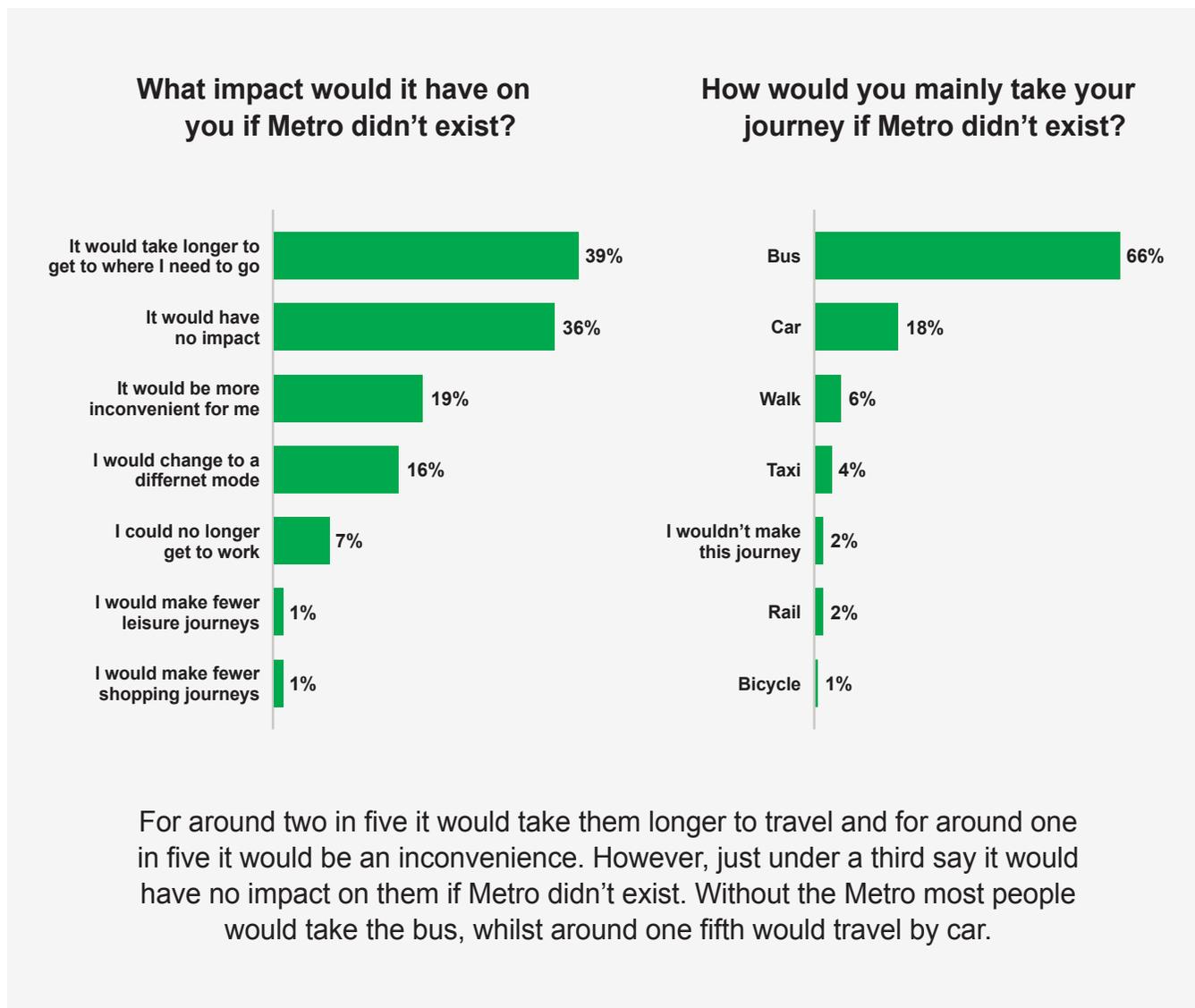


In addition, many people may not be able to travel at all, either because alternative forms of transport are not available to them or because the road-based journey time would be unattractive. This will lead to significant reductions in accessibility, reducing peoples' access to education and employment opportunities, as well as to a broad range of social and healthcare options.

Our asset management plans demonstrate that without investment the network would first face speed restrictions, which would impact customer satisfaction and journey time, then, progressively close.

Without Metro there would be serious detrimental effects on the highways network. Analysis for the business case for the essential renewals programme forecasts an increase in car trips of over 11 million by 2028. This would put more pressure on river crossings, city centre junctions and radial routes. Emissions would increase; in 2007 this was forecast to be an extra 3,480 tonnes of CO2 per year due to increased car use. Increased levels of accidents were forecast, and the local bus networks would be over-burdened.

Research with the Nexus insight panel demonstrated the personal impact that no Metro service would have, with 20% switching to cars.



Assets which have not been renewed during the Asset Renewal Plan (ARP) have aged further and will need renewing or replacing in subsequent years. Lack of investment in the various asset categories have differing degrees of impact on the network, but ultimately all result in the degeneration of the service impacting on the reliability and frequency of Metro. Failure to invest in the permanent way will result in the imposition of speed restrictions and eventually parts of the network being closed to passenger service.

A failure to invest in the signalling system will, in the short term, result in loss of assets such as sidings, as signalling assets here are cannibalised to support assets on the running line. This in itself will impact on service and Nexus will lose the ability to run some peak additional services through the central corridor [Pelaw to South Gosforth]. This position is also not sustainable and continued lack of investment will result in increased failures of the signals which will take longer to rectify impacting on reliability, increasing delays and reducing the attractiveness of Metro as a public transport option. Eventually failures of the signalling systems will result in sections of track being removed from passenger service.

There are many consequences of not continuing to invest in the infrastructure of the Metro.

When Metro was experiencing challenges with the punctuality and reliability of the rolling stock in the mid 2010's, customer satisfaction levels dropped. In 2010/11 the punctuality score for Metro was 79, this fell to 59 by 2016/17 and after a temporary improvement dipped again in 2019/20. Whilst this has been driven by the poor performance of the fleet, which will be addressed via the fleet replacement programme a similar scenario exists if Nexus do not attract a long-term capital funding agreement with Government beyond 2022. A failure to continue to invest in the renewal of the Metro infrastructure would have the same result, or worse.

When the 11-year ARP period ends in 2021/22, Nexus estimated that there is likely to be a period of three years' of grace where normal services can operate. Several sections of permanent way, if not repaired after this period, will be subject to closure. The understanding of these and the impact on services is as per the list below :

- 2024/25 - Regent Centre to Airport – Services could not run from Airport to Regent Centre. It will therefore be assumed that services will run only from Regent Centre to South Hylton (Green Line) and from St James to South Shields via the coast (Yellow line).

- 2025/26 - Plain Line - Tynemouth to Chillingham Road – Would mean services on the coastal loop could not run from St. James to South Gosforth.
- 2026/27 - Plain line - Tynemouth to Northumberland Park – Services on the coastal loop could not run Tynemouth to Northumberland Park.
- 2027/28 - Plain Line - Northumberland Park to South Gosforth – Services could not run from Tynemouth to South Gosforth.
- 2028/29 - Plain Line – Pelaw to South Shields – services would only run from Regent Centre to South Hylton on Network Rail infrastructure (Pelaw to South Hylton) (Green line) and South Gosforth to Pelaw (Yellow line).

A reduction in the number of people using Metro will inevitably lead to a significant increase in road-based travel, adding to existing congestion, reducing productivity and increasing harmful emissions, through an increase in car journeys. Our research into how customer would make their journeys if Metro did not exist shows that about 20% would switch to car.

In addition, many people may not be able to travel at all, either because alternative forms of transport are not available to them or because the road-based journey time would be unattractive. This will lead to significant reductions in accessibility, reducing peoples' access to education and employment opportunities, as well as to a broad range of social and healthcare options.

The ARP Phase 2 has helped replace and renew parts of the infrastructure that were ageing or had become life expired. However, this work has been prioritised by order of need and asset condition, within a limited budget, and this programme is only addressing a part of the asset renewal needs of the Metro system. There is an on-going and continually increasing need to renew those parts of the system that had previously been considered less of a priority but whose condition will gradually deteriorate with the passage of time, to the point where renewal or replacement is required. Such replacement or renewal will help ensure that these assets are able to cope with current levels of day-to-day operations together with projected increases in patronage.

As Nexus operates, owns and manages its own network, there is a need to ensure sufficient funding exists in order to maintain the infrastructure to a condition that enables

train services to be operated; another principle that central government accepted in 2010 when approving its long-term funding commitment to Nexus.

### Asset Renewal Plan (ARP)

In 2007, Nexus embarked on an ambitious programme of renewal of the Metro system called "Metro Reinvigoration". The work undertaken ensures that tracks, buildings, systems and stations are kept safe and are in the best possible condition necessary to the safe and efficient operation of the network.

Some of the key achievements and key deliverables of the ARP are detailed in the next section, but these include station refurbishment improving accessibility, almost 80Km of track has been renewed or refurbished, 20 bridges have been repaired/ replaced, 47Km of Overhead Line have been replaced, Metrocars had ¾ life refurbishment, 27 escalators and 12 lifts have been replaced, a new radio system has been installed and over 600 CCTV cameras have been replaced. This, coupled together with our plans for the future, allows Metro to operate efficiently now and into the future.

### Metro Reinvigoration

This project comprised of three phases.

**Phase 1** involved provision of a ticketing and gating programme that saw the introduction of new ticket machines, and gating at key Metro stations, as well as investment refurbishing a number of stations.

**Phase 2** was the subject of a Business Case submission to Government to fund Nexus' 'Asset Renewal Plan' (ARP), including fleet refurbishment. The DfT granted Nexus significant capital funding to undertake the ARP which, when combined with a 10% local contribution amounts to around £352 million spread over 11 years.

**Phase 3** comprises fleet renewal and the continuation of essential renewals network wide. Work has also commenced on the feasibility of network expansion.

### Delivery of our Asset Renewal Plan 2010 – 2021

Nexus have argued that despite owning and operating a railway with similar characteristics to the national rail network, it had no certainty of funding for either on-going operational subsidy, or renewal and maintenance work, contrasting sharply with franchised heavy rail operators who have subsidy commitments for the period of the franchise, and Network Rail whose funding is based on a regulated asset base (RAB) calculation and reviewed on a 5-year basis. Following award of its long-term funding commitment from DfT to Nexus in 2010, there is no doubt the Metro system has benefitted significantly from having a certainty of funding that has enabled renewal of infrastructure and properly planned maintenance, with improved asset knowledge leading to a reduction in unplanned maintenance and renewal. This allowed greater value for money to be achieved.

The guarantee of funding from Government, subject to certain conditions, has meant that Nexus has undertaken essential works to replace track, upgrade stations and renew points over a programme period. Some of the projects take years in the planning stage, such as the major line closures. Without this long-term funding commitment

from Government, Nexus would not have been able to undertake such major works, nor would it be able to take a holistic and long-term approach to the maintenance and renewal of its assets. This is why, at the outset of the ARP in 2010, Nexus and Government acknowledged the need to maintain an eleven-year planning horizon, which the DfT recognised as necessary in order for Nexus to continue to plan the cost effective and efficient delivery of its Plan.

### ARP Delivery Achievements

#### ARP Delivery

- 54 Multi-Functional Relays installed
- 35 Stations have been refurbished
- Delivery of South Shields Interchange
- 79.1 km of track has been renewed or refurbished; comprising of 37.3km of ballasted track renewal, 27.9km of existing ballasted track refurbished and 13.8km of track re-railed.
- 49 Switches and Crossing shave been renewed or refurbished;
- 82 sets of points motors have been replaced;
- 6.5km of track drainage has been installed;

- 31.5km of cable troughing has been refurbished;
- 86.5km of signalling cable has been replaced;
- One depot rectifier transformer replaced and 2no. ground mounted OHL switches installed
- 20 bridges have been structurally repaired/ replaced and 5 bridges have been removed in their entirety;
- 27 escalators and 12 lifts have been replaced;
- A new Metro car wash and wheel lathe have been installed at the Gosforth depot;
- A new rail tamping machine has been acquired;
- 2km of earthworks have been repaired through ballast retention and stabilisation;
- 47 route km of OLE conductors replaced, this includes circa 54km of Contact wire and 42km of Catenary wire. On top of this, there has been an additional partial completion of circa 2.5 route km of twin contact wire (additional 5km total), the associated catenary wire replacement to follow. To date there have been 121 Cantilevers replaced.

- A new hardware platform for critical communications systems has been installed together with the replacement of help points, the public address system and over 600 CCTV cameras.
- The virtual server ICT platform has been renewed together with centralised storage for the new CCTV cameras.
- 86 Metrocars have been refurbished at ¾ life.
- A new Radio System has been installed;
- A new Rail Traffic Management System (RTMS) has been installed.
- 5 new technology EBI track circuits installed.
- Howdon depot commissioned
- Nexus Learning Centre completed.

The consequence of not having a continuation of the current ARP approach would be to revert back to a sub-optimal set of asset management approaches. This approach increases costs of project and inefficiencies in the planning and procurement but most fundamentally does allow for the planning of large assets replacements relying instead on inefficient patch and mend.



### New Metro Fleet

Nexus has successfully secured Government to funding to replace of our ageing Metro fleet. Government provided £332m (out of £362m total) of funding for a new fleet of Metros and a brand new replacement depot.

The network was experiencing challenges relating to the reliability of the current fleet due to their age which was having an impact on passenger satisfaction.

After a thorough procurement process, Stadler were appointed to build our new Metros and Depot. An extensive public consultation allowed Metro customers to have their say on design and layout of the new Metros. The new Metros will provide a transformational change for our customers. More details are provided in the case study below (please see New Metro Fleet and Depot case study in Overcoming inequality and growing our economy chapter for more information).

## Metro Flow

Nexus was successful in attracting £100m of Government funding through the Transforming Cities programme. This project will deliver:

- **More capacity:** an estimated 24,000 additional spaces per day across the system to transport more customers in greater comfort
- **More frequency:** a 20% uplift in daytime services network wide each week, reducing overall customer journey times, with the opportunity to enhance weekend services subject to the business case.
- **More resilience:** improvement in service recovery in the area of the network, which is most affected, meaning a reduced impact on our customers during times of disruption, it will also act as an enabler to deliver more stations and facilitate Metro expansion.

These benefits will be delivered through dualling a section of track in between Pelaw and Jarrow which is currently single track. It will merge Metro and Network Rail's infrastructure to extract better value from both assets at a favourable cost.

## The project delivers the following outputs and outcomes:

- twin-track Metro operations throughout between Pelaw and Jarrow
- network capacity and resilience to enable the reliable operation of a minimum 10-minute daytime frequency throughout the Metro network
- four additional new Metro trains to enable more frequent services to be operated, taking the fleet to 46.
- passive provision for a potential additional station between Hebburn and Pelaw
- continuity of freight train operations at Jarrow oil terminal.

## Metro Signalling

Nexus' existing signalling system was installed by Westinghouse (now Siemens) between 1979 and 1984. It is made up of 12 interlockings based on electro-mechanical relays. These Relay Rooms perform the safety interlocking of the signalling and are therefore a critical part of the signalling system. If they fail, it has a significant impact on the operational service.

Unlike modern computer-based interlockings, there are no special data preparation tools or vendor support requirements for maintaining and modifying the majority of the existing systems.

Network Rail is currently undertaking a programme of signalling system renewals which will upgrade similar relay based signalling systems installed in the 1970's and 1980's with modern computer based equipment. Industry support for supplying re serviced or new relays is now reducing, indeed during the late 1990s Westinghouse stopped all manufacturing of the Nexus based relays for mainline interlocking. This has led to cost increases from other smaller suppliers, and also difficulty sourcing supplies.

The relays have been operational for over 35 years. Based on service lives of similar relays on similar infrastructure, along with the current failure rate, efficient operation can be expected for a further 10 years, after which increasing relay failures in terms of contact or bearing failure will occur.

Installation of Relay Rooms and equipment since it was first fitted used a variety of manufactures to supply the wire to interconnect relays together. Over the past 35 years wires are now exhibiting failure in the form of wire degradation. The safety integrity of the system will become compromised unless action is taken. The only long-term solution is to completely rewire the Relay Room or equipment location housing with modern, non-degradable wire. This is an extremely expensive and lengthy procedure, causing significant disruption to operational service as the equipment is taken out of service during the rewire and test phases. This emphasises the need to replace the system, as there are many aspects of the current system that are life expired.

Renewal of relay rooms can be on the principle of part replacement or wholesale renewal. With the unpredictability of the extent and speed of wire degradation, part replacement is not recommended as it will not eliminate concealed areas of dangerous wire degradation. The main cost of renewing a Relay Room is the availability of skilled labour and cost required to carry out the extensive running and termination of the individual wires onto the relays, fuses and terminals. Due to the limited space in the relay rooms, significant disruption to operational service will be experienced during the renewal phases. Network Rail install small Computer Based Interlocking (CBI) in the existing Relay Rooms. These are pre- tested and require only changeover of the input and output functions on commissioning. This is only an interim solution pending wholesale replacement of the signalling with modern centralised CBIs.

The Nexus signalling system makes extensive use of copper multicore cables which are starting to degrade. With cables the degradation is only visible at the cable terminations, not internally in the cable, therefore there is a potential latent failure mode which is difficult to observe or determine without regular cable testing.

As the signalling industry moves towards CBI based signalling, the use of multicore cables is reducing, hence the manufacture and availability of these railway specific products is becoming limited and expensive.

The power supply switch gear is over 35 years old that will need replacement over the next 5-10 years. Modern power switchgear and transformers are smaller and more efficient, using electrical industry standard equipment which is readily available in the marketplace.

## Other projects requiring capital investment:

There are more than 10 significant projects that need to be taken forward, which if not delivered will have a detrimental impact to the operation of Metro. Some of these are summarised in the image below, which also highlights the impact of Storm Arwen.

### 1. Airport Line

**What is the issue?**

- The Airport route constructed in 1991 has received little or no capital investment to date and is over 30 years old.

**What do we need to do?**

- A combination of full renewals and refurbishment to be completed by the mid 2020s.

**Risks of do nothing?**

- Speed restrictions impacting timetables with longer journey times and less frequency.
- More intensive and intrusive maintenance possibly involving longer possessions.



### 3. OHL Renewals

**What is the issue?**

- Almost 50% of the network is still to be renewed. This infrastructure is over 40 years old and both excessive wear and a high number of cable splices and repairs risk catastrophic failure – this has already happened on several occasions resulting in loss of Metro for several days.

**What do we need to do?**

- We need to continue the renewal work in priority order and is envisaged to require a further 4-5 years to complete.

**Risks of do nothing?**

- Further catastrophic events will occur – more frequently impacting in service delays or loss of service in some cases. Loss of patronage and loss of revenue as a result of this, with extra costs associated with providing replacement bus services, ticket acceptance on bus services, and ticket refunds.

### 5. SCADA

**What is the issue?**

- SCADA allows Nexus to remotely control stations and infrastructure. Key components of the SCADA system are no longer available from any source. It is predicted that the new system will be unsupported by the Original Equipment Manufacturer within 3 years.

**What do we need to do?**

- Replace it – otherwise new staff will be needed to supervise locally controlled stations.

**Risks of do nothing?**

- An estimate of 100 new staff would add 4m annually to operating costs, as well as several months for recruitment.
- Loss of Scada is likely to result in a severely degraded service in the short and medium term.

### 2. Howdon Viaduct

**What is the issue?**

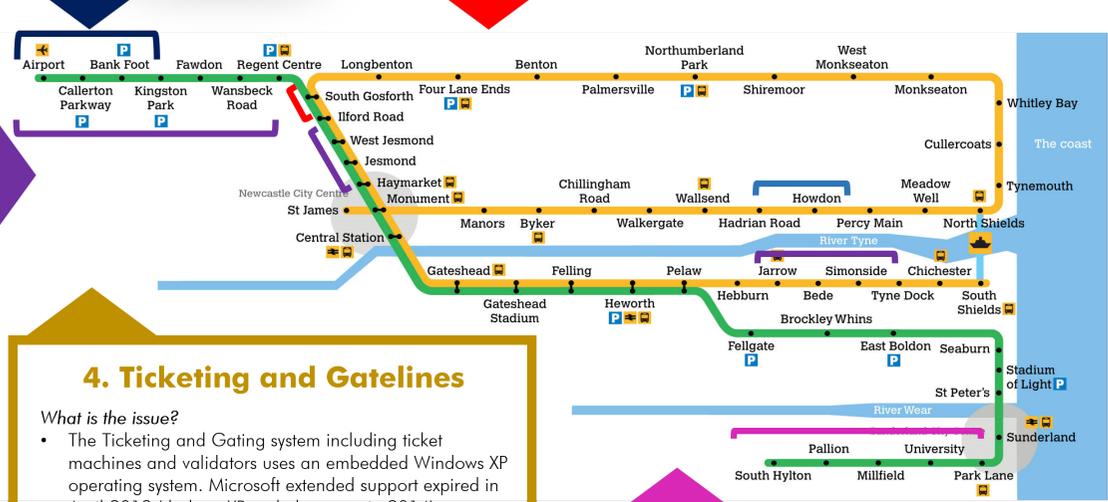
- Howdon Viaduct is an iron bridge from circa 1860, constructed of 7 arches of 36m – on masonry piers. The bridge deck and rail fastening arrangements are unsatisfactory resulting in a current speed restriction, impacting on journey times.

**What do we need to do?**

- Reconstruction of the bridge deck and extensive strengthening works are required to ensure the long-term maintainability of the structure and removal of the speed restriction.

**Risks of do nothing?**

- Further speed restrictions, timetable changes resulting in less frequent services. In turn, a loss of patronage and loss of revenue. Network severance is a real possibility.

### 4. Ticketing and Gatelines

**What is the issue?**

- The Ticketing and Gating system including ticket machines and validators uses an embedded Windows XP operating system. Microsoft extended support expired in April 2019 (desktop XP ended support in 2014).

**What do we need to do?**

- A replacement is required to ensure future operation of existing system and also to futureproof for future system requirements (EV tech, bank cards etc.)

**Risks of do nothing?**

- Not able to sell tickets at TVMs. Gatelines would remain open due to lack of upgrade and thus fraud would increase. Significant financial and operational risk if the system was unavailable

### 6. Storm Arwen

**What is the issue?**

- A failure to progress a large scale capital funded vegetation reduction programme meant having to shut the entire Metro network for almost two days during Storm Arwen. We have incurred costs associated with ticket acceptance on bus operators, emergency rates of several external vegetation contractors, and internal overtime.]
- A failure of battery locos meant we were unable to recover a Metro train trapped by overhead line damage between South Hylton and Park Lane on Network Rail track.
- Closure of the network on Friday at 9pm was 3.5k loss in patronage, 75% down. Closure of the network on Saturday was an estimated 105k loss, 95% down. Partial closure on Sunday accrued a 37k loss, 60% down. Total losses for weekend revenue were circa 145k.

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## Metro Operations

### Customer data and insights

Transport Focus had undertaken research throughout the lockdown, a survey of 2000 people in May 2020, found that four out of ten people said they wouldn't use public transport again until they feel safe. Also, they found that the number of people happy to use public transport when restrictions are lifted had gone down from 24% in the first week to 18%.

Further research undertaken by Transport Focus found that:

- 50% said that in the future they will be more likely to **drive** for journeys they would have previously made by public transport
- 25% said that in future they will be more likely to **cycle** for journeys they would have previously made by public transport
- About 4 in 10 said that in future they will be more likely to **walk** for journeys they would have previously made by public transport

Research undertaken by Systra, found that:

- 29% of office workers never want to return to the office, instead wanting to work from home.
- Of those that commute by rail or bus, this figure increases to 32%.

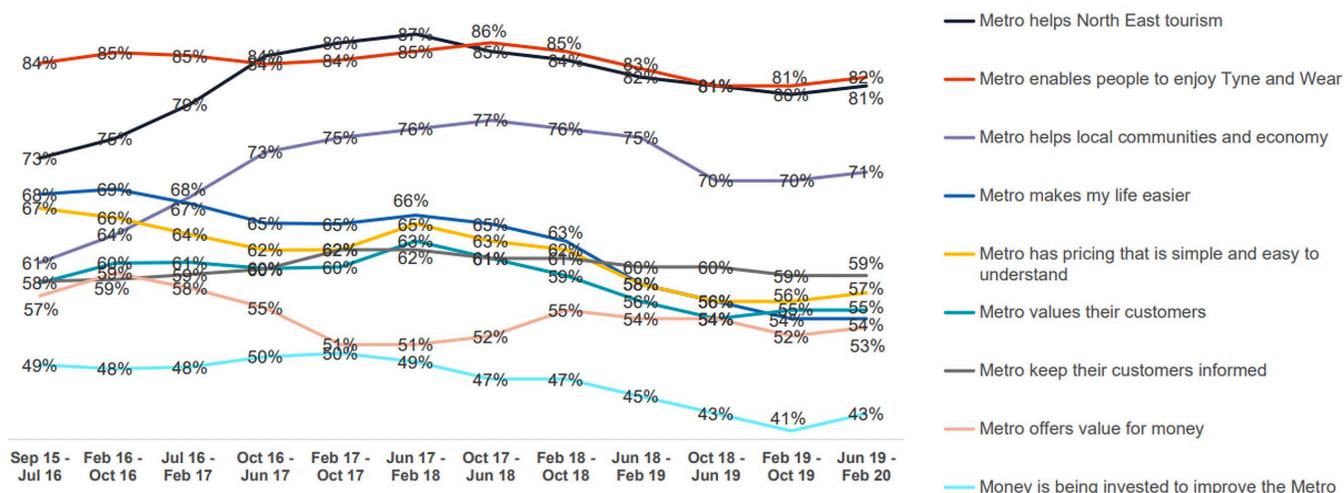
- 55% of UK workers would like to work more flexibly, including changing their start/finish times or working their hours across fewer days, compared with before COVID-19.
- 59% think it is likely their employer will let them make the changes they want to their work location or working patterns.

## Customer satisfaction

However, in November 2021 overall satisfaction with Metro is 7.8, this is the highest score since 2013/14, highlighting that customers were happier with what Nexus were doing to keep Metro safe as they return to public transport.

### Perceptions of Metro Source: Brand Tracking, Feb 2020

How strongly do you agree/disagree with the following statements?



## Customer experience

### Customer Journey Mapping

A prototype customer sentiment map is currently being developed by the Business Intelligence Team. This can be used to pinpoint lagging points in service offerings and may be integrated with the Nexus Insight Panel and pulse surveys to provide up-to-date information on the customer experience.

### Communications channels

Nexus offers information to customers in a range of legacy and modern formats, catering these to the requirements of our customers. Currently, Nexus communicates with customers through mail, text, and web. The @My\_Metro Twitter page replies to customer queries and posts updates on travel disruption on the network. The Twitter page is a main source of information for customers, with the account having over 130,000 followers and over 115,000 tweets. Customers regularly interact with Twitter for general enquiries since it's often the quickest way online to receive information.

Nexus provides a range of information sources which can be viewed by customers at any time. All online sources only provide information based upon timetabled departure

times and are not updated to reflect cancellations and are therefore not always up to date and reliable. Nexus currently uses a Content Management System (CMS) to publish information for all feeds, providing a consistent message across a variety of platforms. There is often a delay on the website, meaning that customers who use the website as their primary source of information are likely to receive information later than those customers using an alternative information source. Different platforms (RTI & station boards) have different data sources, due to this the messaging can be inconsistent across platforms. These issues are being addressed as part of the implementation of Nexus' Customer Information Strategy.

### Real Time Information

An outline business case is being developed by Nexus for future funding opportunities for the implementation of real-time information (RTI) through a unified Application Programming Interface (API), which would ensure that all channels are fed from one source of information. Please see the Integration chapter for more information.

### Tyne and Wear Metro App

Nexus currently offers an official Tyne and Wear Metro App. The app makes it easier for passengers to get around Tyne and Wear by Metro. As well as incorporating official timetable and connection information, the app pulls live travel alert data direct from Tyne and Wear Metro Control room, giving passengers live updates on the service and travel advice during periods of disruption. The app also allows passengers to plan by setting up favourite stations and journeys. It has been recently updated to help customers identify quieter times on Metro, allowing them to make informed decisions about when to travel, for those who have the choice.

Nexus continues to make improvements to the functionality of the Metro app. The updated app will contain digital ticketing, real time information and a new design featuring the POP card design.

**Customer service**

Nexus employees are trained to deal with a wide variety of situations at stations, this can range from helping passengers with additional requirements to giving instructions during an emergency. For more information on Nexus customer services please see Safe and Secure Chapter

**Station environment**

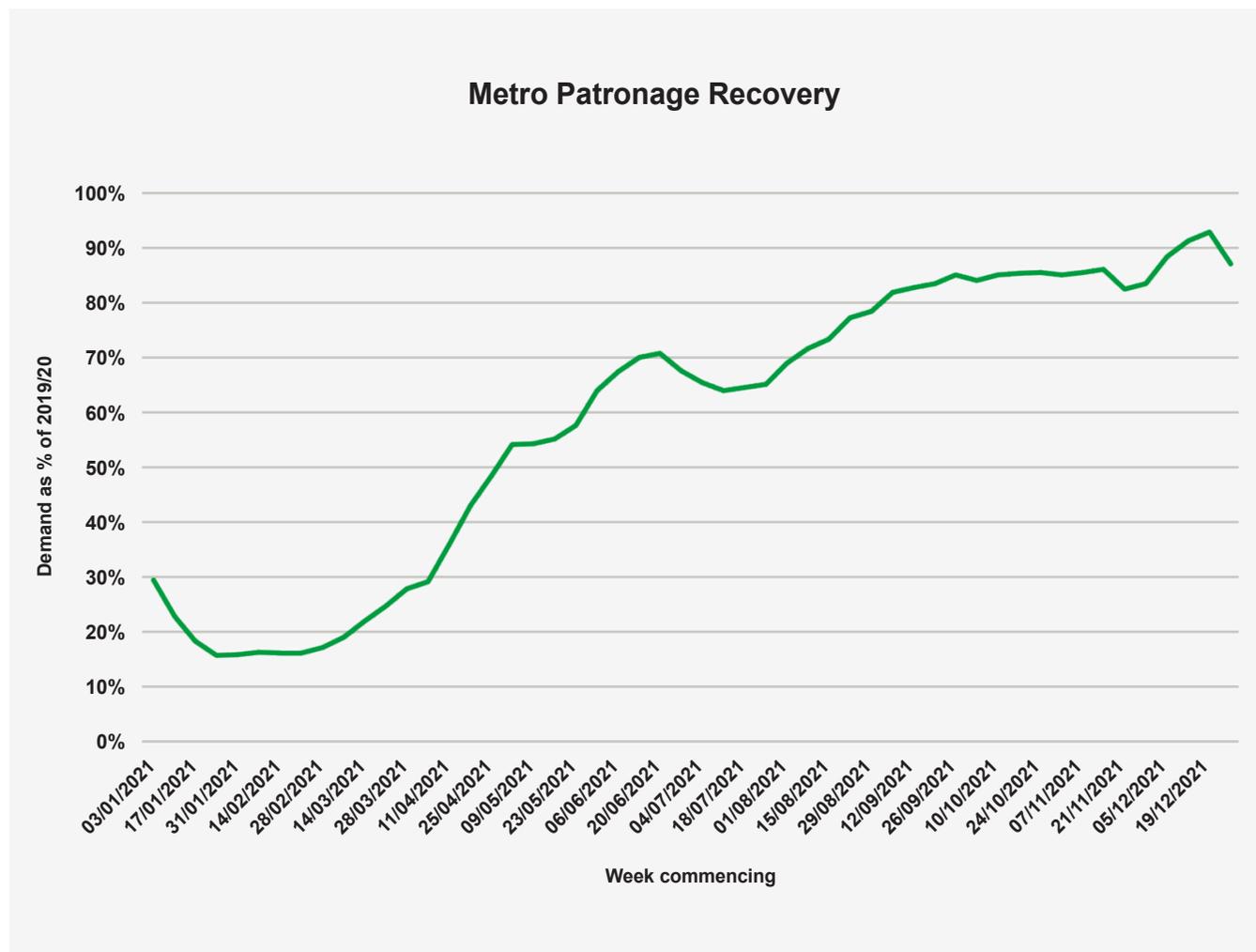
Currently Metro stations vary in condition. However, signage and colour schemes remain consistent throughout all stations, which creates a visual consistency and a sense of security throughout the network.

**Ticketing systems and gate-lines**

Currently, there are gate-lines at 13 of our stations . There are 225 Ticket Vending Machines (TVMs), 90 gate-line validators and 188 standalone platform validators on the Metro system. For more information about Metro’s ticketing systems please see Appealing, Sustainable transport choice chapter.

**Recovery from Covid**

All forms of public transport suffered during the lockdowns of 2020 and early 2021. At the start of the pandemic public transport ridership fell by 95%, since then the Metro system has seen patronage fluctuate as restrictions changed, however the system has recovered quickly in comparison with other light rail networks.



Nexus face challenges in the short term – one of them is a gap in revenue funding. Government provided revenue support which is due to end in April 2022. Nexus will still have a substantial gap in funding for the Metro network over the next three years, as it has not fully recovered from the fall in passengers due to the pandemic. Without continued Government support the network would face significant financial challenges, and given the high level of fixed costs associated with running the network reducing costs would be challenging:

- Without additional grant support, the only way to attract funding is to exploit Metro and grow fare revenue – cutting services is counter-intuitive
- If services were cut to 3 trains per hour (every 20 minutes) and 2 trains per hour from 19:00 each day would deliver a £3.7m saving, but modelling shows this would have a major impact on revenue with an estimated loss of £4.0m
- To achieve this there would be significant upfront redundancy costs due to the reduction in headcount.

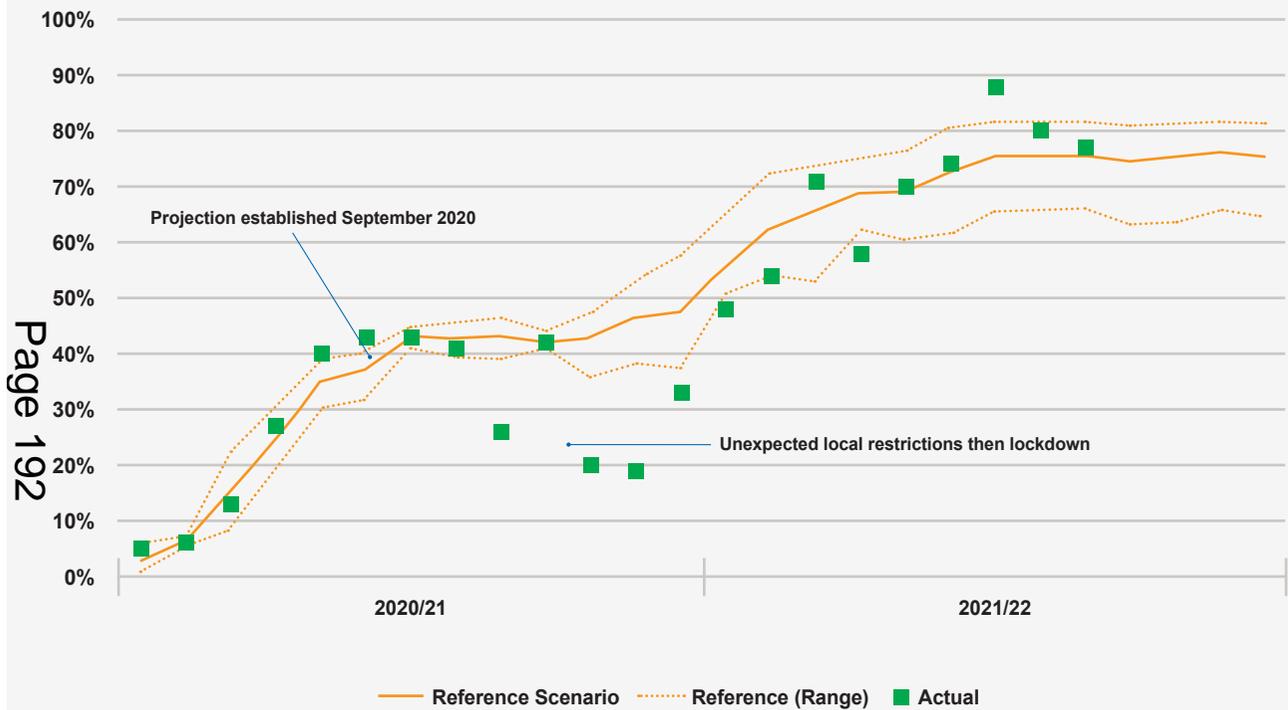
- Several million pounds would be incurred in respect of the termination of contracts e.g., policing and security, cleaning and the new fleet
- Ultimately would lead to the closure of the Metro system which would have a detrimental impact on the region
- £8.50 per journey lost to the economy
- Increased car usage (estimated 12million cars) leading to significant damage to the environment.

### Changing patterns of Travel

With so many unknowns, it is impossible to forecast future customer numbers with any certainty. The graph below is a reference scenario for what the rate of Metro recovery might be, based on economic forecasts, surrounded by a confidence band in that reference scenario. The numbers on the horizontal axis refer to the 13 four-week accounting periods used by Metro, beginning in April each year.

The analysis suggests that Metro demand could be around 20% below former levels for a prolonged period with serious implications for the funding of the Metro network. The outlook for other modes of local transport is similar. This means that Nexus and other providers will need to actively target new passengers, including modal shift from car use to fill the gap, as well as redoubling efforts to win back former customers through reassurance and attractive products and excellent service delivery.

Potential Metro Recovery Scenario by 4 week period



With the exception of the unexpected September 2020 heightening of restrictions, the actual performance of patronage has tracked anticipated trends

Changes to passenger behaviours impacted on travel patterns. As an example, the percentage of the workforce working for their employer from home in the region increased from 4.5% to 27% within weeks. This is a disproportionate reduction in commuter flows, often a source of regular season-ticket revenues. Flexibility of resources to meet abrupt temporary and permanent changes in demand will be a key feature of future public transport planning and operations.

Changes to the function of established retail centres are a well-established trend accelerated by the pandemic however individual outcomes are more nuanced and vary by activity and location. Data shows that out-of-home retail activity is in net decline, whilst online retaining and home delivery activity have increased substantially.

Due to the interventions implemented, including 'Kids go free' and 19-21 POP products and an on-going focus on enhanced cleaning, patronage on Metro by the end of 2021 had reached the upper levels of expectations; however, recovery has been heavily led by the leisure market.

With the return of full attendances at football fixtures and the gradual re-opening of arts and cultural venues, this has continued. Restrictions on overseas travel have reduced both outbound and inward tourism, although Tyne and Wear seems to be a net beneficiary with the decline in overseas visitors more than balanced by more residents staying at home or on staycations close to home.

The leisure market is most buoyant at weekends, during school holidays and during good weather. This is borne out by Metro patronage figures which on some days have approached or exceeded 2019 levels:

- Sunday 30 May +18%
- Sunday 18 July +7%
- Saturday 7 August -7%
- Sunday 8 August -2%
- Sunday 15 August +32%

These weekend totals contrast with average customer numbers on Mondays to Fridays which are around 25%-33% lower than pre-pandemic levels, with more trips made during school holidays. This highlights the leisure market as an area of future growth and an opportunity for Nexus to incentivise more travel by Metro.

However relatively slow return of commuters meaning the recovery is fragile and susceptible to external factors such as the weather and restrictions being reimposed.

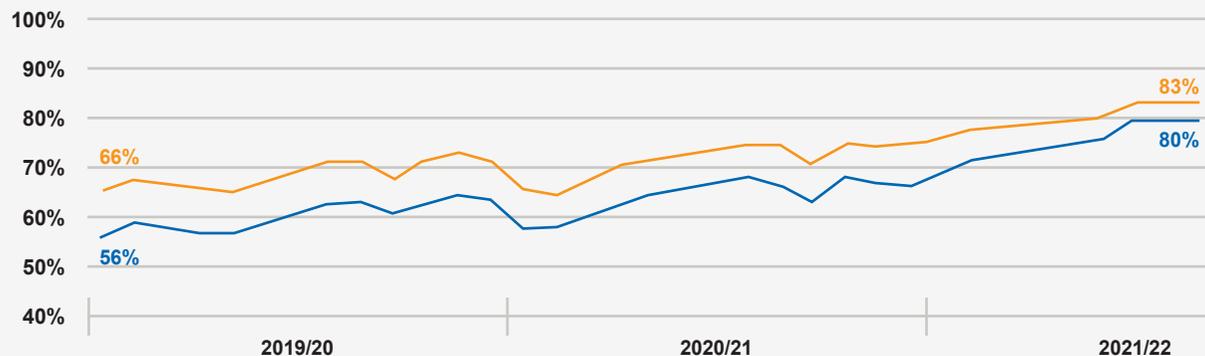
Nexus has used its Insight Panel and has undertaken a business survey, a public survey and a more in-depth qualitative survey to gather vital evidence from research to capture attitudes and potential behaviours in a post-COVID-19 environment. These in turn have provided the evidence for what Nexus needs to do to attract people back to public transport.

The pandemic has given rise to a wide range of negative emotions across society which can alter travel behaviours. Throughout the pandemic, Nexus has had a unique insight into the views of regular public transport users who are members of its Insight Panel. The Insight Panel is a community of around 900 online members who use regularly use public transport and are based in County Durham, in Northumberland and across the Tyne and Wear area. The objective of the Panel is to canvass a wide spectrum of views and opinions across a range of subjects; these provide a knowledge-bank of data which actively informs the current operations and future plans of Metro, Nexus and bus operators.

The pandemic has changed customer perceptions and expectations from services, including Metro. There has been an acceleration in the use of technology with a jump in cashless transactions and higher expectations from customers that operators will take steps to keep people safe.

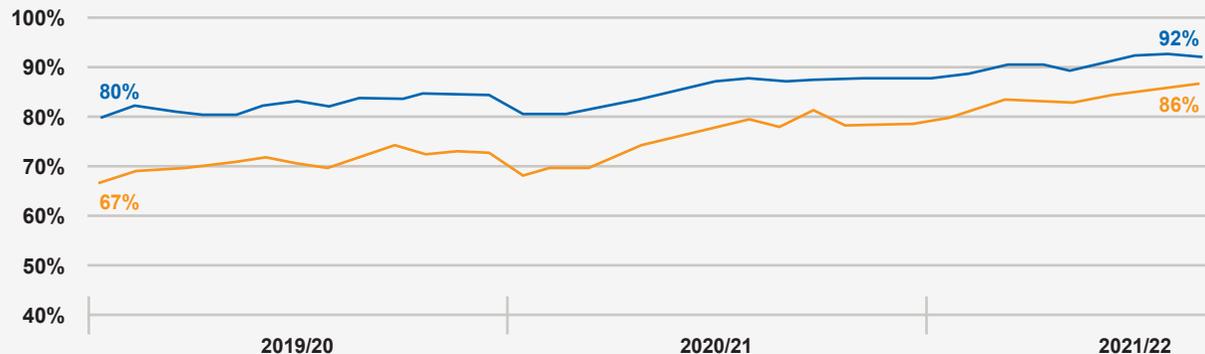
### TVM Debit/Credit Card Use

% of sales volume | % of revenue



### TVM Contactless Use

% of card sales volume | % of card revenue



## The recovery Plan

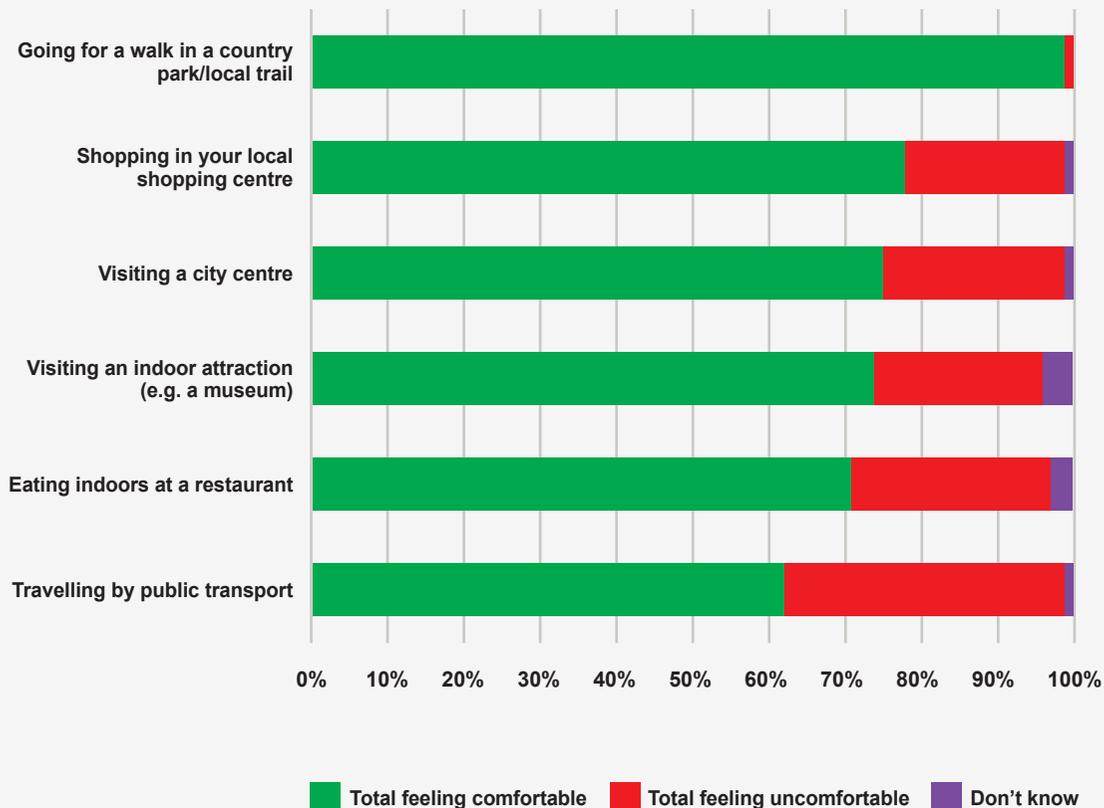
In response to the changes in travel patterns Nexus developed a Recovery Plan, setting out the short, medium and long term actions needed will to win customers back and attract new people to Metro.

But in the short to medium term, Metro faces a serious funding shortfall. Revenue has not grown equally with patronage levels, and the revenue model for leisure trips is less than that of commuter market. This is despite very good cost efficiency, delivered through unit costs for service operations and maintenance that are nearly the lowest globally, with administration costs that are below the global average, suggesting that any opportunities to reduce costs are likely to be extremely limited. In fact, as part of our recovery, it is necessary that Nexus incur some additional costs to provide our customers with the service and reassurance they deserve and implement interventions to attract new customers. To achieve this, Metro requires significant ongoing support to combat the severe and lasting financial impacts of the pandemic.

Nexus' research shows that previous customers are likely to make fewer journeys in future. Those previously commuting 5 days a week, may now only commute 2-3 days and more customers will be shopping online. Research also suggests that customer are combining journey purposes and thus making fewer trips.

The first step in the recovery plan has been to reassure customers that Metro and public transport is safe, overcoming negative messaging throughout the early stages of the pandemic. Research shows that customer still perceive travelling on public transport to be risky; in August 2021, the Insight panel showed that 37% of respondents still felt uncomfortable on public transport, compared to 26% eating in a restaurant and 24% visiting a city centre.

### Proportion of people comfortable doing activities, Nexus Insight Panel, July 2021



The recovery plan sets out the steps that need to be taken to:

- Identify and target new customers, predominately through modal shift from car.
- Encourage new journeys on Metro
- Exploit the potential growth in the leisure market driven by the pandemic
- Position Metro to capture all returning customer journey, avoiding a car led recovery

Position Metro to secure external funding to implement these plan.

### Recovery interventions

#### Theme 1 – Reassurance

The first step in Nexus' recovery plan was to reassure customers that Metro is a Covid-secure environment and a safe place to make their journey. This included deep cleans and sanitisation of the Metro fleet, increased cleaning around the system during operational hours, increased employee presence to support customers and challenge anti-social behaviour, and the launch of an app which shows customers how busy services are, supported by publicity, communications and signage.

There will need to be continued comprehensive, targeted publicity, highlighting steps that are being taken to maximise personal safety and minimise risk. Nexus will keep customers involved through online channels, and actively explore any new products and processes that come to market that will improve the safety of customers and staff. Nexus have worked with our stakeholders on Community Reassurance exercises which target anti-social behaviour and provide guidance on use of face coverings.

#### Theme 2 – Flexibility – planning to respond to changing markets

Nexus will investigate changes to timetables and staff rosters that will result in future schedules being attuned to changing customer requirements – this could mean an increased focus on catering for local and leisure trips instead of an intensive weekday peak service, for example. Nexus will accelerate the move to smart integrated products, reducing paper ticketing and cash on the network, driving efficiency along with meeting customer expectations. This will be supported by a marketing and communications plan.

#### Theme 3 – Attracting new customers and targeting new markets

Nexus needs to actively target new customers to grow patronage, this means developing plans and schemes to attract journeys from car and to improve walking and cycling to Metro stations to widen the catchment area of our stations. By attracting people who haven't used Metro before as well as winning back our former customers, Nexus will help to return to levels of pre-Covid journey volumes.

As fewer people travel for work, Nexus anticipate people will make more local journeys and more leisure journeys. Product ranges, services and information will support these journeys and make public transport an attractive choice.

#### Where do we want to be?

Nexus wants to continue to deliver a frequent, reliable, safe and secure Metro service for its customers. Investment in new technology, in Metro infrastructure (such as tracks, overhead line, stations and other assets) and in new rolling stock will secure Metro's future for the medium to longer term.

### Metro expansion

Over the coming years, as a region we want to expand the reach of local rail and Metro into more communities, benefiting more people's lives and unlocking access to opportunities.

Studies have been commissioned which are assessing the feasibility and demand of new corridors, as set out in the Overcoming Inequality and growing our economy.

### Metro Operations

The impact of the pandemic on Metro Operations has been significant and it is clear that Metro will need on-going revenue support until at least 2023-24 financial year to maintain operations. The priority will be both negotiating this support with Central Government to avoid devastating cuts to Metro services which will have significant wider economic implications and taking steps to both encourage customers back to the network and attract new customers to choose Metro.

These steps are set out in Nexus' recovery plan which will be reviewed at least annually to ensure the measures being put in place are effective and respond to the latest intelligence and travel patterns.

Many of the drivers for attracting more passengers are key to achieving the wider Transport Plan objectives. Thus, details of these can be found in the following chapters.

### Ticketing

For information on ticketing please see Integration chapter

Integration with walking and cycling – Please see Integration Chapter & Healthier North East Chapters for more information

### Better customer experience

Nexus has a responsibility to provide an excellent service and is committed to providing efficient public transport, which is pleasant, convenient, and accessible to all customers. The services Nexus provide are essential in getting people to place of work, retail, and leisure at an affordable price. In recent years, technology has granted consumers growing power over how and where they buy products and services, and industry leaders have steadily raised expectations and redefined industry standard processes for providing a superior customer experience.

Improving customer experience will contribute greatly to maintaining existing customer base and attracting new customers to the network. This is critical in the wake of the pandemic, as improving customer experience increases customer loyalty and retention. It is therefore imperative that the customer experience is prioritised to rebuild trust with our passengers. Nexus aims to grow patronage to exceed pre-pandemic levels, helping to place Metro on a secure financial footing.

For more information on customer service please see Appealing, Sustainable Transport Choice chapter.

### More environmentally friendly system

Public transport and Metro in particular should be seen as part of the solution to the climate emergencies and poor air quality. Despite the age of the existing train fleet, Metro delivers excellent environmental performance. Based on average (pre-pandemic) levels of occupancy, Metro produces the second lowest emissions of any non-active form of transport, with electric road vehicles coming first.

With a new fleet due to enter service in 2024, its performance will further improve making Metro the most environmentally form of travel in the region, excluding walking and cycling.

The North East Joint Transport Committee has an ambitious programme to complement the 'net zero' targets of the region's local authorities by improving public transport and active travel so that they become the modes of choice for an increasing proportion of society on an everyday basis.

Please see the Carbon Neutral Rail and Metro for the North East chapter for more information.

### Increased frequency, increase capacity

There are major plans in place to achieve this: a new Metro fleet will be running by 2024, extra network capacity will be available by 2023 through the Metro Flow track dualling project which will enable a 20% increase in train frequencies, and over £350m of assets have been renewed across the network over the past eleven years to ensure that Metro is fit for the future, with a further £200m of essential renewals to come. The benefits of this large-scale capital expenditure will be felt for decades to come in terms of better air quality, reduced congestion and improved sustainable access to jobs across the region.

The pandemic has fundamentally changed the way people travel, in particular working from home. Metro previously relied heavily on the commuter market for its revenue, 34% of journeys were travelling to/from a workplace and most of these customers purchased long terms season products. The pandemic has accelerated trends for working at home and a significant proportion of commuters now intend to only travel into the office 2-3 days per week.

In contrast however the leisure market has grown, making up 42% of journeys in the latest period compared to 32% in 2019/20 and this has resulted in patronage at weekend recovering far more quickly than the weekdays.

Nexus will review the business case to move to a seven-day timetable to better support the leisure market to coincide with the implementation of the new fleet of Metro and Metro Flow.

Please see the Metro Fleet and Depot case study in Overcoming inequality and growing our economy chapter for more information about the benefits of it.

### Renewals and maintenance

Nexus will continue to lobby government to secure a long-term funding package for ongoing maintenance and renewal of the Metro network to ensure that recent improvements in the reliability of the network are capitalised upon and improved. Nexus will develop a 10 year programme of work aimed at building on the benefits realised by the new fleet and Metro Flow, ensuring the network is reliable, well maintained, safe and secure. Reliability of the network is a crucial part of meeting customers' expectations and enabling Nexus to grow patronage and attract new customers.

Nexus will investigate opportunities to use new technologies to improve the efficiency and effectiveness of the renewals and maintenance of the network, through proactive and remote monitoring of assets and helping to ensure the safety of employees through reducing the need to carry out inspection work during hours of operation.

### New Signalling system

A new signalling system is required from 2030, it will be operational in 2030, meaning that design work would need to commence from 2025.

A main priority will be to develop the business case to replace the signalling system for the Metro network and secure funding to ensure work can commence on replacing this critical asset by 2025.

This will be based around replacing the existing outdated signalling system by a modern solid state modular system that will result in fewer, smaller relay rooms and new trackside location cases, all of which would be connected together by a fibre network from 2030. The trackside assets such as points, track circuits and signals would then be connected onto the new system. This would bring greater reliability, reduce the risk of obsolescence, entail less maintenance and improve the monitoring of the condition of the equipment with improved failure diagnostics.

### Battery Locomotives

The life of the battery locomotives is estimated to be 35 years. This is based more on parts obsolescence rather than wear and tear. The fragility of the battery locomotives has been highlighted during an occasion of power failure at the Depot when the battery locomotives did not have sufficient capacity to move the Metrocars to allow a service to operate.

### Wagons & Rail Engineering Vehicles

The bogie flat wagons are the oldest in the fleet and are becoming corroded. Some still serve a useful purpose but others could be scrapped, after 2025 hopper wagons, rail crane wagons and low height spoil wagons will still be needed.

### Passenger facilities

Many of the passenger facilities, such as lifts and escalators, which were replaced during ARP, have a 25 year design life. These assets will require a significant overhaul during the 2020's, and ultimately will need replacing beyond 2030. This will ensure that the Metro will remain accessible to all.

### Station upgrades

The comprehensive programme to upgrade and refurbish Metro stations was planned during ARP Phase 2 but has been substantially deferred following a reduction in funding. The programme for 2020 to 2030 includes the refurbishment of the remaining 13 stations. 11 of these stations will be brought up to a modern day quality standard and finish, with new and reconfigured vitreous enamelling panelling throughout, new floor and platform surfacing, signage and wayfinding in line with current Nexus branding, together with improved accessibility to bring the stations in line with the Equality Act.

The remaining stations are two heritage stations, Whitley Bay and Tynemouth. Improvements of a different nature are required, taking the form of re-branding in a manner sympathetic to the construction of these stations. It is anticipated that the works will comprise painting of ironwork in the current Nexus colours, renewal of signs and wayfinding panels, platform surfacing and improving accessibility where practicable.

The Essential Renewals work is essential for keeping Metro stations accessible for people with reduced mobility. The consequences of not investing in these assets will lead to a system which becomes less accessible for people with mobility issues.

### Key structures

Refurbishment of a number of the key structures on Metro will be necessary from 2022 and beyond. This includes strengthening work to bridges and the essential painting of both the QEII Bridge over the River Tyne and works to Howdon Viaduct. The Howdon Viaduct is a crucial part of the Metro infrastructure, speed restrictions imposed currently impact on journey times and any failure of the structure would leave a significant part of the network isolated or facing significantly longer journey times, via the coast into Newcastle City Centre impacting on access to employment, education and leisure connectivity.

Ensuring the integrity of the tunnelled sections of the network, constructed back in the 1970's, will be key to the safe operation of the Metro.

The most pressing issue between 2020 and 2030 in the central tunnels is the continued need to undertake detailed inspections on the tunnel structures and undertake any work arising from these inspections.

Some underbridges will require reconstruction within the next 20 years. In addition, a further cyclical round of strength assessments will begin to ensure that the underbridges can continue to carry the necessary loadings. For the bridges that require strengthening, without the necessary investment, speed restrictions will eventually be imposed as the structures will be unable to withstand the loads at current line speeds. This will result in limiting the service and increasing journey times and has the potential to prevent trains from running on certain parts of the network.

Major maintenance work is planned on some of the older footbridge structures on the system. Some of these older structures require urgent attention in the next phase of essential renewals, particularly those where a large amount of timber is present.

## Permanent Way

While much of the Metro permanent way has been replaced during ARP phase 2, there will be track assets that have been subject to refurbishment works only, which will eventually require renewal to sustain system performance beyond 2020. These include the following asset types:

Page 201  
Switch and Crossing (timber bearers) - The units on timber bearers have been refurbished and brought up to a good standard using new steelwork, stressing, tamping and ballast works. It is envisaged that these units will remain serviceable with normal maintenance activities for a further 10 years after refurbishment. This means that in some cases full renewal will be required from in the early and mid-2020's;

- Plain Line (Concrete Sleepers) - Rail renewal or ballast cleaning in some places is required beyond 2030. This equates to a future requirement for 8,000m of rail and an estimated 5,000m of ballast cleaning; and
- Plain Line Timber sleepers - Those with pressed baseplates have been refurbished and brought up to a good standard by stressing / tamping and ballast works. It is envisaged that this track system will remain serviceable with normal maintenance activities for a further 15 years after refurbishment. It is therefore likely that full renewal in some places is required from 2023.

### How we get there?

The first priority for Nexus is to secure long-term revenue and capital funding to ensure the future operation of the existing Metro network and create a solid and stable platform for improvements to grow patronage, improve satisfaction, create modal shift from car, whilst supporting the wider economic recovery and development of the North East.

### Extensions and Enhancements

The feasibility and demand studies that were mentioned in the overcoming inequality and growing our economy chapter are currently in progress or have been completed. Once all of the studies have been completed, and whose recommendations are considered by the Joint Transport Committee, then a decision will be taken which projects to take forward to develop outline business cases over the next two to three years. These studies will underpin the development of business cases.

### Metro Operations

Capitalising on the benefits afforded by Metro Flow and the introduction of the new fleet Nexus will work to develop the case for and secure funding for initiatives which support the wider improvement of the service Metro offers. Nexus will look at the possibility and feasibility of changes to timetable when the new fleet and Metro Flow are fully operational.

### Better Customer Experience

The customer experience strategy for Metro set out a range of measures, to be introduced in the run-up to the introduction of the new fleet, so Metro can offer a transformative change to the customer offer which matches that of the trains, as detailed below: -

Develop a methodology to identify lagging points and manage the customer experience.

This strategy recommends developing customer journey mapping (CJM) to better understand the passenger experience and identify problem areas in our service offerings.

### Make improvements to our digital presence and communications channels.

This includes all digital interfaces, such as the Nexus website, Metro app, and social media accounts. This also extends to various communication channels, whereby information provided can be personalised using data analytics, or displayed using real-time information (RTI) technology.

### Embed customer-centricity throughout Nexus and empower customer services.

This may be achieved through equipping customer-facing departments with digital solutions to empower staff, such as AI chatbots.

### Make improvements to physical presence.

Nexus will develop plans and seek funding to make the station environment a more pleasing place to wait, repurposing former Travelshops for community use where feasible, or strengthening our gate lines. This will align with the renewal of the Metro fleet, which will improve the reliability and comfort of trains to ensure customers have an uplifting experience.

## More Environmental System

Nexus will take forward the recommendation of it's Energy and Environment Strategy which include:

- Defining the baseline - Emissions, Waste Volumes, Electricity Intensity,

### Monitoring

- Commitment to a minimum annual reduction target GHG emissions.
- Creation of annual internal and public reports relating to environmental performance.

### Evaluation and Improvement

- Recruit talent with a passion for sustainability
- Creation of a centralised "Sustainability Fund" to provide investment for energy saving projects.
- Improving station architecture to better consider "green" features.
- Creation of a Biodiversity Action Plan to enhance habitats and a Climate Adaptation Report to tackle key infrastructure vulnerabilities associated with climate change.
- Aim for Biodiversity Net Gain on some major projects.

## New Stations

Throughout the history of Metro new stations have been opened across the network, most recently in Simonside and Nexus are currently working with North Tyneside Council and the housing developers on a potential new station at Murton to support a significant area of housing growth.

New stations however need to be considered strategically across the network to ensure the additional journey times they create don't detract from the attractiveness of Metro's quick and reliable journey times.

In response to the extension's studies, Nexus will undertake a study to assess the feasibility of new stations on the existing network to determine which ones would be viable investments. These will then be progressed subject to securing appropriate funding.

## Standards for stations

There is a growing body of academic research surrounding how the aesthetic quality of the built environment affects community satisfaction, and how people identify with their urban surroundings. This is important, as positive identification with communities increases social cohesion and increases social interaction. Improving the

rail station environment increases passenger satisfaction, increases pedestrian connectivity, and strengthens local economies. However, the viability of implementing placemaking principles within the design of stations is a contentious issue as stations can be viewed as being 'placeless' within the urban environment due to a lack of communal ownership. Despite this, stations can become assets to the community through a process of legitimisation, whereby communities can claim and re-appropriate the station environment to promote a sense of place which aligns with the local cultural identity.

Nexus will develop a standard for all stations which can be applied to renewals, maintenance or the construction of new stations on the network. This will be informed by best practice and market research with our customers, whilst ensuring stations are easy and cost effective to maintain. Our standards will be reviewed regularly to ensure they remain aligned to our customers' expectations.

### Integration with Walking and Cycling

Good cycling and walking routes to public transport hubs and interchanges can encourage more people to use public transport. For example, well-lit streets, wide pavements, appropriate parking restrictions, good signage, dedicated cycle lanes and secure cycle parking at public transport hubs can produce an environment where people feel safe and secure accessing public transport.

Nexus will seek funding to provide more smart cycle lockers at public transport interchanges, including Metro, bus and rail and undertake an audit of Park and Ride locations to identify best places to promote cycle parking

Please see Healthier North East Chapter for more information on Metro and active travel plans.



### Park and Ride

Improved park and ride helps to expand the reach of Metro and allow customers living in more rural locations the opportunity to use sustainable transport for at least part of their journey. Park and ride also helps reduce congestion and pollution in City Centres and supports the implementation of a Clean Air Zone in and around the centre of Newcastle.

Nexus will work to support the development of strategic park and ride sites and develop a programme to expand, develop and modernised Metro's Park and Ride offer at appropriate locations subject to funding.

For more information about Park and Ride please see Integration chapter.

### Safety and Security

#### Gate-lines and Remote monitoring

In order to help address ticketless travel and associated anti-social behaviour and vandalism Nexus will develop plans to install gate-lines at more stations across the network. This will not only help reduce actual incidences but also help to improve perception of safety and security across the network.

Nexus has developed a prioritised list for stations to be gated based on an assessment of the business case for each – cost of installation and operation against additional revenue generated. However few if any stations cover their own costs as currently gate-lines need to have staff in attendance during operational hours. Therefore, Nexus will conduct a study into alternative solutions including remote monitoring which needs less staff to manage customer flows through gate-lines, responding to queries and opening gates when required. It also allows gate-lines to be more quickly turned on/off to respond to operations issues. Installation of gate-lines at additional stations will be subject to the identification of an appropriate operating model as well as securing grant funding for installation. The studies will be concluded during 2022 to allow business cases to be developed for future funding opportunities.

## Maintenance and renewals

**New Signalling system** - It is accepted that a new signalling system would be required from 2030. Nexus will begin to develop an Outline Business Case in 2022 to set out in detail what the problems are, and what are the options to address the problem. Nexus needs to begin the work for this now, as experience has shown that the development of Business Cases for medium to large scale projects takes 2-3 years to develop. Design work and implementation will of the new system will take 2 years or more, so that it is assumed that a new signalling system becomes operational in 2030.

Nexus' proposals for a longer-term capital funding settlement for its Essential Renewals Programme will allow for the following to be achieved:

- Battery Locomotives – Nexus' current fleet of battery locomotives will require replacing in the early 2020s as they are approaching 40 years old.
- Wagons & Rail Engineering Vehicles – After 2025, there will be a need for hopper wagons, rail crane wagons and low height spoil wagons.

- Passenger facilities, such as lifts and escalators, which were replaced during ARP, have a 25-year design life. These assets will require a significant overhaul during the 2020's, and ultimately will need replacing beyond 2030.
- Station refurbishment – The programme for 2020 to 2030 includes the refurbishment of the 13 stations. 11 of these stations will be brought up to a modern-day quality standard and finish.
- The remaining stations are two heritage stations, Whitley Bay and Tynemouth. Improvements of a different nature are required here, taking the form of re-branding in a manner sympathetic to the construction of these stations.
- Key Structures – Refurbishment of a number of the key structures on Metro will be necessary from the early 2020s and beyond. This includes strengthening work to bridges and the essential painting of both the QEII Bridge over the River Tyne and works to Howdon Viaduct.
- Tunnels – Ensuring the integrity of the tunnelled sections of the network, constructed back in the 1970's, will be key to the safe operation of the Metro. The most pressing issue between 2020 and 2030 in the central tunnels is the continued need to undertake detailed inspections on

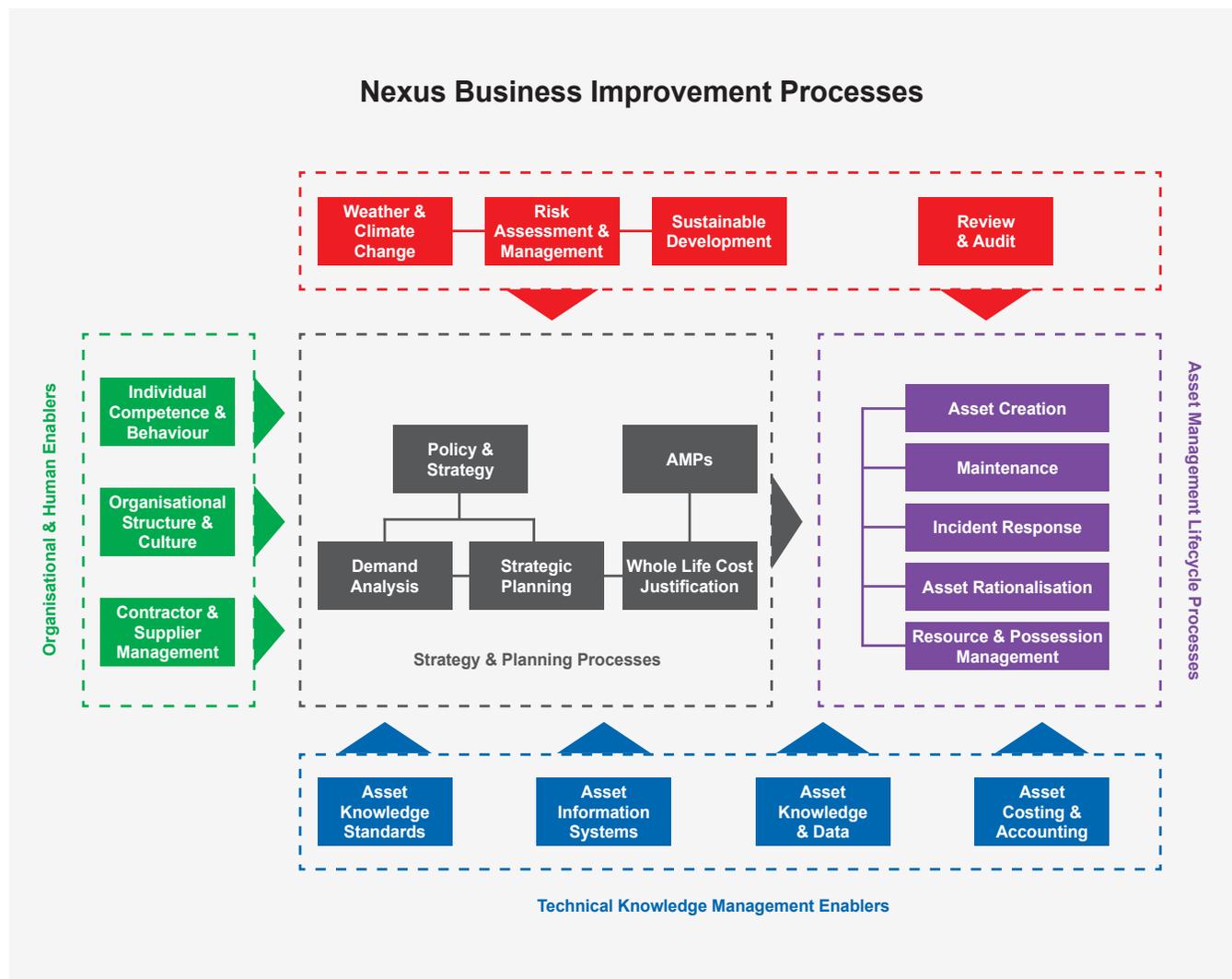
the tunnel structures and undertake any work arising from these inspections.

- Some underbridges will require reconstruction within the next 20 years. In addition, a further cyclical round of strength assessments will begin to ensure that the underbridges can continue to carry the necessary loadings.
- Permanent Way – While much of the Metro permanent way has been replaced during ARP phase 2 (2010/11 - 2020/21), there will be track assets that have been subject to refurbishment works only, which will eventually require renewal to sustain system performance into the 2020's. These include the following asset types:
  - Switch and Crossing (timber bearers) – Requiring full renewal will be required from early 2020's;
  - Plain Line (Concrete Sleepers) – Rail renewal or ballast cleaning in some places is required beyond 2030; and
  - Plain Line Timber sleepers - It is envisaged that this track system will remain serviceable with normal maintenance activities for a further 15 years after refurbishment. It is therefore likely that full renewal in some places is required from 2023.

## Evidence based Asset Management Plans

Nexus has developed a corporate Asset Management Manual which seeks to make best use of its assets whilst identifying those that require renewing or replacing. Within the Asset Management Manual, strategies and Asset Management Plans have been developed for the Metro system, via asset category and have been recorded onto the asset management system, Maximo. The Asset Management Plans clearly identify, for each asset category, the lifecycle of the asset including maintenance regimes and replacement timescales.

Using these plans Nexus' Engineering department has undertaken assessments in each of the asset categories and has identified those areas that require renewing or replacing. These have been amalgamated, costed, and presented in a programme up to 2030 via asset category. Nexus' approach to Asset Management is set out below.



Asset condition deteriorates with time and use; Nexus' ARP has enabled some life expired assets to be replaced and renewed and ensures the maintenance of all network assets to a required standard that will allow the continued operation of the railway. However, assets that have not been renewed in this period have further aged and deteriorated and will need renewing in the coming years. Additionally, some assets replaced through ARP will require mid-life overhauls between 2020 and 2030 and in some instances again become life-expired and require replacing in this period.

This approach will address the problems identified by investing in those assets that are in poor condition or are approaching the end of their operational life, to allow Metro to operate for the next generation. The successful delivery of the ARP phase 2 is evidence that Nexus possesses both

the capacity and capability to deliver this ambitious programme. Having a long term, costed programme of renewals will help underpin and sustain Metro operations.

By attracting further long-term investment for essential renewals and maintenance of the Metro infrastructure, the network will maintain its resilience, help ensure future reliability, and support the Transport Plan's aspirations for reducing congestion and encouraging more sustainable forms of transport.

### Funding

Security of both capital grant and revenue grant funding streams, either devolved or direct from central government, is crucial if Metro is to continue to deliver the benefits to our region set out in this document and if the unpalatable consequences we describe of a less effective Metro system are to be avoided.

Building on these funding sources, Nexus will continue to bid to relevant national and local funding sources and work in partnership with both public and private stakeholders, including Great British Railways to progress the projects set out in our implementation plan.

## Description of project

The Tyne and Wear Metro Signalling system was installed between 1979 and 1984. Although still functioning, the current system is obsolete and not compatible with the needs and requirements of a modern railway. Maintaining and renewing this system is difficult sourcing spare parts becomes more challenging. Any failure of any part of the signalling system will either temporarily or permanently stop the service on that particular section of track. As other parts of the rail network are moving towards a more digital and high-tech system, there is a need to replace our current system with a new one.



## Innovative solutions implemented

- In 2018, consultants advised Nexus that the existing outdated signalling system is replaced by a modern system that will result in fewer, smaller relay rooms and new trackside location cases, all of which would be connected together by a fibre network.
- The trackside assets such as points, track circuits and signals would then be connected onto the new system.
- This would bring greater reliability, reduce the risk of obsolescence, entail less maintenance and improve the condition monitoring of the equipment
- A new signalling system could cater for a future increase in capacity and more efficient operation
- Supports expansion of system and integration with Local Heavy Rail
- Could facilitate new stations across the network
- More reliable and resilient network.

## How does the project help meet our objectives?



- Supporting network expansion and enhancement
- Providing a more resilient and reliable network
- Less intrusive maintenance
- Potential to deliver further integrated Metro and local rail network.



## 7. Overcoming inequality and growing our economy

### **As a result of the Covid-19 pandemic, many of our region's longstanding economic challenges and inequalities have now re-emerged.**

It took until 2016 for North East employment to return to 2008 levels following the last recession – the speed of this recovery must be faster, and rail and Metro will need to play a significant role. This chapter sets out how.

We believe that there is a clear opportunity to transition the number of journeys people make from other transport modes and on to rail and Metro.

By improving existing local rail services through integration with the Metro, and expanding the network further. Our first priority is to get rail and Metro on a more stable financial footing and then grow from there. This will enable rail and Metro to play a central role in alleviating inequality and growing the region's economy further.

### **Background**

The short-term impact of COVID-19 on the North East was highly disruptive and challenging. Despite this, the region has continued to sustain increased levels of employment compared with our 2014 baseline, with continued growth of the proportion of 'better jobs' as outlined in the region's Strategic Economic Plan (SEP) – the roadmap for increasing economic growth in the North East, which this strategy is aligned to.

However, inequalities within the region have been exacerbated by the pandemic. For example, there is significant mismatches of labour supply and demand holding us back. Employers in many industries are struggling with skills shortages and younger and older people need support such as improved access to jobs and training opportunities.

It is important to understand the various inequalities and economic imbalances within our region. The delivery of an improved rail and Metro network, better connecting the region's residents, businesses and visitors can significantly help address our challenges. This following section outlines our key challenges and sets out how rail and Metro could enable us to achieve our objective of overcoming inequality and growing our economy.

### **North East regional challenges**

#### **GDP per head**

GDP of North East LEP area in 2019 was £48.2 billion, just 3.4% of the England (excluding London) total.

In 2019 GDP per head in the North East was only about 82% of the equivalent for England (excluding London).

#### **Productivity**

Average productivity in our region is well below the output for England. North East GVA per hour in 2019 was £30.81, 85% of England's rate and 93% of that for England (excluding London).

#### **Economic inactivity**

In Apr 2020-Mar 2021, 23.5% of the working age population was economically inactive, a higher (20.9%) percentage than in England (excluding London).

#### **Unemployment related benefit claimant count**

In June 2021, just over 76,000 people were claiming unemployment related benefit. Between March 2020 and July 2021, the number of claimants in the North East LEP area increased by almost 23,000 (38%).

### Low-income households

In 2019/20 over 90,000 children in the North East LEP area were living in relative low-income families. This was over a quarter (26%) of all children, a higher proportion than nationally (19%).

### Jobs paid below the National Minimum Wage (NMW)

In 2020, around 36,000 jobs in the North East region (including Tees Valley) were paid below the NMW. This was 3.7% of employee jobs, the highest in any English region. Greater local control and accountability of local services could allow fares to be set at a level relevant to the local economy.

### Skills gap

In 2020, over 38% of working age people in the North East LEP area had no or low (NVQ1 / NVQ2) qualifications, compared to less than 34% in England (excluding London). The North East also had a lower percentage qualified to degree level and above (NVQ4+).

### North East sectoral strengths

The North East has key economic assets, including:

- Offshore energy and subsea technologies;
- World leading clinical research that supports a growing health and life sciences sector;
- A vibrant digital community with a combination of start-up, high growth and established businesses across a wide range of specialisms;
- Capabilities across a range of enabling services including education, financial, professional, and business services, transport and logistics, and construction.
- Significant employment in the public sector across both local services and central government back office and shared services;
- A strong cultural, heritage and sports sector that supports our growing visitor economy.

### North East Economic geography

The North East is a place like no other. Its geography is highly complex and polycentric. This polycentricity is both in terms of the economy and in patterns of settlement and development, which provides challenges and opportunities around sustainable and public transport options. We have a population of just under 2 million people.

This mix of urban, suburban, and rural landscapes results in complex demands for travel and is reflected in our varied transport challenges, from rural isolation in our remoter areas to poor air quality and congestion in parts of our cities.

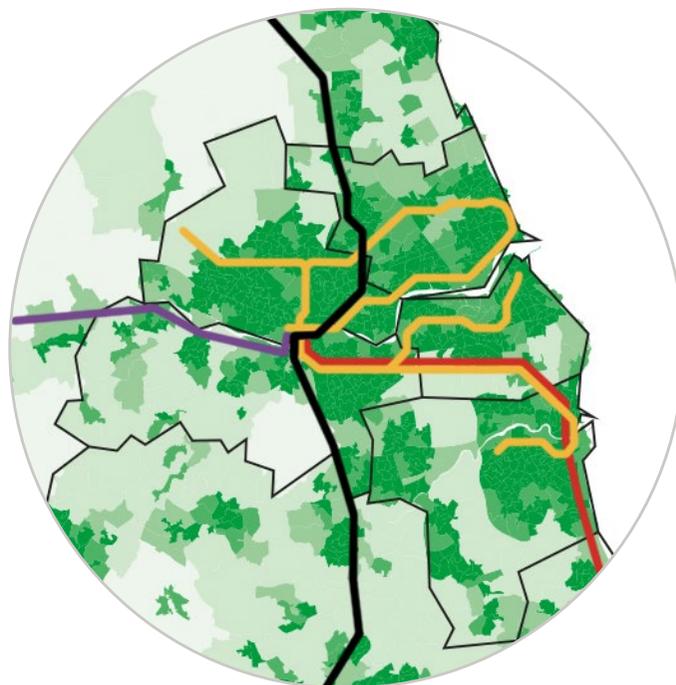
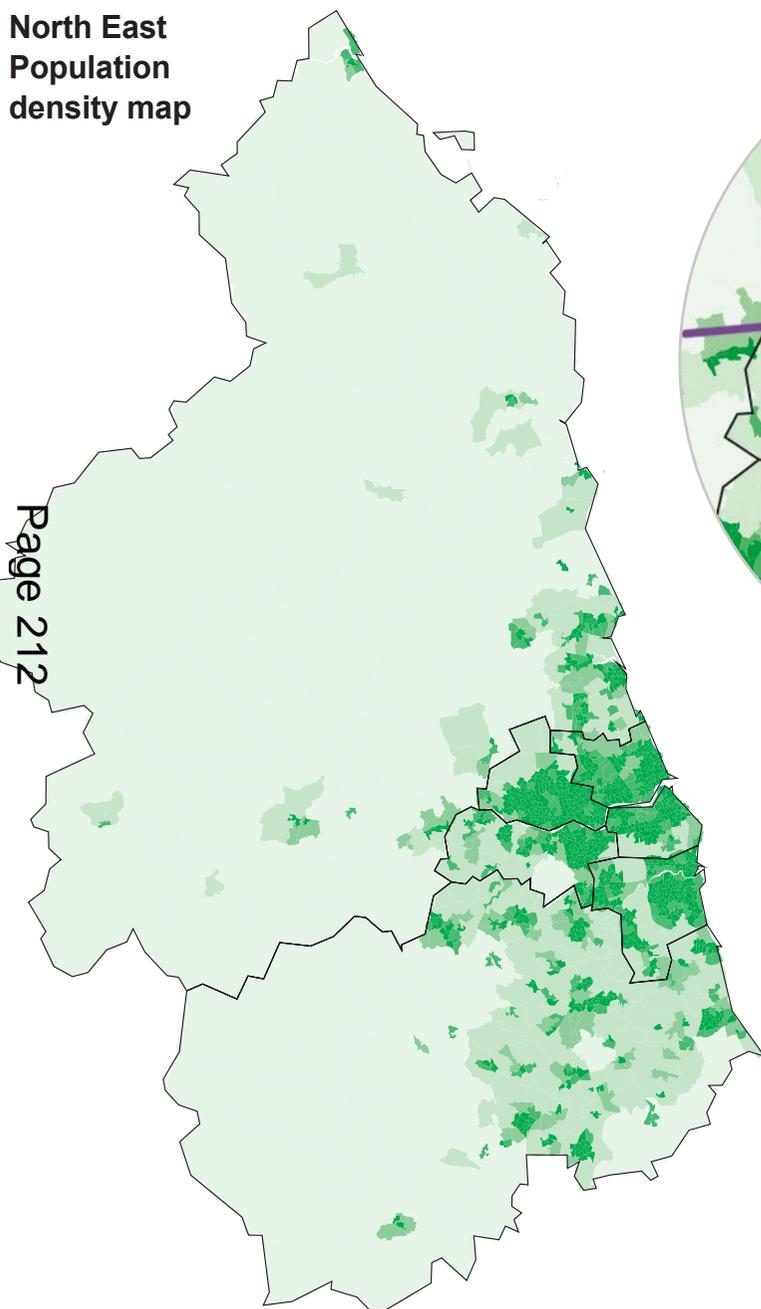
Professional services are focused on the main urban centres and at out-of-town commercial developments, with advanced manufacturing located at business parks around the region.

Typically, higher volumes of Metro and Local rail usage are closely correlated with areas of high employment density.

For example, in Tyne and Wear, most of the highest density areas for workers are closely connected with Metro and Local rail services.

However, there are some key exceptions with some major employment sites such as Cobalt Business Park in North Tyneside not having rail access.

North East  
Population  
density map



**Map key:**

- 0.0 to 0.9 people per hectare
- 1.0 to 4.9 people per hectare
- 5.0 to 9.9 people per hectare
- 10.0 to 19.9 people per hectare
- 20.0 or more
- Tyne and Wear Metro
- East Coast Main Line
- Durham Coast Line
- Tyne Valley Line

Several of our key employment and retail sites sit in isolation of our local rail and Metro networks such as Cobalt, Silverlink, Team Valley and the International Advanced Manufacturing Park (IAMP).

The expansion of Metro and Local Rail across the North East, will offer connections to a wide range of destinations, unlocking new employment and social opportunities, and assisting in reducing congestion by attracting more people to rail from road.

**Deprivation in the region**

Inequalities in the provision of transport services are strongly linked with where people live, and the associated differences in access to employment, healthcare, education, and local shops. Deprivation is concentrated in the urban centres of Newcastle and Gateshead (and along the banks of the River Tyne and River Wear), Sunderland and concentrations in larger towns.

Rail connectivity is of a high quality within the urban Tyne and Wear core, mainly thanks to the well-developed Metro system. However, connectivity remains a challenge to more remote rural areas and deprived areas in the urban periphery.

It is clear that there are large areas of the region that do not benefit from train services at all because there are no local routes or stations, or which are hampered by the limitations of existing services. This hinders wider opportunities for businesses and residents alike.

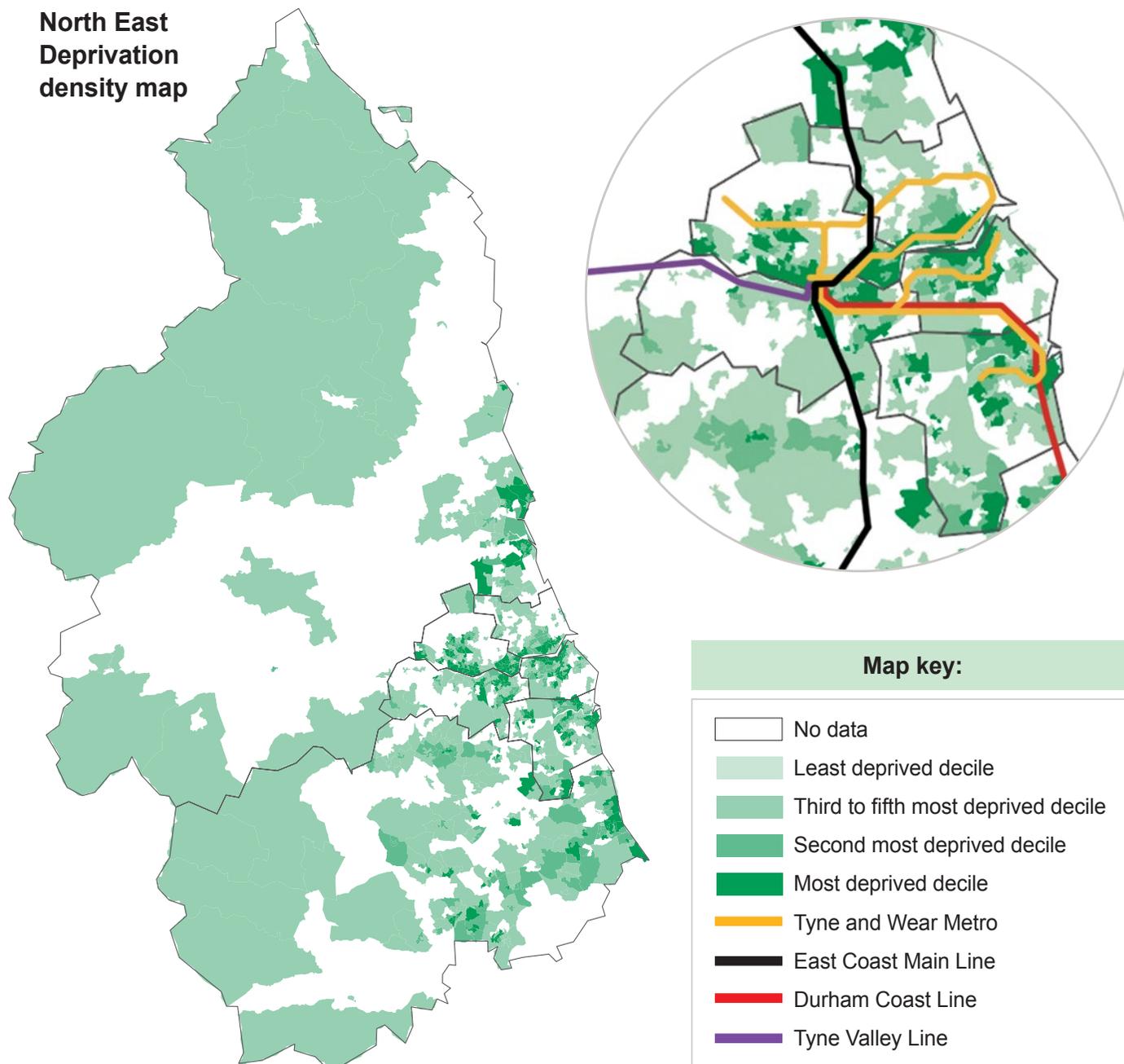
This does not just occur in rural areas of the region. For example in Tyne and Wear there are significant communities that are unserved by rail. For example, both Washington and West Newcastle. This leads to over-reliance on the congested road network and economic isolation for people without a car.

Despite the North East having some of the most isolated rural communities in the country, some rural areas in west and north Northumberland such as Haltwhistle and Alnmouth are better served by rail than other public transport modes such as buses due to being served by the Tyne Valley and East Coast Main Line.

However, we acknowledge that for many people living in our rural communities, using a private car for travel is the only viable option.

Pockets of health and income inequalities are seen across the North East and as the map shows, there are areas of deprivation across both our urban and rural areas. Improving rail connectivity can help alleviate deprivation.

**North East Deprivation density map**



## Where are we now (2022)?

### Rail as an economic enabler and inequality reducer

Connectivity between people and jobs, businesses and workers, and businesses to suppliers and customers is at the heart of economic performance. Transport enables people to be in employment who would not otherwise be.

It also enables trade between companies and between companies and consumers where there would otherwise not occur if there was no Rail or Metro connection.

There is a proven evidence base of how improvements in connectivity contribute to increased economic performance.

Rail enables people to access a wider range of more productive, higher value, jobs (and training opportunities), bringing businesses closer together, and addressing structural employment and deprivation issues in specific areas, Rail and Metro is crucial in growing the region's economy and connecting people to opportunities.

There is also a relationship between transport and land use as together this can lead to the densification of economic activity and growth.

### How does Rail and Metro support the North East economy?

Metro and Rail impacts on the economy in many and inter-related ways. Firstly, it ensures excellent access to jobs, but they also ensure a better-functioning economy enhancing our region's inward investment appeal and leading to further growth.

Every journey on our Metro and Local Rail network brings an £8.50 direct benefit to our economy.

Over the past 40 years, the rail network in the North East has developed in two very different ways.

Much of the local rail network in Tyne and Wear was converted into the Metro system. It has continued its role at the heart of the local economy by transporting tens of thousands of people by rail to work, education and other activities each day.

The remainder of the local rail network has continued through decades of closures and cutbacks, maintaining some connectivity but characterised by poor-quality trains and low service frequencies.



#### Tyne and Wear Metro

36 million passenger trips per year

60 stations

77.5km of electrified track

New trains arriving from 2023



#### Local Rail

5 million passenger trips per year

31 stations

1980s diesel powered trains

Collectively, Metro and Local Rail supported

**34,800 daily commuting trips**

within the North East in 2018

## Where are we now – Tyne and Wear Metro

Metro plays a principal part in enabling the economy of Tyne and Wear to function and grow.

For example, Metro plays a strong role in supporting access to city centre jobs in particularly in Newcastle and Sunderland, particularly from Jesmond and Gosforth, North Tyneside and south of the river from Gateshead, Pelaw, Heworth, Hebburn, Jarrow and South Shields.

As well as connecting key employment centres, Metro provides access to higher education sites and key leisure facilities and tourism assets across Tyne and Wear.

Metro also plays a key role in supporting the region's economy through enabling multi modal journeys. The system was specifically designed and built to complement and enhance the region's bus network, with five seamless interchanges sited on key transport corridors to connect local bus service to fast train routes into the urban core. Other stations are deliberately sited on bus corridors.

The North East has over 4,300 park and ride spaces made available across 30 Metro stations. These sites play an important role in enhancing our economy by improving the efficiency of our transport network, helping to relieve congestion, and improving air quality.

In late 2021, Nexus introduced free parking at four park and ride sites on the network until the end of January 2022 which is aimed at stimulating further demand post lockdown.

25% of homes in Tyne and Wear are within walking distance of a Metro station.

23 of the 60 Metro stations on the network are located in the bottom 20% of nationally defined areas of deprivation.

Since 2010, the entire Metro system has been undergoing a significant upgrade through the £350M 'Metro: All Change' modernisation programme. Over an 11-year timeframe, stations have been modernised, the existing Metrocars refurbished, and miles of new tracks and cables installed. This major scheme of investment has ensured our region has a reliable Metro system for many decades to come. However, there is more investment needed on a sustained basis to ensure the system is the best it can be for our residents, businesses and visitors.

However, prior to the pandemic, patronage was starting to decline from around 40 million passengers in 2015/16 to 34 million in 2019/20. This can partly be attributed to the aging fleet.

As of November 2021, Metro has recovered to around 80% of pre-Covid patronage levels.

The new Metro fleet arriving in 2023 will help address the issues of reliability and availability, providing a more appealing service through increased frequencies and a better on-board travelling experience. The new fleet will also improve environmental performance on the network.

From 2023 – The new Metro trains being rolled out will be 15 times more reliable than the current fleet.

### Where are we now – Local Rail

In contrast to the Metro, the region's local rail network has not had the same focused investment, is not as well aligned to the local economy and previously has lacked a clear plan for its long-term future. Despite these drawbacks, the region's local rail network has strong foundations on which to build on.

An example on none alignment with local priorities is that the earliest and latest arrivals and departures of local rail services are not conducive with modern-day life both for early morning work requirements and late-evening social requirements. The night economy is a key part of the North East economic make-up.

The Durham Coast line is another vital part of the North East's rail network. It runs between Newcastle in the north and Middlesbrough in the south via Sunderland and Hartlepool. It forms a second north-south rail link running parallel to the ECML.

Despite serving some of the largest centres of population in the North East, parts of the route have suffered from under-investment over the years. It is also at capacity, holding back the future growth of services. This combined with low line speeds, a circuitous route in places and tight curvature mean that the end-to-end journey time from Newcastle to Middlesbrough is around 76 minutes. This is considerably slower than travelling by car which takes 50 around minutes.

Another central element of the region's national rail network is the Tyne Valley line which runs across the north of England between Newcastle and Carlisle. The line forms a major rail link to the North Pennines Area of Natural Beauty, Northumberland National Park and Hadrian's Wall World Heritage Site.

It serves a diverse variety of markets and communities as it passes through inner city areas, a major out-of-town shopping centre, suburbia, semi-rural commuter belt, market towns and highly rural villages. It is estimated that the population within a 30-minute travelling time of a station on the line is in excess of 1.5 million.

The route also forms an important diversionary facility for Anglo-Scottish long distance high speed and freight trains when either the ECML or the WCML is unavailable north of Newcastle or Carlisle due to incident or planned engineering work.

On the East Coast Main Line north of Newcastle, Northern runs an hourly Newcastle-Morpeth local rail service, which is extended to Chathill during the peak periods. There are stations at Manors, Cramlington, Morpeth, Pegswood, Widdrington, Acklington, Alnmouth, Chathill and Berwick-upon-Tweed. Due to the lack of capacity on the line, there is conflict between desire for more frequent station stops and line capacity for long-distance high-speed (LDHS) services. A further example of this would be on the ECML south of Newcastle at Chester-Le-Street station. This is why we must ensure there is sufficient capacity for local, regional, national rail, as well as freight.

### Where are we now – National Rail

Rail underperforms in our area, whereas it could be a greater driver of economic growth. This is because North East rail infrastructure does not have enough capacity for today's growth in traffic, let alone for the future.

For example, on the East Coast Main Line, we rely on just two tracks, one in each direction for all of our rail services to London, Scotland and the Midlands, as well as to Leeds and Manchester.

Creating additional capacity will enable our economy to grow further, helping to create and sustain more high-quality jobs and closing a long-standing economic gap with other regions.

The ECML is vital to our economy. The line currently combines long-distance, regional, local and freight traffic on the same two tracks.

As of October 2021, there are 6 passenger and 2 freight train paths per hour. Based on Network Rail's analysis this is at the limits of its capacity. In the coming years there are too many train paths committed and unpalatable trade-offs may be necessary until the infrastructure is upgraded.

Slow-moving freight trains being used on the line, whilst vital to our economy, they prevent high-speed passenger trains from reaching maximum speeds of 125mph.

As well as capacity constraints, the line also suffers from reliability and resilience issues. The section of the ECML between Northallerton and Newcastle is particularly prone to suffering major incidents that cause the service to stop for long periods of time often associated with the relative under-investment in the route. There is also no feasible diversionary route with sufficient capacity. (A lengthy routing exists between Newcastle and Northallerton via the Durham Coast and Northallerton–Eaglescliffe line, however there is insufficient capacity, particularly on the Durham Coast and they are not fully electrified.

Frequent issues on the ECML most-often seen in major overhead line dewirement events but can also be associated with other issues such as signal and points failures.

North of Newcastle the ECML in our region extends for just under 70 miles to the Scottish Border, three miles north of Berwick-upon-Tweed station.

The ECML is the busiest cross-border route between England and Scotland by rail and has seen passenger growth of 40% since 2008/09.

There are stations at Manors, Cramlington, Morpeth, Pegswood, Widdrington, Acklington, Alnmouth, Chathill and Berwick-upon-Tweed. However, only Morpeth, Alnmouth and Berwick are of sufficient length to accommodate long-distance high-speed trains, and these stations are served by infrequent calls. The remainder are served only by infrequent local stopping services.

Journey times between Newcastle and Edinburgh are currently constrained by the formation of the network on this section of the route. The section has a large number of tight curves which restricts the maximum speed of the line and causes services to have a lower average speed than the rest of the ECML. At locations such as Morpeth the speed restrictions due to curves are as low as 50mph.

In November 2021, the Union connectivity Review (UCR) final report highlighted that there is a need for more capacity and faster journey times between England and Scotland by rail on the East Coast Main Line north of Newcastle.

However, it did not recommend any new investment, rather an assessment is undertaken.

North East political and business leaders have made it clear that the ECML needs urgent investment, not more assessments.

As well as the constraints highlighted above the capacity at both Sunderland and Newcastle stations are holding back future expansion of services. Neither station can accommodate any additional services without significant works to improve their platform capacity and in Sunderland's case the line capacity on the approaches also.

### Where are we now – Rail Freight

Freight services are less regular and visible than passenger services but are equally important in contributing towards a strong economy and a sustainable environment.

The region's current rail freight market is subdued having undergone structural change due to changes in heavy industry and the decline of coal.

Although coal traffic in the North East has reduced in recent years, there are still residual operations that impact on the constrained East Coast Main Line (ECML) route between Northallerton and Newcastle.

Currently there is a rapidly changing situation with rail freight. HGV driver shortages which forced Government in 2021 to reconsider training to tackle the shortfall furthermore, fuel price increases and other factors such as climate targets are changing the outlook for intermodal railfreight. As part of the future planning of rail there needs to be consideration of rail freight growth when deciding on train paths.

The ECML through the region is also used by 12 freight trains in each day. However, the potential for new and existing freight paths on the ECML is increasingly constrained without extra capacity and investment.

Strong growth is forecast in the intermodal market via domestic and international container services. Biomass has in part replaced imported coal flows in the North East. These services occupy capacity on the Durham Coast Line and also create timetabling issues around Newcastle Central station either with services that have originated at the Port of Blyth and are heading south or trains from the Port of Tyne heading to Lynemouth Power Station.

There is also regular freight operation on the Tyne Valley line, typically linking the west of Scotland with east and north east England.

North of Newcastle on the ECML and into Scotland, freight flows mostly comprise a mix of container traffic, cement and nuclear cargos. In a typical weekday there are 25 freight train paths per day in each direction on the ECML at Alnmouth in Northumberland. It should be noted that the number of services operating can fluctuate at short notice subject to the demands of customers.

In 2015, the Port of Sunderland reinstated its rail connection to the Durham Coast line, meaning that other than Berwick, all ports in the region are rail connected (Blyth, Seaham, Sunderland, and the Port of Tyne.)

Unlike other parts of the United Kingdom, the north-east lacks a Strategic Rail Freight Interchange (SRFI) where goods can easily be transferred between road and rail.

In 2019, the North East Chamber of Commerce undertook a series of interviews and roundtable events with professionals involved in the region's transport sector and local business who trade internationally.

These interviews and events have informed the findings and recommendations set out in this report, in particular identifying the key transport interventions required and how those interventions will help to encourage international trade and grow the North East's economy.

The UK government's Union connectivity Review (UCR) final report recommended in late 2021 that

UK-wide a strategic transport networks should be created known as UKNET. This could guide future investment and policy decisions. The North East is included in UKNET via the multimodal East Coast and North Channel corridors. These corridors include Newcastle International Airport but exclude some of our major sea ports. It is our view that UKNET should be extended to include rail access to North East Ports to enable them to grow and develop supporting the wider UK economy.

The key issues identified in our interviews with businesses and port operators centred around the need for more reliable rail freight access and the need to make the North East a more attractive place to ship goods to/from.

As well as this, more capacity for freight on the East Coast Main Line was identified as a way of helping to encourage international trade and grow the North East's economy.

### Where do we want to be?

#### **Metro and Local Rail Improvement, Integration and expansion**

There is a need to improve and expand our existing Metro and local rail services to both encourage further use and improve customer experience.

We need to consider the impacts of changing travel patterns following the Covid 19 pandemic and work towards a greater integration of public transport for the benefit of our communities.

We want to introduce additional services and expanding the networks to enable more people access to Metro and local rail services which will enable us to overcome inequality and grow our economy.

These aspects are dealt in more detail within chapters 11 'Appealing Sustainable Choices' and Chapter 12 'Integration'.

Transport North East and Nexus are already working with partners to progress a variety of schemes such as restoring passenger services on the Northumberland Line (being led by Northumberland County council) and removing constraints on the Metro network through the Metro Flow project.

Looking to the future, this strategy has utilised the North East Transport Plan pipeline and Nexus' capital pipeline to identify schemes that will help us to achieve our shared objectives.

We want to create a one, integrated public transport network where there is seamless travel between different modes of transport including active travel.

The first steps towards this for Rail and Metro is to integrate and expand their reach into more communities.

We want to integrate and expand the reach of Metro and local rail into more communities, benefiting more people's lives across the region.

Integration of the Rail and Metro networks and improving their connections with the wider public transport network and active travel modes will provide greater access to opportunities for people, communities and businesses, alleviating inequality and grow the region's economy.

With geographic expansion of the network, the benefits will be distributed across a wider cross-section of the North East's residential and business populations. The case for improvement and expansion is simple: the more people who travel, the greater the benefits to the North East.

Section 11 'Appealing Sustainable Choices' outlines how we will consider 'fares and ticketing' policies to consider whether they could provide better value for money and be easier to use.

The tickets options need to be made easier for passengers with simpler fare structures. Tickets should be provided and purchased in 'smarter' ways across the whole public transport network. This could help to increase use of our rail networks by making best use of new technological platforms.

Accessibility to the network is a key issue. Expanding Metro and Local Rail to more communities will enable the region's economy to grow further and reduce inequality by providing high-quality public transport links.

We have an enormous potential to connect more residents to opportunities across the region through the development of many of our under-used or disused railway assets and alignments.

Network extensions and service improvements could alleviate road congestion, create new economic opportunities and provide sustainable access for many more communities.

The Leamside Line is one example of where we want to restore Metro and rail services to communities, many of which are in areas of high deprivation, providing new and more reliable connections. There is potential to include a number of new / reinstated stations along the route including a new East Gateshead Station to serve the future Gateshead Quays development, which also links to our longer-term Leamside Line aspirations.

The expansion of Metro and Local Rail across the North East, integrated within the conurbation's spatial strategy and future land-use planning, could:

- Increase inward investment by improving access to labour, suppliers, and consumers
- Help more people get to work and access services each day
- Make the key economic centres easier to reach and reduce congestion
- Bring existing businesses closer together, boosting productivity, support regeneration and redevelopment around stations and in the city centre
- Encourage more people to live and work in the North East, improving quality of life.

**The following pages contain information on potential network extensions.**

### South of Tyne & Wearside Loop

Washington's population (67,000) and central position on both the Newcastle-Durham and Newcastle-Sunderland corridors have meant local aspirations to bring the town back onto the local rail and Metro networks have been evident since the early days of Metro operation.

There is potential to deliver a circular Metro service covering South Tyneside, Washington and Sunderland, by piecing together several separate disused corridors. At the northern end, the Leamside Line alignment could link with the South Shields route, and/or a new spur with the existing Durham Coast Line. To the south, the existing Metro alignment from South Hylton could extend westwards along the disused route towards Penshaw, before also connecting with the Leamside Line via the Victoria Viaduct.

In combination, these schemes would enable a significant number of new journey opportunities across the Sunderland and South Tyneside areas, creating a second Metro corridor connecting Wearside with Tyneside which would deliver additional network capacity and operational flexibilities.

### The Leamside Line

Restoring the Leamside Line in full is one of our region's key priorities. In doing so, this alignment could provide several benefits to our communities at various scales. In 2017, Network Rail identified reinstatement of the Leamside Line has "potential to open up access to suburban rail services for up to 1 million residents in County Durham and Tyne and Wear, connecting them to jobs, commerce and the wider transport network".

Reinstating these local services would help deliver the North East's climate emergency action plans by providing attractive alternatives to car use.

The alignment runs close to several North East existing and planned employment centres which provide upwards of 25,000 direct jobs plus thousands more indirectly through supply chains. When developing these locations, accessibility to the local highway network was considered an asset but as they've become more established and employment levels grew, local roads have suffered from increasing congestion.

A study is currently underway to produce an 'Umbrella Strategic Outline Business Case' bringing together these various local, regional and national rail schemes which have an interest in operating services along a reopened Leamside Line corridor.

### Ferryhill and Stillington

Following a successful Restoring your Railways bid, a Strategic Outline Business case has been produced, setting out the case to reintroduce passenger services along the Stillington Line (currently freight only) to a new station at Ferryhill. This will provide improved connectivity between south Durham and Teesside.

The re-opening of the Stillington Line to passenger services and a new station at Ferryhill, and potentially Sedgefield, offers the opportunity to begin the transformation of the area. It currently suffers from multiple adverse social and economic outcomes with a growing culture of car dependency (for those who can afford one) leading to adverse environmental impacts. This project seeks to enhance connectivity to/from the area to begin the process of driving change alongside complementary investment.

### **Cobalt-Silverlink**

Cobalt, Silverlink and the Tyne Tunnel Trading Estate are major growth engines of the local economy, hosting around 20,000 jobs and extensive retail facilities, but they are poorly located in relation to existing rail-based links.

Despite being neatly positioned between the northern and southern sections of the Metro loop in North Tyneside they are not close to any existing stations.

We are exploring an opportunity to deliver Metro services directly to these key employment areas by re-use of an old alignment previously used to transport coal to the River Tyne. By linking into the existing Metro network, direct services could be introduced as part of an 'Inner Loop' service between Cobalt-Silverlink and Newcastle upon Tyne, North Tyneside and Gateshead.

### **Consett Connectivity**

A further successful restoring your railways bid had led to a study on how to improve rail connectivity of Consett to the Tyne and Wear metropolitan area.

### **West Newcastle & West Gateshead**

The A1(M) between Durham, Chester-le-Street and Newcastle experiences high levels of traffic congestion, the Team Valley Trading Estate is one of the largest out of town employment locations in the North, its commuting dominated by single occupancy car journeys, whilst some of our communities living in West Newcastle & West Gateshead are amongst those in the highest areas of deprivation. Restoring local rail services to these areas is seen to be a vital step for addressing all these issues.

Our proposals would reintroduce the Bensham Curve to enable local passenger services between Newcastle/Gateshead, Team Valley and Chester-le-Street, with options for connections to/ from Metrocentre (and beyond).

This would provide many of our communities in West Newcastle and Gateshead with improved access to the local rail network, enhance existing local services at Chester-le-Street and provide sustainable alternatives for local journeys on the A1(M) corridor.

### **East Coast Main Line-Newcastle International Airport**

Newcastle International Airport (NIA) is a significantly important strategic transport asset for the region. Providing quality, sustainable transport links are integral to its future economic success, and that of the entire North East, as is the expansion of its catchment.

Our Metro provides a direct link to Newcastle (23 mins) and Sunderland (55 mins).

Enhancements to Metro services and potentially a direct heavy rail link from the ECML will form the key planks of this study.

NIA hosts around 3,450 jobs directly across its site, serving 5.4M passengers in 2018. By 2030, around 8.7M passenger trips per year are forecast, with an estimated regional impact of £1.3Bn per year. Mode share for Metro (2017 data) was only 12% for passengers and 4% for staff which indicates potential for further sustainability gains in response to better transport services - the NIA Masterplan 2035 has set targets of 30% passengers and 25% staff travelling sustainably by 2035.

### Northumberland connectivity

There are currently limited local services on the ECML linking Northumberland towns and villages to Newcastle.

Currently, residents of Pegswood, Widdrington, Acklington and Chathill have a choice of just one morning commuter train and one evening return train. This is wholly inadequate and does not reflect the needs of part time workers or those who have variable finish times.

However, in the coming years improving Northumberland rail connectivity is a priority. As well as this, there are plans to reopen new stations such as The proposal is to construct a new station to serve the village of Belford and the surrounding catchment area of north Northumberland.

This will greatly improve peoples' ability to use the train to get to work, education and leisure opportunities.

Taken together with the project to bring rail services back to the Northumberland Line, rail connectivity in Northumberland will be transformed.

### Regional and National Rail

We want to see a step-change in rail connectivity to regional and national economic centres to maintain and grow our economic competitiveness.

We need to release much-needed capacity on the ECML for additional freight and passenger services.

We also require capacity improvement to Newcastle and Sunderland stations and associated track works on the approaches. There is a further ambition to link Sunderland directly to the ECML, by utilising the southern section of the Leamside line to enable better connectivity to other northern cities.

Investment in the Durham Coast line must not be overlooked. The route links some of the largest centres of population in the North East, including Sunderland with plans to double the resident population of the city centre it will become an increasingly well-used transport hub. Additional capacity is also much needed at Hartlepool station to meet demand growth. Parts of the route have suffered from under-investment over the years, end to end rail journey times from Newcastle to Middlesbrough are considerably slower than travelling by car.

### Rail freight

Making sure that freight can travel sustainably by rail is crucial.

The North East needs to develop an additional freight routing option through the region, providing additional paths and capacity away from the congested ECML.

The opportunities for freight to have more consistency in a similar way to rail and Metro needs to be explored whilst not diminishing efforts to provide a faster service for passengers along those routes.



### How do we get there

#### Metro and Local Rail

We must invest in Metro and local rail to extend and improve the network.

We will continue working with partners to explore various corridors to restore railways and reconnect some of these disconnected communities back into the railway network.

We have a recent track record of this. In recent years, the region worked together to open a new local rail station in Horden, County Durham.

Transport North East, Nexus, North East Councils and the rail industry are already working together progressing schemes for delivery such as restoring passenger services on the Northumberland Line and removing constraints on the Metro network (Metro Flow project).

Although the government has decided not to accept many of our bids to the “Restoring Your Railways Fund” in relation to the restoration local heavy rail passenger services, we believe that there is a significant opportunity to improve the connectivity and social and economic outcomes for communities in the North East.

We therefore propose to commission studies through our own budgetary provision in the coming years.

#### Regional and National Rail

Work is underway to examine capacity increases on the East Coast Main Line.

Whilst it is disappointing that the Integrated Rail Plan (IRP) effectively rules out government national investment in the Leamside Line as a means of adding capacity to the ECML, nevertheless the strategic case remains strong for the region to develop a business case for the route to be used for Metro and local rail services. We will ensure that our work to progress the reopening of the Leamside Line for Metro and local passenger services allows, where possible, for its future use by **long-distance** freight and **passenger** services.

The North East Joint Transport Committee will also continue to work with local, regional and national stakeholders to provide strong evidence (through business case development) of the need to significantly invest in rail connectivity within and between the North East and the other main economic and social hubs across the north and the rest of the UK.

#### Rail Freight

We will need to ensure a fair allocation of network capacity and delivering additional capacity where required, including investigating whether facilities for transfer of goods between road and rail are feasible in the region.

We will need additional capacity on the ECML in our region to grow the number of both freight and passenger train paths.

A key element of this is providing W12 gauge clearance where possible to the region’s rail network to enable all existing and future freight to use it.

We do not accept the government's Integrated Rail Plan (IRP) analysis that only 7 or 8 paths are required on the ECML in our region. This would meet the short-term need but does not allow for any future growth in services – passenger or freight – and it does not improve the resilience of the route. **We will therefore continue to make the case to the government for future investment.** We will also ensure that our work to progress the reopening of the Leamside Line for Metro and local passenger services allows, where possible, **for its future use by long-distance freight and passenger services.**

Reopening the Leamside Line and assessing the feasibility of a Strategic Rail Freight Interchange for the region will also enable this.

### **Through delivery of the NERMS we will reduce inequality and stimulate economic growth by:**

- Extending the reach of local rail and Metro to serve more communities by upgrading the
- Existing network and services, and through expansion and adding new stations.
- Investing in long distance transport infrastructure increasing the capacity and resilience of the East Coast Main Line and Durham Coast Line to improve the regions connectivity.
- Making sure that freight can travel sustainably by rail and ensuring a fair allocation of network capacity and delivering additional capacity where required.

**Description of project**

In 2018, Network Rail produced Strategic Advice on the northeast rail network. This identified that current constraints on the Durham Coast are restricting future aspirations for improved connectivity both within the region (Metro Expansion), between the region and Tees Valley (half hourly local rail service) and also longer distance connectivity (York, Leeds, Manchester, London).

One of the major constraints is Sunderland (Underground) Station. Uplifted infrastructure is key to improving connectivity and goes hand in hand with the transformation of Sunderland Station to provide a modern facility that is an appropriate gateway to the City and to the region.



The station project will be delivered in three phases and the first part of the project, a dynamic new entrance to the South side of the station will commence construction in early 2022. The new entrance features a large glass wrap around design, and will include a new ticket office and reception, public toilets, retail space and cafes, comfortable waiting areas, as well as a new mezzanine level that will have office space reserved for railway industry staff. It is the first part of a development programme that includes plans for the northern entrance of the station to be reimaged and platform-level works undertaken to increase the capacity of the station, with four tracks and four platforms to unlock future connectivity and separate Metro services from mainline services.

As well as Sunderland Station and its approaches, constraint were also identified at the stations at Newcastle Central, Hartlepool and Middlesbrough (all of which are progressing under separate workstreams).

**Innovative solutions implemented**

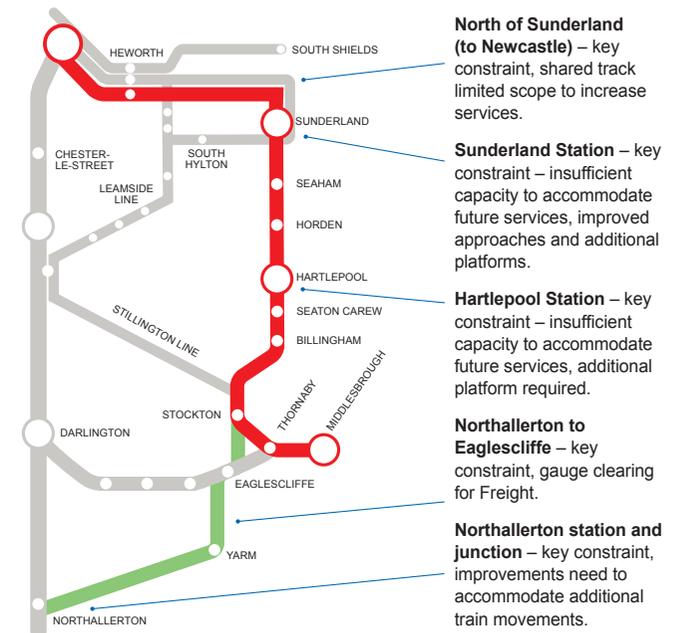
Working with Network Rail and Tees Valley, Sunderland CC and Transport North East are seeking a line of route approach to delivering the full suite of interventions that will enable improved connectivity for Metro, Local rail and Regional and National rail.

**How does the project help meet our objectives?**



This line of route approach seeks to unlock future connectivity which will drive increased rail and metro use linking more residents via low carbon transport to economic and social opportunities within the North East and the wider North.

**2035 proposals and challenges to overcome**



**Description of project**

The Leamside line has the potential to play a part in the relief of congestion on the ECML, improve local connectivity (through the expansion of Metro to create the South of Tyne and Wearside loop), to reconnect communities to the rail network and to aid future growth in Freight.

**Innovative solutions implemented**

A number of studies are/ have been looked at along the ECML/Leamside corridor over recent years, work to coordinate these various studies and assimilate them into a single coherent plan which maximises the benefits to the North East, known as the umbrella strategic outline business case (USOBC), is nearing completion. The publication of the governments Integrated Rail Plan on the 18th November 2021 has necessitated a rethink on the approach both to delivering much needed capacity on the ECML and also the approach to take to reopen the Leamside Line.

The emerging SOBC therefore show four elements to be progressed incrementally over a period of time. These being:

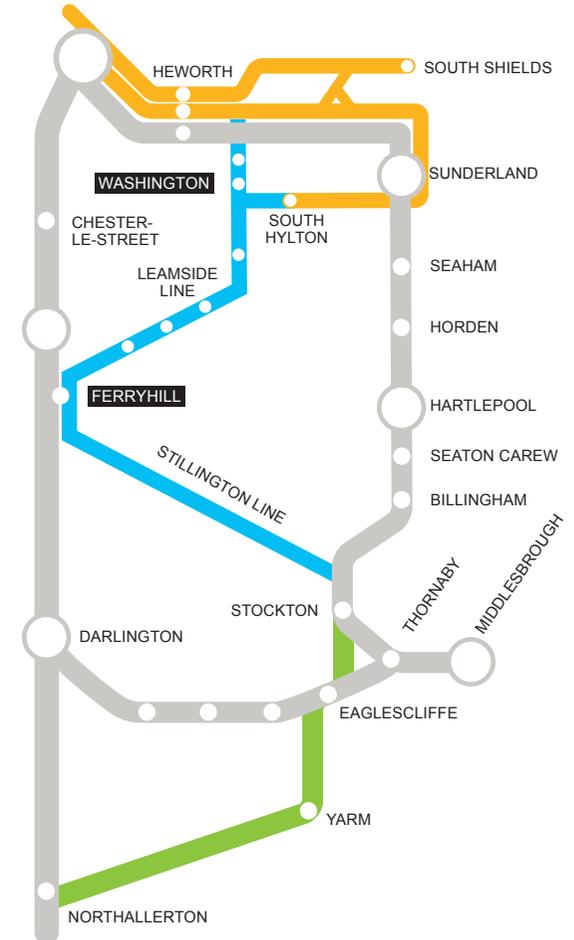
- ECML capacity and resilience
- South of Tyne and Wearside Loop (Metro)
- Local and regional rail connectivity
- Freight enhancements to meet future demand.

**How does the project help meet our objectives?**



As well as solving the ECML capacity constraints, reopening the Leamside Line also offers the potential for local rail connectivity, managing congestion and access to jobs in our region. It would also offer the opportunity to integrate our local railways and Tyne and Wear Metro, enabling major improvements in connectivity for people across the region. Washington is the fourth largest town in the UK without a rail service.

**Leamside and Stillington Lines map (including South of Tyne and Wearside loop)**



## 8. Carbon Neutral Rail and Metro in the North East

## Issues in the North East

The landscape of the North East is a beautiful mix rural and urban areas in which our rail and Metro service work to connect the two. However, the contribution to carbon emissions has made the Local Authorities in our area call climate emergencies to protect the North East, collectively more can be done. One element, is eco-friendly travel whilst supporting the Government's Net Zero Plan 2021 and providing great passenger experience.

This strategy will assist the North East in becoming a greener and healthier place to live, work and visit.

## Congestion

High proportions of car use in the region result in road corridors into the centres of Durham, Newcastle, Gateshead and Sunderland being regularly congested, especially at peak times and particularly at city centre river crossings. Increased number of cars on the road for an extended amount of time caused by congestion is leading to poorer air quality. Higher levels of congestion can lead to a higher risk of road traffic accidents.

## Car use

Recent decades have seen rising levels of car use and ownership in the North East. According to DfT in 2019 76% of people in the North East opt to commute to work using a car. Patterns of car ownership and use may change permanently post-pandemic as road-space reallocation favours buses and active travel modes, with air quality interventions having a similar impact. Under these circumstances, the presence of a high-quality integrated transport network with rail, Metro and bus at its core becomes ever more relevant.

Rural residents are more dependent on cars than urban residents due to some having little to no viable public transport option.

In the Government Net Zero Plan they aim for the end of sale of all new petrol and diesel cars by 2030, however we must ensure our public transport is a high quality alternative to private car use whilst working to run decarbonised rail and Metro services.

The use of car is not the only issue for residents, but freight on the road is a similar cause for congestion and accidents.



**Collectively, Metro and Local Rail supported 34,800 daily commuting trips within the North East in 2018.**



**A full Metro train has the potential to take 119 cars off our local road network.**

## Air Quality

An impact of the dominance of travel by car has resulted in hotspots of poor air quality which has pushed Government and Local Authorities to put plans in place to reduce it. For example, Newcastle City Council's Clean Air strategy is planned to come in action in Summer 2022. Their clean air zone will cover Newcastle city centre as well as routes over the River Tyne bridges and will apply to all taxis, vans, buses, coaches and HGVs that do not meet national Clean Air Zone emissions standards. Whilst private cars will not be subject to charges Newcastle and Gateshead Councils are encouraging use of other modes of transport. Durham is also looking at methods to reduce carbon emissions in their area.

A key theme from the 2019 Tyneside Air Quality Public Consultation was that improvements to public transport and walking and cycling routes are needed before many people, who said they rely on their cars for essential journeys, would feel able to change their travel behaviour.

By supporting the reduction of carbon emissions in the North East we could see a resultant reduction in public health issues.

Metro is currently one of the most sustainable forms of transport within the region, each Metrocar has the potential to take 119 cars off the road and per passenger Km only a five travel and Electric Vehicles have a smaller carbon footprint. The introduction of the new fleet of Metrocars from 2023 will reduce this further with a minimum 30% reduction in energy usage. In addition, many of the interventions that have been delivered through the asset renewal programme aim to reduce energy consumption and the carbon footprint of the wider Metro operation. This includes lighting, lift and escalators that are more energy efficient.

## Fuelling rail

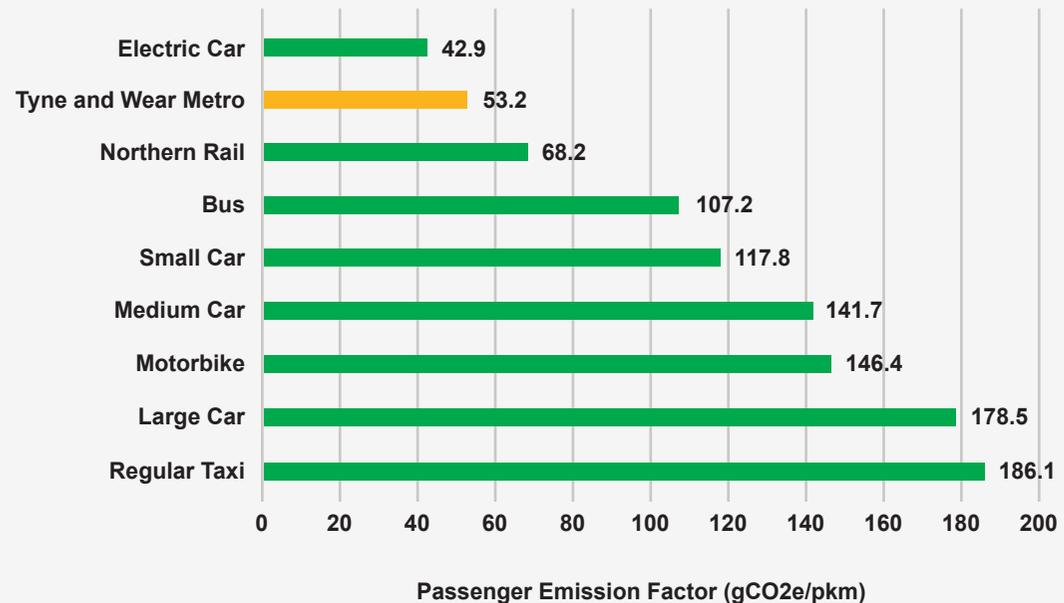
There is a marked difference in the way Metro and heavy rail is powered. Whilst all Metro trains are electric, only 31% of the region's heavy rail network is electrified. It is necessary to move to greener trains, including increased electrification of our rail network, where practicable. Where electrification isn't possible it is necessary to assess the possibility of other traction types for trains including hydrogen and battery power to drive our rail services.

Similar investment in electrification to serve Freight is vitally important as the country as a whole moves to a carbon neutral future.

## Where are we now?

Recognising the importance of the environment, both locally through declared climate emergencies and local air quality proposals and in response to national governments Transport Decarbonisation Plan.

Metro and Rail amongst the least polluting modes



### Metro

In 2022 Nexus will publish an Energy and Environment strategy which will cover all its operations including Metro. Nexus' vision is to continue to serve the North East with Metro being the cleanest, greenest mode of transport. One of the biggest environmental benefits to be gained is to offer people an attractive low carbon alternative mode of transport through Tyne and Wear. Driving growth in public transport usage is central to delivering any Net Zero regional transport network.

The new Metro train is due to enter passenger service in 2023 with a full roll out in 2024. The new Metro fleet will be more energy-efficient coupled with an increased passenger capacity per train, allowing emissions per passenger-kilometre performance to further improve. The new Metros will also have battery provision that gives the ability to run 'off wire' creating new expansion possibilities.

### Local rail

Local rail provides connections from outside the urban core and plays an important role for some of the slightly longer journeys to the economic and social hubs in the North East.

Local rail expansions are being developed with the most advanced of these being the Northumberland Line, which is currently planning to be operational during 2023/24. There is a significant outflow of commuters from Northumberland into Tyne and Wear. Congestion is already an issue on the strategic road network into the urban core and alternative modes of transport need to be provided to ensure the population of South East Northumberland can access key areas of employment by sustainable modes. Although not feasible for the opening of the service, the project has committed to being carbon zero by 2030.

Unlike the Metro there are as yet no firm plans to replace the current diesel fleet for local rail services. We will seek to work with Northern to support the case for a North East rolling stock strategy.

### Regional and National

Currently, the East Coast Main Line is fully electrified through our region, however other sections of the network require further development, to accommodate longer distance services which currently run diesel trains 'under the wires' on services to and from the North East. Without substantial investment, there is also limited power availability to cater for future growth in services.

The Azuma and Nova fleets introduced on the East Coast Main Line are lighter and more energy-efficient in comparison to the older stock they have replaced, many of which were diesel units. In December 2021, East Coast Trains Limited (a new Open Access operator) have launched a new long distance electric service calling at Morpeth and Newcastle.

### Freight

As of 2021, none of the region's rail freight services were hauled by electric locomotives, due to a need for electrified sections, particularly on local routes and freight-only sections connecting to our freight terminals, ports and depots. The freight market in the North is heavily dominated by road with 87% of the tonne kilometres transported using road.

### Where do we want to be?

We want to play a part to enable the reduction in congestion on the roads of the North East by enabling a modal shift through extending the reach of Metro and Rail to more communities infrastructure of trains and other alternative transport methods. We are continuing to look at opportunities for an expanded rail and Metro service to best serve the North East and encourage more passenger to travel sustainably. **Our plans are detailed in the Overcoming inequality and growing our economy chapter.**

Similarly, we are seeking ways to increase the use of existing services, with more details in our Appealing sustainable choices chapter.

We will progress plans for network extension to both the rail and Metro lines making an attractive offer as an alternative to a private car. Whilst the Government plans for stop sale of new all petrol and diesel cars by 2030, we also need to continue to ensure other choices are available to those not choosing or not able to buy a zero emissions vehicle.

We want to continue to investigate options to reduce road congestion, carrying passengers and freight by using less energy than other modes of transport. To support our Local Authorities plans to achieve cleaner air and support the reduction in health issues in their

area. We aim to seek opportunities for local rail and Metro Park and Ride options to help reduce congestion and therefore emissions in our main centres.

In 2019/20, Network Rail and the wider rail industry came together to assess the issues and options for being closer to becoming carbon neutral. The resulting Traction Decarbonisation Network Strategy (TDNS) sets out the rail sector's response to the Government's climate challenge by outlining how the direct emissions from trains on the network can be removed. The TDNS considers where overhead electrification, battery or hydrogen trains might be most effectively be deployed on key routes in our region with recommendations put forward, and fully endorsed by this Strategy to help our region meet emissions targets.

In Autumn 2021 the Government published its Net Zero Strategy and supported switching to a carbon neutral rail and Metro by 2050 by pledging to remove all diesel only trains (both passenger and freight) and deploy new low-carbon technologies on the network. We welcome the Government's pledge to deliver as hydrogen and battery trains will need to form a part of our local Rail solution. We will work with stakeholders to take advantage of the Government incentive to take up of low carbon rail options at the earliest opportunity.

### How do we get there?

#### A greener way to travel

Our aim is to improve accessibility of rail and Metro to increase usage and reduce reliance on private cars. Greener travel through modal shift will enable long-term decarbonisation.

Our findings based on local travel habits and average passenger loading show the Metro and local rail the forms of transport with the lowest emissions, despite the age and mix of traction sources of the current fleets in the region. In fact, Metro is the greenest way to travel other than by electric car.

With pledges from Government to invest in the future of rail to become greener we now have more certainty that voices for an eco-friendly rail and Metro service are being heard. We will continue to explore the opportunities for new technologies to be utilised to benefit both the customer, planet and local economy.

Whilst the introduction of new traction technologies will improve the efficiency of train fleets in our region, these do take time however to research, develop, prove and introduce.

A 'quick win' can be had through greater use of our current rail networks by both passengers and freight, helping prevent increased road traffic levels as part of the post- pandemic recovery, reducing emissions and helping to tackle local air pollution.

Prior to lockdown, most Metro services had adequate capacity with some peak-time journeys carrying the heaviest passenger loadings. Research to assess the impact of Producing Clean Air Zones in Gateshead/ Newcastle/ North Tyneside concluded that whilst some peak-time trains were frequently very busy, there was still sufficient capacity to accommodate the projected modal shift from car to Metro.

In terms of expansion, we will keep assessing and lobbying for more to be done for local rail and Metro in an effort to increase the attraction of our services as the mode of choice. Regards freight services, the potential for transferring more freight from road to rail is substantial and increasingly important as we move towards the goal of a net-carbon future. The freight market in the wider North is expected to grow by over 30% until 2050 across all modes.

We welcome Government's support for modal shift from road and air to rail for freight services within their Net Zero Strategy. Through investment we could increase capacity in the North East to meet current and future demand for freight and take more congestion off the road with an attractive alternative to businesses.

Furthermore, with support, expansion and development of the pre-existing infrastructure, rail would be able to accommodate more freight service in the region. Running one additional freight train per hour over the Pennines could save over 10,000 lorry journeys a week.

### Decarbonisation of the trains

The DfT has challenged the industry to remove all diesel-only trains from the network by 2040. Government Net Zero Strategy is step in the right direction for the rail and Metro industry with future investment an indicator for the developments in years to come.

There are 533km of rail lines in the North East, only 31% of which are currently electrified (East Coast Main Line plus Metro), meaning most of our region's trains continue to be diesel powered. Many local rail services are operated by diesel trains built in the 1980s, which emit larger quantities of pollutants, leading to poor air quality, particularly in enclosed station environments.

As mentioned previously new Metro fleet is being built and will start to roll out onto the network from 2023. However local rail is lagging behind. We will work with Northern and Great British Railways to make the case for investing in a new carbon zero fleet for the North East. As the local services, depots and stations are all 'self-contained' we would seek to be an early adopter of newer technologies to decarbonise local rail in our area.

### Our stations and depots

Stations can also play a role in achieving environmental objectives. Investments in upgrades such as solar panels, implementing water efficiency measures, the provision of recycling facilities and installation of LED lighting can all reduce the carbon impacts on the surrounding communities.

The new Metro train depot at South Gosforth will feature sedum roofing, rainwater recycling, daylight capture and other environmental features.

Only 5% of Metro journeys included use of a car to get to a station, so accessibility to or from the network is already highly sustainable. Continuing to provide good accessibility to our local stations through better connections with local bus networks, walking and cycling routes will further contribute towards delivering these environmental benefits.

### Working with Partners

We will support Transport for the North who within its Strategic Transport Plan (STP), has committed to the development of a Decarbonisation pathway to 2050.

The Government, and its Net Zero Strategy and Transport Decarbonisation Plan set out key points of business and society will need to do to deliver the significant emissions reduction needed.

Our focus is on making public transport and active travel the natural first choice for public mobility, something which the successful delivery of this rail and Metro strategy will enable us to deliver as a region which in turn will help the environment.

The impact of not addressing emissions and supporting those around us to make changes could see detrimental impact on the communities we serve. This is reiterated in our Transport Plan which commits us to initiating actions to make travelling in the North East net carbon zero by 2050. Our local rail and Metro networks are the most efficient and greenest 'powered' mode of travel with respect to emissions, therefore have a significant and ever-growing role to play in tackling these issues.

#### **Through delivery of the NERMS we will reduce transport carbon-based emissions by:**

- Increasing the number of people travelling on rail and Metro in preference to the private car.
- Increasing the share of goods transported by rail.
- Introducing new trains, more efficient electric ones on the Metro and electric / battery/ hydrogen ones on local rail.
- Improving stations and depots.

## Description of project

### Replacement of Tyne and Wear Metro Trains and new depot.

We are replacing our current 40 year old fleet of 89 Metro trains, with 46 brand new trains that will provide a step change in customer experience and also benefits for the environment. Our brand new depot will reduce our carbon footprint as well, compared to our existing 100 year old depot.

### Innovative solutions implemented

- Increased capacity - Up to 600 passengers
- At least 30% more energy efficient than current fleet
- Automatic sliding steps providing easy access for mobility impaired
- Space for cycle storage on board encouraging integrated journeys
- Minimum 35 year life span
- 45-minute wireless running from battery power
- Some of the old fleet to be scrapped and materials recycled Five trains offered for community use.
- High proportion of new trains built from recyclable materials

- 11.2 million car journeys taken off road
- The new fleet is projected to save Nexus approximately 4,100 tonnes of CO2e annually, enough to power approximately 4,000 homes.
- The new depot will have environmental features such as sedum roofing, rain water recycling, daylight capture and designed to high quality environmental standards.
- Customer comfort in mind with air conditioning and heated floors in winter, mobile phone charging points,
- Internal and external facing destination information screens, improving information provision on what is available today
- Walking through train, rather than two separate cars, improving perceptions of safety and security
- Four wheelchair spaces per train and retractable ramp at every door (16 in total) plus a further four multi use areas for bikes/luggage areas, more than doubling available space and priority seating, new provision for customers
- Brighter lighting and visual and audio contrast to the doorsets, digital CCTV cameras throughout each train with footage shown periodically on the passenger information screens, improving safety and security.

## How does the project help meet our objectives?



- Fast, reliable and more frequent journey times between key centres of employment and education – connecting communities
- Encourages mode shift from cars – estimated that there will be an uplift in passenger numbers of 7.8%
- Reduces carbon emissions through more efficiency and mode shift
- New fleet is 15 times more reliable than current fleet
- Improved resilience and maintenance through state of the art depot facilities
- Helps integration through cycle storage on trains.



## 9. Rail and Metro for a healthier North East

**The Rail and Metro Strategy will help to achieve better health outcomes for the region.**

**By working in partnership to deliver schemes and initiatives which encourage use of rail and Metro, more sustainable methods of travel will improve local air quality and will help our region move towards attaining better levels of health.**

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## **Issues in the North East – Deprivation**

There is a strong link between deprivation and public health risks. In 2019 Parliament found that areas with more income deprivation are more likely to have a range of health conditions, including mental illness, obesity and diabetes. In 2021 following a number of lockdowns, Public Health bodies found that those at risk of developing health issues did so or were borderline.

The 2019 Index of Multiple Deprivation shows all areas of Tyne and Wear have above average levels of multiple deprivation. Furthermore, we have experienced a worsening in the overall deprivation levels, with significant pockets of concern around the banks of the Tyne and into South East Northumberland - 23 of the 60 Metro stations are in the bottom 20% of deprivation areas.

## **Air quality**

Poor air quality and high levels of air pollution within the urban areas of the North East are becoming an increasing health concern. The elderly, children and those with pre-existing health conditions are more sensitive to the health impacts of air pollution. Long-term exposure to air pollution reduces life

expectancy by increasing deaths from cardiovascular and respiratory conditions, and from lung cancer. It is estimated that long-term exposure to air pollution in the UK has an annual effect equivalent to 28,000 to 36,000 deaths (Public Health England 2018).

## **Active travel**

Based on a 2019 survey of 1,298 Gateshead, Newcastle, and North Tyneside residents aged 16 or over, 72% of participants felt that more cycle tracks alongside roads physically segregated from traffic and pedestrians would encourage them to cycle more (Bike Life Gateshead Newcastle, and North Tyneside, March 2020).

Environmental factors such as poor lighting, secluded areas or woodland on the journey exacerbate these fears. Other studies have found that people from deprived areas consider safety to be a barrier to walking for travel or leisure and that women are constricted by perceived dangers from the external environment. Traffic is an issue for older people and people with mobility impairments, who also mention that narrow pavements and obstacles such as parked cars on pavements impact on safety and cycle tracks and bus lanes create hazards.

## Disability

The incidence of disability is higher in the North East region than England, with 28% of the North East population having a life limiting illness in 2018/19, compared to just 21% across England.

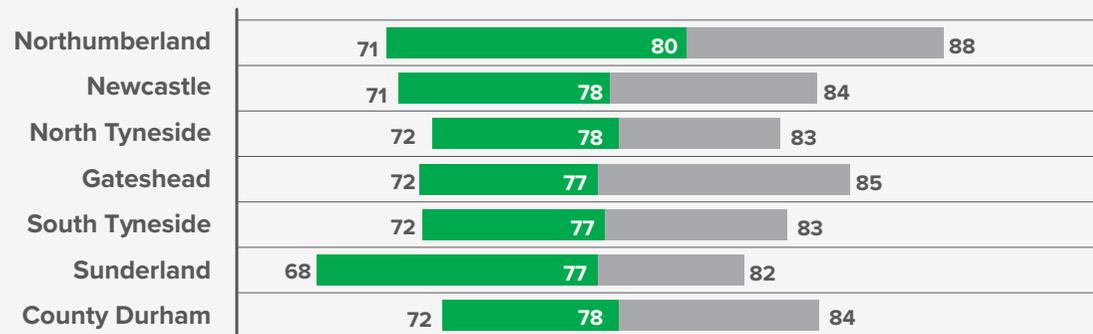
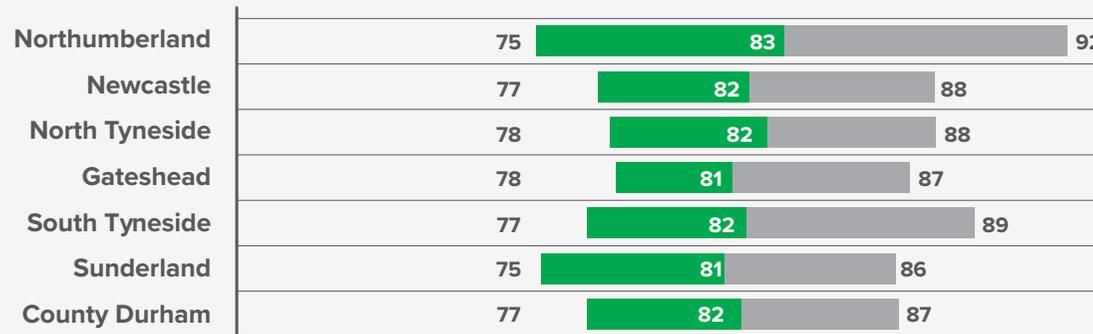
It is important to recognise that people's needs, and experiences vary depending on whether they live in an urban or rural area. Some people experience particular barriers to mobility and access such as people with a disability or injury, elderly people and people with hidden disabilities and conditions.

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Life expectancy is about one year lower in the North East in comparison to the rest of England. Similarly, healthy life expectancy is about four years lower.



**Life expectancy at birth – median, minimum and maximum values within North East local authority areas, 2013-2017**



### Where are we now?

The health and wellbeing gap within our region remains a great cause for concern. During the pandemic many of the services people depended on were limited to keep within Government guidelines, or services went elsewhere to focus on helping Covid patients.

During the lockdowns outdoor activity was permitted, meaning people did enjoy walking and exploring their local surroundings. We've seen an increase in walking (37%) and cycling (15%) in our region between April and July 2020, with increases in cycling up to and over 100% at some locations.

Pre-pandemic the catchment radius for the Metro was 800 metres, research suggests that this potentially will rise to 1200 metres, due to more active travel uptake.

Nexus and its local authority partners will continue to focus on identifying and delivering sustainable links to Metro stations and key bus corridors through the delivery of designated safer routes, based on the concept of TfL's Healthy Streets programme.

The importance of mode choice in 'first mile, last mile' connections is linked to the improved healthcare objective. By making it safe and intuitive for public transport users to walk and cycle to and from public transport, public health and local air quality will be improved. Demand-responsive transport and Mobility as a Service will also have a role to play in the context of last-mile trips.

The North East has an ageing society and there is a need to address the changing societal needs. According to Public Health England, as of 2019/20 only 48.1% of over 65s receive the amount of social contact they would like. The provision of sustainable public transport services connecting our older generations to the essential services is increasingly important.

Our rail and Metro networks are the most efficient and greenest mode of travel with respect to emissions, therefore have a significant and ever-growing role to play in tackling issues brought about from poor air quality. It can also play a valuable role if considered in conjunction with active travel as a means of accessing the network.

### Where do we want to be?

The December 2020 'The Big Transport Conversation' highlighted that users would like to see more done to encourage more active travel. We want to see the provision of suitable routes to and from our stations ( Metro and local rail), coupled with secure cycle parking and where practicable on board cycle use

We want to help to encourage a modal shift to public transport with could result in personal health and fitness benefits resulting from increased exercise levels relative to car use. A high proportion of our passengers walk or cycle to Metro and local rail stations. We are planning to improve access to our stations through a 'healthy streets' approach.

We want to develop the carriage of cycles on trains, where practicable. Currently, the different booking arrangement between train operators remains confusing and continues to act as a barrier to use. We want to ensure users have access to secure cycle parking facilities which could encourage more people to cycle to and from their local station. Users cycling to the station increases the catchment of our existing rail and Metro networks even further.

We want to work with our stakeholders to encourage more sustainable journeys using our region's rail and Metro networks, whilst also helping to expand the reach of our existing rail stations beyond the traditional distances typically associated with journeys on foot.

We want to make rail and Metro a suitable alternative to car use. Reducing the number of cars on the road will help to make the roads safer and less congested and improve air quality. This in turn could lead to fewer hospital admissions and a healthier North East.

We want people to feel connected. Through improved rail and Metro we can work together with our partners and promote social inclusion whilst aiming to reduce loneliness and related mental health issues.

Our Rail and Metro Strategy will work alongside the Active Travel Strategy and will help Local Authorities and stakeholders in the region to increase the uptake of active travel and deliver infrastructure that is safe, appealing, well designed, and accessible for all.

### How do we get there?

The North East Transport Plan outlines the necessity to ensure the network caters to all, accessibility is key to addressing issues. We've adopted the TfL approach on routes to selected public transport interchanges, to encourage sustainable and healthy access to improve public health, but more needs to be done.

Rail and Metro are the solution to enable an ageing society to be more independent for longer by connecting people to the essential services they need such as health and social care and access to outdoor spaces.

We will continue to work with local authorities to promote a shift to using public transport and listen to passengers on how to make rail and Metro move accessible. For example, how we can make it more convenient for walking, disabled and cycling access to rail and Metro stations. We will work towards enabling people across the region to consider transitioning to using rail and Metro for the right journey circumstances.

We will seek to collaborate with local authorities to consider suitable routes and provision for active travel as vital components of our region's transport network. Our developing cycling network requires further investment to deliver its full potential on a

wider scale allowing users to travel longer distances including links to our Metro and local rail services. We want to do our part for creating a healthier, happier North East.

We will continue to promote Park and Ride via Metro and local rail links as a means of improving air quality in urban centres and promoted walking and cycling for active travel and wider public health benefits.

To encourage active travel into stations and customers taking advantage of cycle routes, we will work with stakeholders to ensure storage or onboard carriage of cycles is available where practical. By encouraging active travel into Metro stations, we could firmly increase the catchment by at least 15%.

#### **Through delivery of the NERMS we will encourage more active travel as part of people's sustainable journeys by:**

- Improving walking and cycling links to existing and new stations.
- Increasing the number of people travelling on rail and Metro in preference to the private car.

## 10. Safe and Secure Network

**We want people to feel safe and secure when travelling to, waiting for, travelling by rail or Metro around the North East.**

**Issues in the North East**

In the North East, similar to other areas, we experience anti-social behaviour and crime. The North East is covered by Northumbria, and Durham and Cleveland police forces and the rail network is covered by British Transport Police which means collaboration is necessary with all to achieve a safe and secure public transport service. However, the North East suffers a need for a fairer funding structure to tackle anti-social behaviour and crime in general.

We understand that the rail or Metro journey doesn't start at the station but includes travelling to it. The effort to make people feel safe shouldn't be only by the rail and Metro services but more a collaboration between local authorities, train operators and police forces for support. Negative perceptions of safety and security impacts on patronage, especially at night.

A panel survey from June 2018 showed passengers' most significant personal security concern (on Metro) to be the risk of experiencing anti-social behaviour which negatively impacts people's perceptions of personal safety and overall satisfaction, especially when travelling at night.

**Where are we now?**

Personal safety and security are important when travelling on our networks. We know a negative perception of safety and security can affect the travel choices of individuals, in that they might not choose public transport out of fear, more particularly at different times of day. In order to ensure a successful and attractive integrated transport system, high levels of personal security need to be in place, and passengers need to feel that their safety is not under threat.

Personal safety on Metro scored between 6.8 and 7.7 out of 10 with similar levels for security.



85% of passengers were very or fairly satisfied with personal security on board a Northern service in the North East.



Nationally, 73% of rail users rated personal security whilst using stations as good, rising to 75% when on board a train.

Perceptions of safety on the rail network in our region is generally positive. 85% of rail passengers are very or fairly satisfied with their personal safety.

A 2019 Nexus survey of Perceptions of safety on Metro found that 68% of respondents have felt worried about their personal safety while on board the Metro, 21% while waiting for the Metro and 11% when walking to/from stations and stops.

### Staffing

Since 2017, there has been a new focus on security on the Metro, with a dedicated Security Manager appointed and increased staff patrols across the system. Body-worn cameras were introduced in 2018 to deter troublemakers and provide extra reassurance to passengers as lockdown eases. From late 2020, a new 12-strong customer support team has been deployed to encourage compliance with the face coverings rule, to deal with anti-social behaviour and fare evasion on the Tyne and Wear Metro.

On Metro, Nexus and its partners at Northumbria Police and British Transport Police have undertaken a series of community reassurance exercises, aimed at providing a physical presence at locations across the system to address antisocial behaviour

and fare evasion. Northumbria's Police and Crime Commissioner has set out a Safer Streets initiative to make public transport safer whilst working in partnership with Nexus. We continue to work with our partners, using intelligence to address problem spots on the network. An increased staff presence on the Metro network is highly valued by customers, not only for provision of information but also in terms of perceptions of safety and security.

Metro's new fleet will be able to live stream on CCTV which will be another added security and safety measure across the network.

For increased security Northern Rail are introducing person identifying camera onboard which can be used for prosecution if needed. Northern Rail work closely with British Transport Police (BTP) and colleagues across the rail industry to make the network as safe as possible. They have Travel Safe Officers who work across their trains and stations to help make passengers feel safe and secure when travelling.

### Cleaning regimes

Following the COVID-19 pandemic the government advised the public not to travel on public transport where possible. This caused a decline in patronage which the rail and Metro industry have worked hard to overcome with improved cleaning regimes and advertisement and clearly communicating this to members of the public. There is still work to be done to reassure passengers that public transport is safe.

To address concerns regarding cleanliness cleaning teams regularly treat ticket machines, handrails and other touch points around the station.

On Metro, trains are being treated with a new anti-microbial sanitiser throughout the passenger areas which protects surfaces for up to 30 days. A device uses an ultraviolet light beam to sanitise handrails on escalators and hand sanitiser can be found near entrances of the busiest stations.

A team of over 600 cleaners cover the Northern Rail network; cleaning all carriages and key stations every day, with extra focus on cleaning touchpoints like handrails and armrests, using an anti-viral sanitiser which stops the virus for longer. These cleaning regimes will be kept in place to provide safe rail and Metro travel.

### Text for help

British Transport Police have recently introduced a text for help initiative to improve safety and security on their trains. Passengers can send a message to 61016 to receive immediate assistance and guidance. Northern work closely with British Transport Police (BTP) and colleagues across the rail industry to make their trains and stations on the network as safe as possible.

There must be further communications work to advertise the Text for help scheme to ensure it is being used to provide a safer and securer network. This will improve the level and perception of safety on the network.

### Incident reduction

By continuing investments in CCTV and staffing we can hopefully minimise incidents happening. If they happen in the stations or on the tracks, as well as the emotional impact on friends and family, they also can have significant impacts on other passengers through delays to services.

There is work necessary to reduce the risk of sexual assault and harassment on the network. This includes staff training to spot the signs and provide appropriate support to victims as well as increased CCTV and the use of the text for help scheme.

The Hate Crime Charter is in place for bus and Metro operators as well as members of the public to report incidents. This service offers free and confidential support. The service will help people report a Hate Crime to the police, either directly or through Victim Support's National Hate Crime Report and Support Centre, where people can remain anonymous.

The new Metro fleet which will be fully rolled out in 2024 has more robust windows, doors, seats as well as support poles which should reduce incidents affecting the Metro services.

### Publicity

We are continuing to improve our communication with the public on the steps being taken to maximise personal safety whilst traveling by Metro. We will keep people involved through our usual online and on-site channels, and actively explore any new products and processes which come to market that will improve the safety of customers and staff.

### Where do we want to be?

People must feel confident in using public transport for it to be a mode of choice. We must continue to improve the perception of safety and security of our local rail and Metro

systems, ensuring people are confident and reassured whilst travelling around the North East.

We want to increase the amount of CCTV and staffing presence to deter possible acts of vandalism or assault. It is necessary to provide appropriate support and care should an incident occur.

We want to see improved modal interchange, lighting and CCTV along popular walking routes together with support from local authorities and police services to ensure people feel safe on their journey to the stations. We will also seek funding to raise the standard for passenger environment on trains, at stations and along station approaches.

### How do we get there?

This strategy in conjunction with the Nexus safety and security strategy will support processes and interventions to improve personal safety and security for users of our local rail and Metro networks across the region. Passengers must feel safe when using our networks. We need robust systems in place to deter those who create safety and security concerns for passengers this will encourage higher patronage on rail and Metro services by making a safer environment for all.

Nexus have developed specific recommendations which are grouped by:

### People:

- Investigate the costs and feasibility of increasing the levels of Metro Police Unit (MPU) officers to extend the reach of the MPU.

Consult with stakeholders around the introduction of Travel Safe Officers to the public transport network.

Set up a working group to examine how to better use frontline staff on Metro, Bus and Ferry.

- Implement a change to the Penalty Fare Notice system to increase the deterrent.
- Work with local councils and police forces to ensure the journey to the stations are well lit and have CCTV.

### Technology:

- Examine if the use of Analytical CCTV is cost effective and useful to Nexus.
- Use a CCTV working group to examine where existing gaps are in CCTV coverage.
- Further roll out the use of Body Worn CCTV across the Metro.

- Pilot a trial covert surveillance scheme in the Metro depot
- Use further plain clothed patrols of Customer Service Assistant's to tackle fare evasion in data driven hotspot
- Increased gatelines at more Metro stations and remote monitoring can help to tackle fraud, anti-social behaviour and provide customer reassurance.

### Consultation and Liaison:

- Set up a "Meet the Manager" type campaign and ensure representation from key areas across the business at the events.
- Work with Youth Offending Teams to incorporate SafetyWorks! into the rehabilitation program.
- Reach out to colleges and 6th forms to encourage the introduction of "Travel Ambassadors".
- Introduce an age-appropriate Safety Works course for 15–18-year-olds.

### Connectivity

- Improved connectivity and integration between transport modes will reduce risk to safety and security when travelling between stations.
- Active modes of travel should be improved with increased lighting and CCTV on popular walking/ cycling routes.

### Through delivery of the NERMS we will improve the safety and security of rail and Metro travel by:

- Maintaining enhanced presence on trains and at stations.
- Providing safer routes to stations.
- Raising the security standards at stations and on trains.
- Undertaking targeted initiatives and campaigns to improve passenger safety.

# 11. Appealing, Sustainable transport choices

**The region must introduce measures which make sustainable travel a more attractive, convenient and easy alternative to getting around by car. Only through this, will modal shift occur and patronage increase.**

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Our ambition is to have improved, greener and more sustainable transport options, including public transport, cycling and walking. Our aim is to deliver continuous improvement to a modern, integrated transport system that underpins our economic ambitions and encourages people to travel more sustainably.

We have a solid foundation upon which we can continue to build a greener and more sustainable transport network across our region. The emphasis of this chapter will focus on ways to increase patronage on rail and Metro by making it more attractive to retain existing users and encourage new users.

Some of the key aspects are covered in other chapters including Safety and Security and the benefits of new rail and Metro trains and carriages.

Thus, the Key aspects covered in this chapter are:

- Improved Customer Experience
- Ensuring punctual and reliable services
- Affordability and value for money.

Under the changes being looked at following the Williams Shapps Rail Plan the North East will aim to work with the Great British Railways Transition team to better align influence and accountability enjoyed on the Metro with that on Local rail in particular. This work is described in more detail in the Integration chapter.

### Issues in the North East

#### Customer Experience

Customer experience is high on the agenda for many businesses and their customers. More than two-thirds of companies now compete primarily based on customer experience. Over the next five years, customer experience is expected to overtake price and product as the number one brand differentiator. Research from PWC has found that 73% of customers point to experience as an important factor in their purchasing decisions, behind price and product quality. Furthermore, 43% of consumers would pay more for greater convenience, and 42% would pay more for a friendly, welcoming experience. Failing to meet customer expectations has been shown to have twice the negative impact as delighting customers has a positive impact. Nexus have recognised the importance of improved customer experience and are producing a Customer Experience Strategy to focus on improving positive customer experience.

Therefore, improved customer retention often provides the most obvious rationale for making customer experience improvements.

#### Punctuality and Reliability

Passengers repeatedly ask for certainty that their train will arrive on time. To compete with the convenience of the car, public transport needs to offer certainty of journey (as far as is practicable). Delays to services, infrequency and lack of accessibility can make customers view rail and Metro as an unreliable form of transport, especially in comparison to car travel.

#### Affordability and Value for money

Pricing and affordability can be a barrier to sustainable transport use. Transport poverty can be the result of low income, poor availability of public transport and needing to make lengthy journeys to access essential services. The impacts of transport poverty are worst for disadvantaged people in rural areas according to a recent Evidence Review for the Department for Transport. Improved ticketing and integration of public transport services can provide better value for money.

Passengers choices can depend on certainty that their train get them to their destination on time. To encourage a modal shift public transport needs to offer connectivity and timely updates for alternative routes if a delay occurs which would be a whole network approach.

### Where are we now?

#### Customer Experience

Rail and Metro operators regularly survey their passengers for feedback on the customer experience. In addition, Transport Focus also regular conduct surveys to ascertain the current level of feeling amongst passengers.

The Spring 2020 Transport Focus Customer Satisfaction Survey found that only 77% of Northern Rail customers were satisfied with their journey. This was the second lowest score across the country. 73% of customers were satisfied with their station, a reduction of 6% since spring 2019. Only 30% of customers were satisfied with how Northern Rail deals with delays; whereas 36% rated it as poor/ dissatisfied.

Respondents to a 2019 Nexus Insight Panel Survey voted the local rail and Metro network as most important to invest in to provide benefits to the North East.

Before taking a Metro journey passengers voted these as the three most important items:

- Cost/VFM
- Security approaching the station
- Facilities for buying tickets.

Current Nexus customer surveys show that customer satisfaction is currently at 80%, the highest it has been for 7 years.

**Punctuality and Reliability**

Rail and Metro record their punctuality and reliability on a regular period by period basis. Pre Covid 73% of Northern Rail customers were satisfied with the punctuality and

reliability of the services. However, as of the Spring 2020 Transport Focus Customer Satisfaction Survey satisfaction has fallen to 63%.

If the Metro is reliable then journey times are not dependent on other factors ( unlike car journeys that are often subject to delay through congestion) and the Metro will be punctual. Metro has become more punctual in 2020/2021.

**Average Metro punctuality**



**Affordability and value for money**

In a 2019 Nexus Insight Panel survey, Cost/ Value for Money ranked highest importance for Metro passengers but only 62% of respondents felt the ticket offered fair, good or very good value. Similarly, on our local rail services where only 60% of passengers in our region were satisfied with the price of their journey. Integrated and easy to use ticketing would provide better accessibility to customers.

Jobcentre Plus Travel Discount Card is provided to those unemployed claiming Jobseekers Allowance or Universal Credit for 3-9 months (18–24-year-olds) or 3-12 months (over 25s). Cardholders are entitled to a 50% discount on selected rail tickets. There are also a range of discounts available to those in full time education e.g., Home to School Transport, Care to Learn and the 16-25 Railcard. There is Concessionary Travel Scheme for Tyne and Wear residents aged under 16 for use on Metro journeys. This helps to provide affordability to those in need to allow them to access education and employment opportunities.

Integrated and easy to use ticketing would provide better accessibility to customers.

### Where do we want to be?

#### Customer Experience

We want people to experience excellent customer service no matter the network they using. Many of the providers have great customer service strategies in place. The Metro Customer Experience strategy aims to deliver a greater customer experience for our passengers by analysing customer feedback data to make targeted improvements in our physical and digital presence, along with embedding customer-centricity throughout Nexus.

Northern Rail have a Customer Charter as a way of showing their pledge to provide the highest quality rail service.

They have also shown commitment to improving customer experience by introducing a new customer interaction tool. Transpennine have also shown commitment to customer experience with the introduction of a customer and community insight panel, hoping to increase ongoing dialogue.

Our strategy will work to provide easy to plan integrated journeys, easy product purchase, safe and secure routes to stations, welcoming stations, clean, comfortable and reliable trains.

We also hope to increase discourse between operators, authorities and passengers so that the system works for all users.

#### Punctuality and reliability

We aim to provide improved punctuality and reliability across rail and Metro.

Northern set standards for train punctuality and make every effort to get customers to their destination on time. Their 2020 target was to ensure 79% of trains arrive within 3 minutes of their scheduled arrival time.

Metro aim for the highest levels of reliability and performance and measure punctuality performance against the timetable. They publish the results every four weeks on Passenger Charter posters at stations and online. Their most recent results for September – October were 82% of trains arriving within 3 minutes later or within 30 seconds earlier than scheduled. They aim to provide the best possible punctuality, reliability and customer service. They will refund customers if trains are delayed more than 15 minutes than advertised, whatever the cause.

Improved reliability can be provided with well-maintained and updated infrastructure; such as new fleets, improved signalling and better accessibility.

#### Affordability and Value for money.

We want to provide improved affordability and value for money and reduce the impact of transport poverty on those in need of affordable access to rail and Metro.

Improved ticketing through integration and easier payment will provide better access. Nexus have been working on their Products and Payments Strategy to give customers the ability to buy products at home, at work or the move, making it easy for the customer. Fares will be affordable without placing undue subsidy burdens on local taxpayers and set at levels that allow Nexus to continue to invest in Metro. Payment methods will maximise customer convenience and revenues, deliver best value and minimise transaction costs.

A review is also underway on the National rail network. We would like to see simpler fares and better integration of ticketing between Metro and local rail which would be easier to achieve through further levels of devolution to the North East.

### How do we get there?

#### Customer Experience

Understanding of customer experiences and needs allows specific changes to be made to provide a better experience for passengers. Rail and Metro conduct regular Customer Experience surveys and produce strategies based on the key themes.

The published Metro Customer Experience strategy sets a clear vision and interventions needed in a collective sense of purpose to serve our customers.

Northern Rail have a Customer Charter to show their pledge to provide the highest quality rail service, including:

- Easy access to ticket services
- Reliable trains that run on time
- Clean and safe trains and stations
- Helpful customer service staff throughout your journey
- Extra help if you need it
- Clear and helpful travel information.

Other areas we wish to improve are:

- Refurbishment of Metro and local Rail stations to provide more welcoming and community-based stations.
- Improvements to the signalling system is necessary to provide more reliable and punctual Metro services.
- Improved connections with walking, cycling and other transport services as well as supporting sustainable travel in rural areas with electric vehicle charging points in car parks will provide more sustainable choices to rail and Metro users.

These link into our ambitions within the Transport Plan for encouraging modal shift (away from car) across the region in rural and urban areas. By having more local control and powers, we are confident we will can deliver a better experience for our customers based on the needs of the North East.

#### Punctual and reliable services

Improved signalling, the new Metro fleet (and future Northern trains) and improved accessibility will improve the reliability of rail and Metro.

The new metro fleet will be 15 times more reliable than the current fleet based on the current fleet performance over the last 4 years.

Journey times must be reduced for rail to be more competitive with road-based journeys. This could be achieved by line speed improvements and longer-term electrification of lines or higher performing none diesel trains. Longer-term electrification of the Tyne Valley route is desired to provide greener journey opportunities, linking to the existing ECML and WCML electrified routes, especially given the TVL's secondary function as an ECML diversionary route.

#### Improved affordability and value for money

Tickets need to be made more affordable and easier to purchase/ understand to ensure purchase of the correct ticket type. The use of digital technologies, apps and contactless payments can improve a customer's experience by ensuring seamless transactions across all modes, reducing the complexity of understanding and purchasing the 'right' ticket.

We must also investigate if the impacts of Brexit and Covid-19 have changed the way in which people perceive affordability to previous years.

This can help to increase use of our rail networks and meet today's growing consumer expectations by making best use of new technological platforms.

The costs of cash handling on the Metro network account for around 0.5% of fares income – any reduction in these ongoing costs could be re-invested into new product development and reducing the cost per transaction associated with non-cash payment methods. Cash lying in TVMs at stations heightens the risk of theft and vandalism, resulting in substantial lost revenue and repair costs.

Improved affordability and value for money can be provided by:

- Move single trip, day and season tickets away from paper products to Pop PAYG.

- Move all season ticket product purchases and renewals online
- Integration of smart products
- Introduce payment apps and remote top-up facilities and download app
- Introduce mobile ticketing and EuroPay Mastercard Visa (EMV)-based products
- Utilise account-based technology
- Investigate use of host card emulation technology
- Development of app-based portal for New Mobility Services
- Remove cash as a payment mode
- Marketing and media campaigns.
- Further use of 'discounted' travel such as the 'take kids for free' initiative on metro and discounted travel for those aged 18 and under.

### Maintained and Modernised infrastructure

To provide a satisfactory customer experience, punctual and reliable services and affordable ticketing we must provide well maintained and modernised infrastructure. This is covered in detail in chapter 6.

### Metro

The new Metro fleet arriving in 2024/25 will help address issues of reliability and availability, providing a more appealing service through increased frequencies and a better on-board travelling experience.

Getting to the station on a bike and taking it on a train will be made easier. This links to the Healthier North East objective for encouraging more sustainable journeys to be made using our region's rail networks, whilst also helping to expand the reach of our existing rail stations beyond the traditional distances typically associated with journeys on foot.

### Devolution

Through expanded devolution from the current partially devolved system of TfN, the North East will have greater control over more aspects of rail in the region. This will allow for greater controls of the fares system in the region, so that ticketing can be made multi-modal, and prices reflect the needs of the region. We would also have greater control of infrastructure and line of routes so that the network is more efficient.

**Through delivery of the NERMS we will improve the attractiveness of rail and Metro, encouraging more passengers by:**

- Improving the Customer experience.
- Integrating fares and ticketing across rail, Metro and Bus.
- Improving reliability and punctuality of services.
- Extending the reach of local rail and Metro to serve more communities.



## Description of project

To establish better connectivity for Northumberland and the wider region, the Northumberland line rail project will bring passenger trains back into service between Ashington and Newcastle.

The Scheme has the potential to transform the economic landscape of South Northumberland. It will help residents access employment opportunities in business clusters along the corridor. It will also incentivise new employment and training opportunities across the region, particularly in the growing renewable and advanced manufacturing sectors. This will attract new investment to the region and help the transition to a clean growth future.

Led by Northumberland County Council and through positive working with the Department for Transport, Network Rail, Northern Trains Ltd, Nexus and other key partners, this ambitious project will reintroduce passenger trains on the line by December 2023.

The new half hourly passenger service includes station stops at Ashington, Bedlington, Blyth Bedside, Newsham, Seaton Delaval, Northumberland Park, Manors and Newcastle Central.

The service will provide seamless interchange with the Metro system via a new station Northumberland Park allowing easier travel throughout Tyne and Wear. Improved access to the national rail network at Newcastle Central is a further benefit.

## Innovative solutions implemented

One of the first pilots for a national initiative called 'Project Speed', both project costs and delivery time were reduced through innovative working across the project delivery partners.

Another innovation is to enable full fares and ticketing integration between the Metro network and the Northumberland line. This will create a joint fares structure based on an expanded Metro zonal map and enable ticket acceptance on both networks.

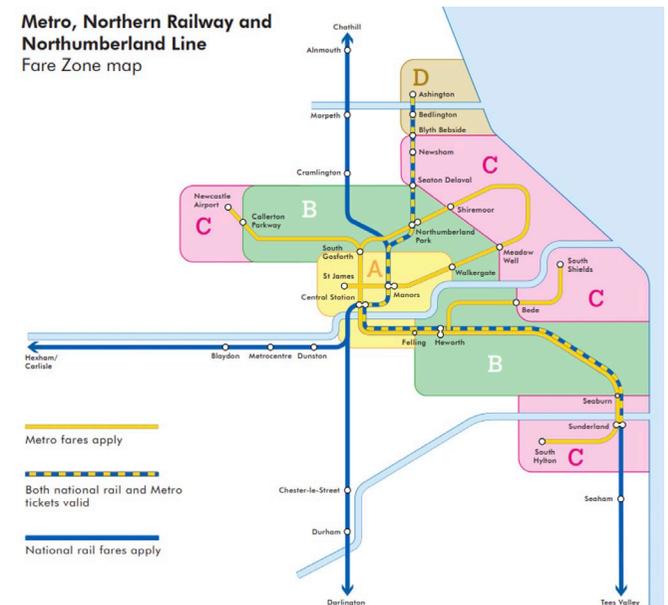
The project has utilised Land Value Capture and secured Contribution Agreements for 16 development sites which have the potential to generate a significant capital return.

## How does the project help meet our objectives?



The reintroduction of passenger services has the potential to deliver economic benefits of up to £470m as well as offering a real alternative to private car use for local journeys.

Metro, Northern Railway and Northumberland Line Fare Zone map



## 12. Integration

**We will seek better integration between local rail, Metro and bus to provide one coherent public transport network covering the whole of the North East. We will expand, improve and integrate our Rail and Metro network through a series of network extensions, enabling rail to unlock greater access to opportunities for people, communities and businesses. We are confident that this will result in growth in modal share and patronage on our rail and Metro network.**

### Barriers to effective Integration in the North East

There are a number of issues which provide barriers to good integration between public transport modes. This is a problem because ultimately passengers have a choice and if they feel that travelling between public transport modes is too difficult, confusing and frustrating then they will at best stick to one mode or alternatively travel by car. As passengers will already be considering journey times and value for money – a seamless, hassle free, well integrated end-to-end experience is essential.

#### Inaccessible and unsafe locations

Rail and Metro stations, some of which were sited in the Victorian era, are not always in the ideal locations and poorly designed to meet the needs of new developments, emerging markets and to encourage greater accessibility to the local public transport network. Residents have also informed us that some walking routes to and from quieter, remote stations feel unsafe.

#### Physical Impediments

At too many locations passengers face physical barriers to integrated travel. Long walks from bus stops or between station platforms; a lack of car park spaces or inadequate bike storage facilities.

#### Active Travel

Whilst the provision of cycling parking at stations is improving and there have been increases in the number of cycles accepted on trains, more can still be done. The limits on the carriage of cycles on trains and the different booking arrangements between train operators remains confusing and continues to act as a barrier to use.



### Timing and Coordination

Integration between public transport modes is made harder by difficult service patterns rather than complementary timetables. Often local rail, Metro and bus timetables lack the coordination passengers require, leading to longer wait and journey times. For some local rail journeys integration is also limited by reduced station calling patterns. Too many passengers experience the frustration of seeing their next train or Metro depart into the distance just as they are alighting the bus or first train leg of their journey.

### Fares & Ticketing

Rail, Metro and Bus fares are seen as complex by many passengers. There are numerous competing options on offer which makes obtaining the best deal very difficult. The situation becomes even more confusing when using multiple modes. Passengers believe an integrated public transport network across the region would provide better Value for Money. The ticket options need to be made easier for passengers with simpler fare structures. Tickets should be provided and purchased in 'smarter' ways across the whole public transport network.

### How integration can be improved and the benefits to passengers

Integration of the Rail and Metro networks and improving their connections with the wider public transport network and active travel modes will provide greater access to opportunities for people, communities and businesses.

### Accessibility

Expansion of Rail and Metro networks coupled with closer links with other modes of transport will increase the levels of accessibility for all. A wider rail network, which reflects both the current and future economic geography of our region, could be created across the North East by reviving disused routes and integrating them into our existing networks. This can be done at a lower cost than new-build railways.

We want to deliver new stations on existing lines and reopen routes, such as the Northumberland Line and the Leamside Line, alongside Metro network extensions to widen access to jobs and training, grow the economy and reduce deprivation.

The Metro Flow project will see an existing freight line upgraded and electrified in South Tyneside from September 2022, making it capable of carrying Metro services. The project will allow Metro to increase the frequency of Metro trains to one every 10 minutes outside central areas and boost the capacity for an extra 24,000 passenger journeys every day.

### Park And Ride

Park-and-ride facilities make using Rail and Metro easier especially when passengers are not within walking distance of a station.

There are car parks at several stations letting you switch easily from car to the Train or Metro to avoid city centre traffic jams, or any trouble finding a parking space.

Metro has just over 3,500 car parking spaces at stations and is expanding this further at Callerton.

Any park and ride initiatives will include consideration of cycle users. The provision of Park and Ride may offer benefits to more rural communities as part of potential rural transport hubs at stations.

### Safety and Security

Shorter and safer access routes to Rail and Metro stations will improve levels of safety and security for users. Improved levels of safety and security will help to reduce the likelihood of incidents and increase the number of network users.

### Physical Impediments

Improved integration between local rail, Metro and other forms of transport must include physical measures on the ground which will make it easier and quicker for passengers to interchange with bus services, park their cars or bicycles at rail stations or more generally allow pedestrians to have improved access both into and between stations and platforms.

Station design standards as well as proposals to improve the layout of existing stations will be considered. This will involve consultation with local users and community stakeholders.

### Active Travel

We want to see the provision of suitable routes to and from our stations (Metro and local rail), coupled with secure cycle parking and where practicable on board cycle use

We want to help to encourage a modal shift to public transport with could result in personal health and fitness benefits resulting from increased exercise levels relative to car use. A high proportion of our passengers walk or cycle to Metro and local rail stations. We are planning to improve access to our stations through a 'healthy streets' approach.

We want to develop the carriage of cycles on trains, where practicable. The new Metro fleet will make it easier for people to take bikes on trains and allow Nexus to expand and make permanent its current long-term trial of bike access. We want to ensure users have access to substantial cycle parking facilities which are based on best practice principles in terms of security and design. This would include consideration of adapted cycles for people with disabilities. This could encourage more people to cycle to and from their local station.

### Timing and Coordination

Whilst acknowledging that there are wider network considerations, public transport connections at key interchange stations must be made as effortless as possible, especially if certain services operate hourly or not to a regular pattern. We must also consider and address uneven rail stopping patterns and adjust timetables so people can easily connect between buses, Metros and trains. This will significantly reduce passenger wait times and improve overall journey times. The introduction of a 10 minute frequency on Metro, as part of Metro Flow, will improve integration and reduce waiting times for passengers.

As part of the region's Bus Service Improvement Plan (BSIP) proposals 'Connect' will be the network of socially and economically necessary links between the local, sub-regional and regional centres in our region, complementing the Rail, Metro and new Interurban Express bus services.

In addition, there will be more early morning, evening, and overnight bus services as well as better connections beyond our boundaries.

### Fares & Ticketing

Integration of ticketing across the whole public transport network aims to make fares systems more equitable and simpler to use for all passengers across the North. This will improve customer experiences and in turn attract more users to the network. Work is progressing to enable full fares and ticketing integration on the Northumberland Line between the Metro and national rail networks, including ticketing, retailing and settlement arrangements. Fares would be based on the Tyne & Wear Metro fare zones, thus facilitating ticketing integration between Metro and Northumberland Line services. We will seek to build on this approach for other local rail lines. Pay As You Go journeys will be expanded to make millions more trips straightforward. Digital tickets across the network for a fully integrated ticketing offer to include local rail, Metro and bus services under the one system.

### Information Systems

Metro plans to invest £16m up to 2025 to provide improved real-time information including new screens and online app-based solutions, better interfaces with the Urban Traffic Management Control centre and closer integration with data feeds produced by National Rail.

An Intelligent Transport System (ITS) scheme is being delivered for Real Time Passenger Information (RTPI). Automatic Vehicle Location (AVL) data can be used in combination with data from Metro and Rail to feed all related Real Time Passenger Information (RTPI) infrastructure in our integrated transport system.

The region's Bus Service Improvement Plan (BSIP) proposes simple and intuitive information to make buses easy to understand and use, with improved integration with Metro and other rail services. Under the proposals, all interchanges and rail stations will be supported with multi-modal passenger information, showing real-time information about connecting journeys.

### Special Events

We need an integrated network that has the flexibility to meet local spikes in passenger demand. Our region is fortunate to have some major event venues and to hold significant annual special events including the Great North Run and Sunderland Air Show. Well integrated public transport and particularly Rail and Metro services play a massive part in the planning and successful operation of such events.

### Stations and Interchanges and park and ride

Stations and particularly interchanges are the focal points of a well-integrated network. We have mentioned the importance of stations in terms of accessibility, safety and the need for good facilities. Stations should look outwards as well as inwards and we will seek greater community involvement and benefits from stations and their assets.

Under the BSIP proposals a strategic plan will be developed to select 'hub' shelters that can serve as a community focus for interchange opportunities, between bus routes, with cycling and walking, with rail, ferry, Metro and our Pocket Park & Ride and Kiss & Ride. This will open up parts of the region which currently do not have access to the rail network, and increase modal share.

### Community Rail Partnerships (CRPs)

Community Rail Partnerships are the key mechanism by which more local community involvement in rail is encouraged. Since the inception of the CRP idea numerous successful partnerships are now in operation. This includes two within our area, the Bishop Auckland to Darlington and the Tyne Valley CRP which covers the line from Newcastle to Carlisle.

Both these partnerships have been proactive in promoting their respective lines and increasing ridership. CRP members have a wealth of knowledge, strong community ties and can act as the eyes and ears of the rail network.

### How improved integration will meet our objectives

The Transport Plan set out a target to have a properly integrated and efficient public transport network across the whole of our region, including simpler fares and ticketing, easily available and accurate travel information and seamless interchange between different forms of transport by 2035. The ambition is to create one, total network approach, aligning different types of transport together. We want to create a transport network where rail, Metro, bus, cycling and walking work together to better connect all of our communities and increase modal share.

### Through delivery of the NERMS we will work to improve integration of local rail and Metro by:

- Working with GBR to seek greater influence over local rail to match the flexibility and accountability of Metro.
- Coordinating services and improving interchange between all modes of transport.
- Integrating fares and ticketing across rail, Metro and bus.

## **13. Measures of Success – Key Performance Indicators**

### **We have developed a set of Key Performance Indicators (KPIs) that are designed to monitor the overall progress of our Strategy with respect to our key objectives.**

In this respect they can be thought of as a cross-cutting set of indicators showing the direction of travel that our strategy needs to achieve to deliver our vision and objectives.

We have developed these KPIs to test whether we are moving in the right direction over the coming years to ensure that Rail and Metro plays a key part in helping the region to achieve its wider transport objectives

We believe that by following this strategy, we can transition the number of journeys people make onto more sustainable and public transport modes such as Rail and Metro. This will drive our economy and improve our environment, achieving our vision and objectives by 2035. Our proposed KPIs have been prioritised based on what we aim to achieve over the period to 2035. This following section sets them out in detail.

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Between TOCs, there are different methods of collecting data e.g., Northern satisfaction is measured as a percentage whereas Nexus/Metro satisfaction scores are a score out of ten.

## Appealing sustainable choices

### Overall passenger usage

Metro – 680,000 Journeys pw  
NERMS area stations - 9,904,258 (19/20)

A key part of this strategy is to grow the use of local rail and Metro services to help tackle the challenges set out in the strategy.

We will measure annual passenger flows using existing and any enhanced data collection sources.

- MEASURED ANNUALLY

## Overcoming Inequality and Growing our Economy

### Access to key NPIER sites by Metro and (local) Rail

Baseline data to be established

- The local rail and Metro systems in the North East play a key part in supporting the local economy and ensuring that people have access to employment in the region. The strategy aims to make sure that existing access is maintained, and also new access opportunities are explored.
- We will measure the increased access to employment sites by rail and Metro within 30 minutes and 60 minutes of a station.
- MEASURED ON A 5 YEAR BASIS

### Increasing economic value of Metro and (local) Rail to the North East

Measured as £224m GVA in a 2019 study

- We aim to refresh this work on a 5 year basis.
- If each journey was worth £8.50 in 2019 the total GVA figure should grow in the years ahead.
- MEASURED ON A 5 YEAR BASIS

## Appealing sustainable choices

### Access to stations

Baseline data to be measured in house for stations

- Increasing the number of people who have access to Metro and (local) Rail so that the Metro is a more appealing choice to travel rather than individuals relying on or turning to private vehicles as a first choice.

We will measure the number of households within 1200m of a local rail or Metro station through the use of a mapping tool.

- MEASURED ANNUALLY

## What do you think?

### Passenger Satisfaction

TOCs – 75% (Transport focus average for 2020)  
Metro – 7.75 / 10 (Result for September 2020)

- Customer satisfaction is one of the key elements to be measured to indicate a positive direction of travel of improvements in the rail and Metro networks of the North East. By measuring passenger satisfaction, we can aim to retain current passengers but also encourage new passengers through promoting positive experiences.
- Measured with the continuation of public forums and surveys – data can be provided by Nexus for Metro; Transport Focus for rail generally and we will work with the train operators to obtain targetted data for local rail.
- Nexus release customer satisfaction data monthly and both the TOCs in our area have shown commitment to improving passenger satisfaction with the introduction of new customer interaction methods.
- MEASURED ANNUALLY

## Carbon-neutral Rail and Metro in the North East

### North East Fleet

TOCs: 100% Diesel | Metro: 100% Electric

- An important step in reducing the effect greenhouse gases and polluting gases in the North East is by reducing the number of vehicles using diesel.
- We will compare the number of non-diesels, updated trains and alternative fuel trains against the current fleet to see a trend towards a carbon neutral trains.
- MEASURED ON A 5 YEAR BASIS

## Carbon-neutral Rail and Metro in the North East

### Rail freight uptake

Rail freight share 12% (2016)

1 rail based freight train can take up to 75 HGVs off the road, vastly reducing the gases emitted on the roads and also freeing up road space leading to less congestion.

Using existing metrics we will measure the rail freight modal share against lorry use.

- MEASURED ON A 5 YEAR BASIS

## Rail and Metro for a healthier North East

### Walking and Cycling to stations

Metro – 82% of passengers walk to stations/0.16% of people cycle to stations  
TOCs – still awaiting data

- We wish to make rail and Metro part of an active journey in the North East and therefore we aim to promote the use of the rail and Metro systems as part of and a step on an individuals journey while walking or cycling. We aim to do this by improving safer routes to Stations , increasing the availability of cycle infrastructure at stations and on the trains themselves.
- We will measure the number of people cycling to stations.
- We will measure the number of stations that meet 'Healthy streets' accessibility standards.
- MEASURED ANNUALLY

## Safe and secure public transport

### Safe and Secure travel

Metro: All 60 metro stations are fitted with CCTV, Full platform lighting and help points on the platform – Security survey score: 70.1

Northern: 3 Stations have help points, 23 have platform CCTV and all stations have platform lighting but with secluded areas – 68% satisfied with personal safety in station

- It is well known that people will not travel on a rail system if they do not feel safe. Safety is paramount on any stage of the journey, from the journey to the station, in the station and finally being on board.
- We will measure the perception of safety on the networks using passenger surveys
- MEASURED ANNUALLY

## Appealing sustainable choices

### Punctuality/ Reliability of the network

TOCs - 90% to 3 minutes / 98% to 15 minutes  
Metro 87.50% - % of trains that leave 'on time'

- For metro data, 'On time' is defined as between 29 seconds before and 3 mins after the timetable time
- Punctuality will be measured using data provided by the train operators and Nexus. The data will be broken down by lines of route
- We will measure reliability by recording the number of service cancellations and changes to scheduled services.
- MEASURED ANNUALLY

### Affordability/ Value for Money

TOCs: 52% | Metro: 6.6/10

- Affordability of the network comes under constant pressure as it is often one of the key drivers of poor customer feedback. Therefore it is key to measure public perception.
- We will measure, through passenger surveys, public perception of value for money/ affordability.
- MEASURED ANNUALLY

### Monitoring and evaluation

To ensure that our Plan's policies and interventions are helping to meet our objectives, we will monitor and evaluate the performance of our Key Performance Indicators and use the data to enable us to adjust our approach if necessary.

Performance will be reported to the Joint Transport Committee at key points.

Individual projects will be required to submit Monitoring and Evaluation Plans within the business cases at stage gates of the framework.

These projects should undertake a detailed impact assessment of the transport, employment and economic impacts of investment in line with DfT guidance. Results will help us better understand the overall plan's performance against the KPIs. To make best use of our local and national data assets the Transport North East will continue to work in partnership with:

- The seven local authorities in our region;
- Nexus;
- Regional Road Safety Resource;
- The North East Local Enterprise Partnership.

#### Central Government Sources:

- Department for Transport;
- the Department of Business, Energy and Industrial Strategy;
- the Office for National Statistics; and
- Public Health England;
- Government Office for Science
- Transport for the North; and
- Public Transport Operators.

### Targets

Funding has yet to be guaranteed from Government and other sources for the schemes which will deliver improved performance in the KPIs. Once funding is received, we will consider what targets can be introduced for these measures.

## **14. Investing in Rail and Metro – Delivering our Strategy**

### Introduction

To realise the ambitions of this strategy, Transport North East and Nexus will work in collaboration with Central Government, Network Rail (and in time Great British Railways), Transport for the North, transport operators, our constituent local authorities, the North East LEP, businesses, the third sector (particularly the Community Rail Partnerships) and crucially local people.

Our plans for investment have been developed by the partnership working that led to the creation of the North East Transport Plan. These proposals have been embedded into the strategy and expanded on to show how they meet Transport Plan and Rail and Metro strategy objectives.

All improvements that we deliver will be fully developed as projects in accordance with the region's assurance framework or that of partners. This will demonstrate the propositions are socially acceptable, economically viable and deliverable as well as supporting the achievement of objectives nationally, regionally and locally.

### Identified Programme

Our programme of investments stems from the North East Transport Plan. This sets out a live programme of interventions. All of these interventions were initially tested to ensure that they are consistent with Transport Plan objectives and that they have a degree of deliverability.

But that is not the end of the process: they will all be subject to more rigorous testing and appraisal and will only be delivered where they have demonstrated through detailed business case development so that they can appropriately contribute towards the delivery of the objectives. If schemes cannot contribute towards objectives and don't support the Transport Plan, they will not be taken forward for delivery.

This strategy has utilised the Transport Plan pipeline and Nexus' capital pipeline schemes and has identified schemes that will support rail and Metro strategy objectives from the above work packages.

In turn these are presented as schemes that can be delivered in varying time horizons, these are:

- **Schemes for delivery in the next five years: requiring funding to be accelerated:** These are either smaller scale schemes that can be quickly developed and delivered or larger schemes at an advanced stage of development. Accelerating development funding will move them to 'Shovel Ready' status.
- **Schemes for development and delivery in the next ten years:** These again will be a programme of smaller schemes coupled with ambitious schemes requiring development funding to bring them to an advanced stage and move to delivery; and
- **Schemes for development and delivery beyond 10 years:** These ambitious schemes are long term visions which require development funding to bring them to an advanced stage and move to delivery.

Our investments surround:

- A mix of customer experience enhancements,
- New infrastructure (to extend the reach of local rail and Metro and provide enhanced regional and national connectivity),
- Asset maintenance and upgrades (to future proof the network),
- Cleaner and greener trains and Metros, and
- More accessible and welcoming stations.

This programme has been further tested to exemplify how it meets the objectives and the Key Performance Indicators of the Rail and Metro Strategy. The primary objective of each scheme has been identified. This is set out in the table overleaf.

## Delivery Options

This programme is broadly split into three delivery routes

1. Projects delivered by Transport North East and constituent authorities;
2. Schemes specific to Metro infrastructure, delivered by Nexus; and
3. Rail schemes delivered by Great British Railways on behalf of Central Government or any subsidiary bodies.

The remainder of this chapter is split into the three delivery routes and the actions that Transport North East will take in order to realise this ambition.

### Projects delivered by Transport North East and constituent authorities

The Transport North East Programme team will programme manage this programme and will be responsible for sponsoring the development of various schemes and projects that support this Plan, as well as a series of region-wide initiatives.

Implementation of the interventions that are regional initiatives are within the region’s control and will be delivered in accordance with the region’s programme management and assurance frameworks.

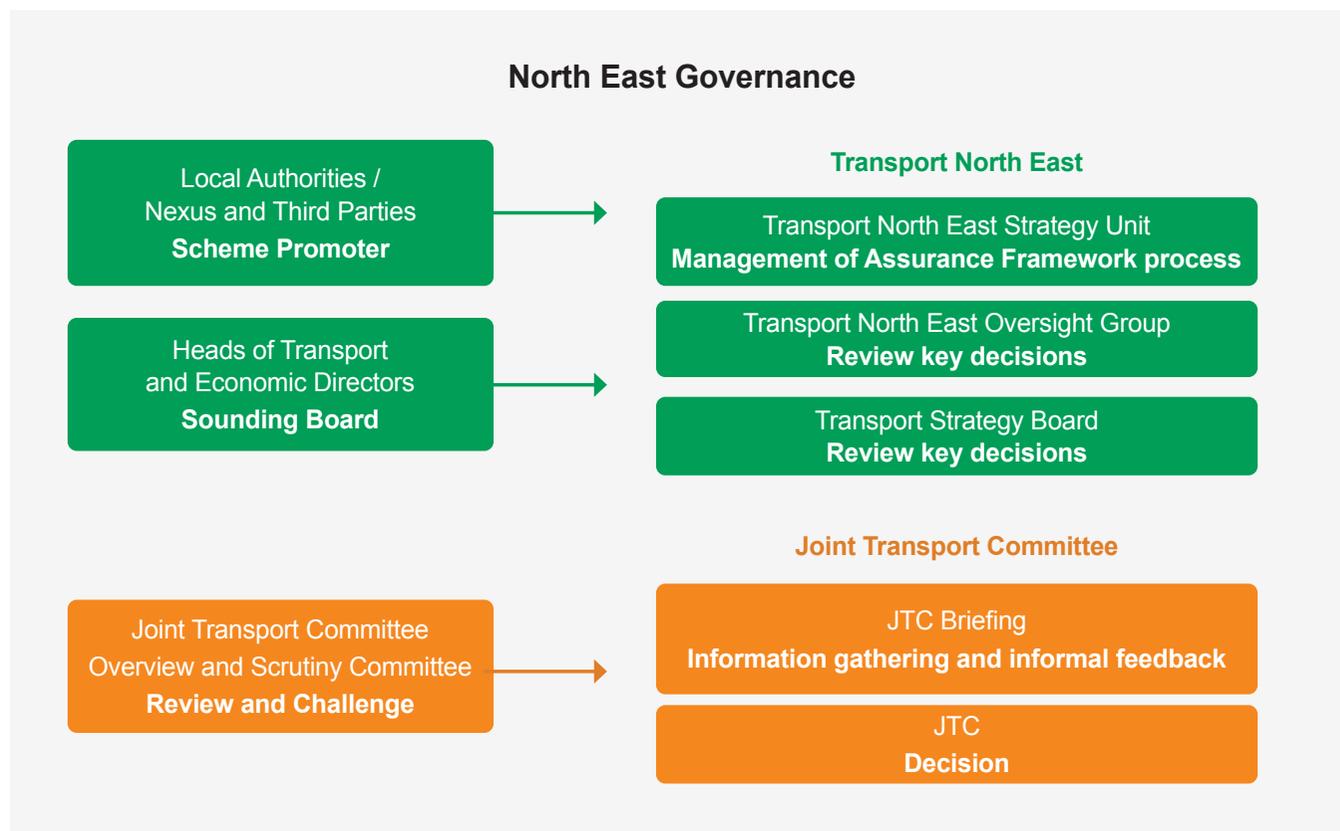
Transport North East’s role is varied in some cases we will act as the promoter of schemes and will be responsible for delivery and in other circumstances delivery may be undertaken by another organisation, for example our constituent local authorities with Transport North East securing funding at a regional scale and providing technical assistance as required.

### Programme Management and Assurance

The funding required to realise the ambitions of this strategy is substantial, however the region is fortunate to have a well-established and ratified Transport Assurance Framework in place which is proportionate to the nature scale and value of schemes.

That has guided the delivery of our devolved £270 million Local Growth Fund for the last six

years and was flexible enough to deliver our Transforming Cities Fund programme. The heart of our Transport Assurance Framework is a scalable series of gateways that provide our governance structure with the confidence that each component investment is delivering on the requirements of the programme and delivering the NERMS and Transport Plan outcomes that have been ascribed to that investment.



Our assurance framework has been developed in stages represents a gateway in the process. Approvals and reviews are applied at each stage of this process.

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### Project Delivery Lifecycle



<b>Concept</b>	Transport improvements of any kind can enter the programme as concepts (any idea can be considered)
Approved gateway, proceed to Objective assessment	
<b>Objective Assessment</b>	Schemes are assessed based on the transport plan objectives and those of individual funding opportunities with a positive and balanced view sought.
Approved gateway, proceed to Business Case Development assessment	
<b>Business Case Development</b>	Some schemes are subject to the development of business cases which are developed in line with the latest government guidance / the region's assurance framework. These include environmental and economic appraisals of the impact of schemes
Approved gateway, proceed to Consultation and powers assessment	
<b>Consultation and powers</b>	Some schemes may require consents or powers such as planning permission or traffic regulation changes, this will be sought and members of the public will have the chance to comment and influence plans
Approved gateway, proceed to Reporting assessment	
<b>Reporting</b>	Regular reporting to programme board and members of the Joint Transport Committee is undertaken when decisions are to be taken.
Approved gateway, proceed to Funding and Delivery assessment	
<b>Funding and Delivery</b>	Most schemes require funding to enable their delivery, this is only confirmed once the scheme is developed all risks have been considered and the case has been made. Funding will come from a variety of sources.
Approved gateway, proceed to Monitoring and Evaluation assessment	
<b>Monitoring and Evaluation</b>	The Transport Plan will be monitored and evaluated alongside the individual scheme components to ensure we are addressing the objectives.
<b>Updates</b>	Our programme of interventions will be updated continuously with new ideas added to reflect the most pressing issues facing the region, ensuring transport investment is agile to change.

### Sequencing and Prioritisation

To ensure the strategy demonstrates a robust pipeline, the interventions selected have initially been appraised against the Plan's vision and objectives to ensure strategic fit. The interventions that form part of the pipeline for the Plan have to be developed to Stage 0 in accordance with the region's assurance framework. This ensures a consistent level of detail is available for all schemes.

Sequencing has been developed into a series of five-year blocks over the lifetime of this Plan, linked to stages of development through the region's Transport Assurance Framework.

Crucially, where there is evidence around the need for a project to be developed in a certain timeframe to realise wider benefits, this has been reflected in the framework.

The North East has a track record in selecting and prioritising projects which balance objectives around the economy, environment and society. It is important that the Plan is flexible to respond to funding opportunities and as such a prioritisation process has been designed incorporating the assessment against the vision and objectives that can be deployed based on the fund that is available.

### Costs and Funding

The main source of funding for transport is from Central Government. Previous rounds of the Local Growth Fund (LGF) and Transforming Cities Fund show how the region can deliver significant packages of investment. The Plan will be refreshed on a regular basis.

The exact costs will vary and will need to be carefully monitored. Based on our latest estimates, a funding requirement of circa £783m worth of capital investment would fund the schemes highlighted in this strategy with a further £120m revenue to maintain and operate infrastructure and services. (All our schemes are set out in the tables and forthcoming maps). This figure excludes the estimated cost of £2.5bn for all Metro and rail extensions included in this strategy. The extension proposals require further refinement and a separate funding strategy.

This will grow as further schemes are developed over the lifetime of the Plan. We believe this to be a fair share of national transport funding which should be allocated to our region from Central Government in the period 2022-2035.

Transport North East works with and will continue to work with Government to secure funding through competition based funding and longer-term devolved settlements to unlock schemes.

For certain investments, developer contributions will form a viable part of the financial model. In others land value capture could be a viable proposition. We will work with the individual authorities to secure appropriate levels of contributions or works in kind where the investment is directly related to the development and is needed to mitigate the impact of the scheme in question.

Realising the ambition of this strategy will be partially reliant on the ability to secure the necessary powers and consents for delivery. The appropriate power and consent route will be determined through the development of each project in full consultation with the local planning authority / DfT / Planning Inspectorate.

Alternative funding possibilities that will be investigated on a case by case basis include.

- Borrowing against future fares revenue, where there is demonstrable demand evidenced by a sound business case;
- Other Regional funding streams, such as the Levelling up Fund;
- UK Infrastructure Bank loan finance;
- Commercial sponsorship opportunities; and
- Local government funding.

### Example Initiatives:

North East Rail Concession, Improved Facilities and information at stations.

### Schemes specific to Metro infrastructure, delivered by Nexus

Metro is a vital public service which will cost £101.3m to operate in 2020/21. Whilst almost half of Metro's total operating costs are covered by fare income, it places heavy reliance on a sizeable amount of public subsidy in the form of revenue grant from central government and the NE Joint Transport Committee (circa £63.7m (made up of Covid Emergency grants, Metro Rail Grant and BSOG, ferry funding and NESTI) and circa £59m respectively in 2020/21). In addition, capital investment in Metro has traditionally been funded from capital grants is also financed from central government. Looking ahead, it will be important to secure an on-going long-term commitment to a continuation of this level of public subsidy, and discussions are underway to understand the government's position.

Metro travel was significantly impacted by the Covid-19 lockdown and April 2020 saw passenger levels fall by 95.5% in comparison to the same month in 2019. In mid-2020, the system was operating at a loss of approximately £0.9m per week, excluding costs associated with making the system Covid secure. However, passenger numbers have started to recover (albeit to around 87%

of normal mobility levels) than the local rail services. The funding model for operation, maintenance and renewal of the Metro network continues to be challenging and multi-year settlements are required as part of the funding model to place operational costs on a sustainable footing.

The cost of improving and expanding the Metro system will also be significant. Although the options identified in this strategy aim to explore the opportunity of using existing assets wherever possible, nevertheless the capital construction costs of any new railway lines are likely to run in the hundreds of millions of pounds, and new operating costs will be added to existing levels of expenditure. To achieve expansion of the system, investment decisions by Network Rail, Nexus and local authorities will need to be aligned and a clear demand identified for each addition to the network.

### Programme Management and Assurance

In some cases, funding for the improvement of the network will be secured by Transport North East for delivery in this scenario the assurance process noted above will be triggered. In other scenarios direct grants will be allocated to Nexus for funding management and delivery.

Nexus has an inhouse project management function and process and reports directly to the Joint Transport Committee including the Tyne and Wear Sub-Committee on the progress of scheme delivery. Delivery is undertaken in accordance with the Corporate Plan which provides the framework for Nexus to deliver its services and prepare for the future.

### Posts and Funding

The Nexus budget is set and monitored by the Joint Transport Committee (JTC) Policy is set and activities overseen principally by the Joint Transport Committee's Tyne and Wear Sub-Committee.

In January 2020, the NECA agreed a budget and issued a transport levy to the constituent councils within Tyne and Wear so as to meet a proportion of its liabilities/expenses for 2020/21. The apportionment of the levy is calculated by reference to the total resident population of each Council. This is done in accordance with Section 7(5) of the Transport Levying Bodies Regulations 1992. In the case of Tyne and Wear, the NECA and NTCA set a levy for the financial year 2020/21 of £59.0m. This levy funding pays for the local transport Nexus provides including free or cheaper concessionary travel, subsidised bus services (about 10% of routes in Tyne and

Wear including school buses), bus stations and stops, the Shields Ferry and specialist services for disabled people.

Metro does not make a profit and all the revenue from it is reinvested in providing a service for local people.

Capital and major maintenance grants are therefore needed to deliver major investments, and this can come in the form of devolved regional funds, grants direct to Nexus, developer contributions and similar. Based on our latest estimates, a funding requirement of circa £426m worth of capital investment would fund the schemes highlighted in this strategy with a further £250m revenue to maintain and operate infrastructure and services.

#### Example Initiatives:

Station refurbishments, maintenance projects, new stations and payment / technology upgrades.

### Rail schemes delivered by Train Operating Companies (Great British Railways), on behalf of Central Government or any subsidiary bodies

Investing in and supporting the transport assets that enable us to connect with the rest of the world has never been a higher priority for the North East. Quality infrastructure will make for reliable, fast journeys with improved connectivity into national and international freight and passenger networks. This network will be the enabler to sustainable growth and opportunity, and to the North East being an outward-looking economy attracting trade, investment and visitors from across Europe and the world.

Following the publication of the government's Integrated Rail Plan, we will continue with our ambitious plans for more, faster and better rail connectivity to the rest of the UK and we will continue to work closely with the Government, and Network Rail to seek maximum benefits for our region.

### Programme Management and Assurance

As we have identified projects in this Plan that are national or pan-Northern in nature. To deliver these we will work with organisations including Transport for the North (TfN), Northern Acceleration Council, Network Rail and others to secure investment.

The North East and North of Tyne Combined Authorities are represented on TfN's board and continue to make the case for investment in pan Northern Infrastructure including devolved budgets to TfN for development and delivery.

The region is immersed in the work of the Union Connectivity Review and Northern Transport Acceleration Council as mechanisms to oversee progress in the development and delivery of schemes these influence the spending priorities of Great British Railways.

The new public body Great British Railways was announced by HM Government in May 2021 as a body to integrate the railways and deliver passenger-focused travel with simpler, modern fares and reliable service. Once established it will deliver on the priorities of the Williams-Shapps Plan for Rail and will assume the work of Network Rail.

### Costs and Funding

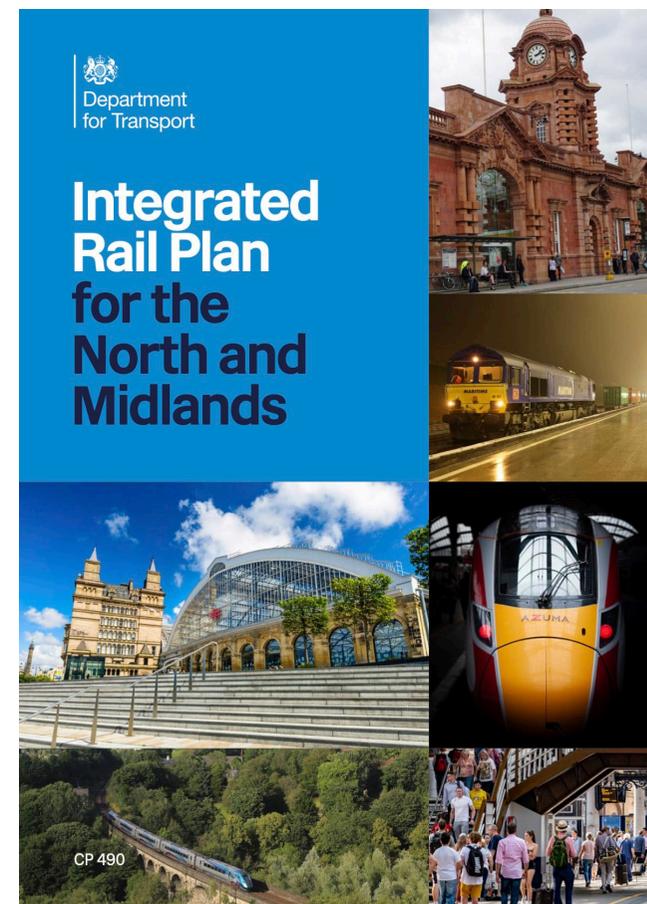
The costs of the package of investment identified in this strategy that will be delivered by bodies on behalf of Central Government and its subsidiaries including rail operating companies is substantial and will be refined as projects are developed in detail by bodies.

The viable source of funding for such projects is at a national level. Following publication of the government's Integrated Rail Plan in November 2021, we are now working with Network Rail to secure an affordable, deliverable, fully costed pipeline of core investments to improve rail in the North.

### Conclusion

Transport North East has set out a range of initiatives within this plan that will meet the objectives of this strategy and our Transport Plan and get us to our vision of Moving to a green, healthy, dynamic and thriving North East. We will keep this pipeline updated and have plans in place to develop schemes, so they are ready for delivery.

We will actively investigate all options for the future financing of these projects including much needed maintenance and revenue support that offer the best combination of security, flexibility and value for public money.



The UK government's Integrated Rail Plan was published in November 2021.

## 15. Delivery plan

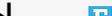
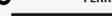
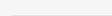
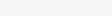
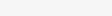
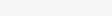
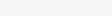
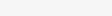
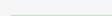
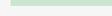
Regionwide schemes:

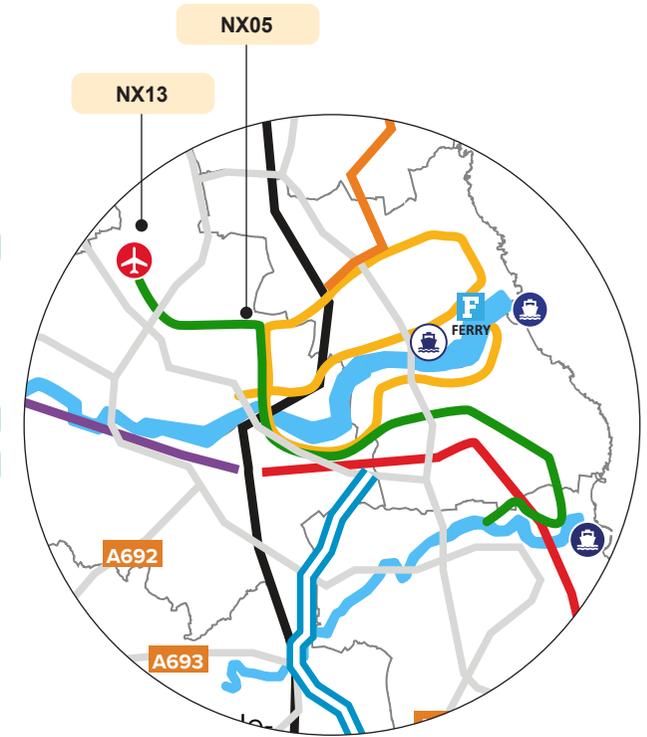
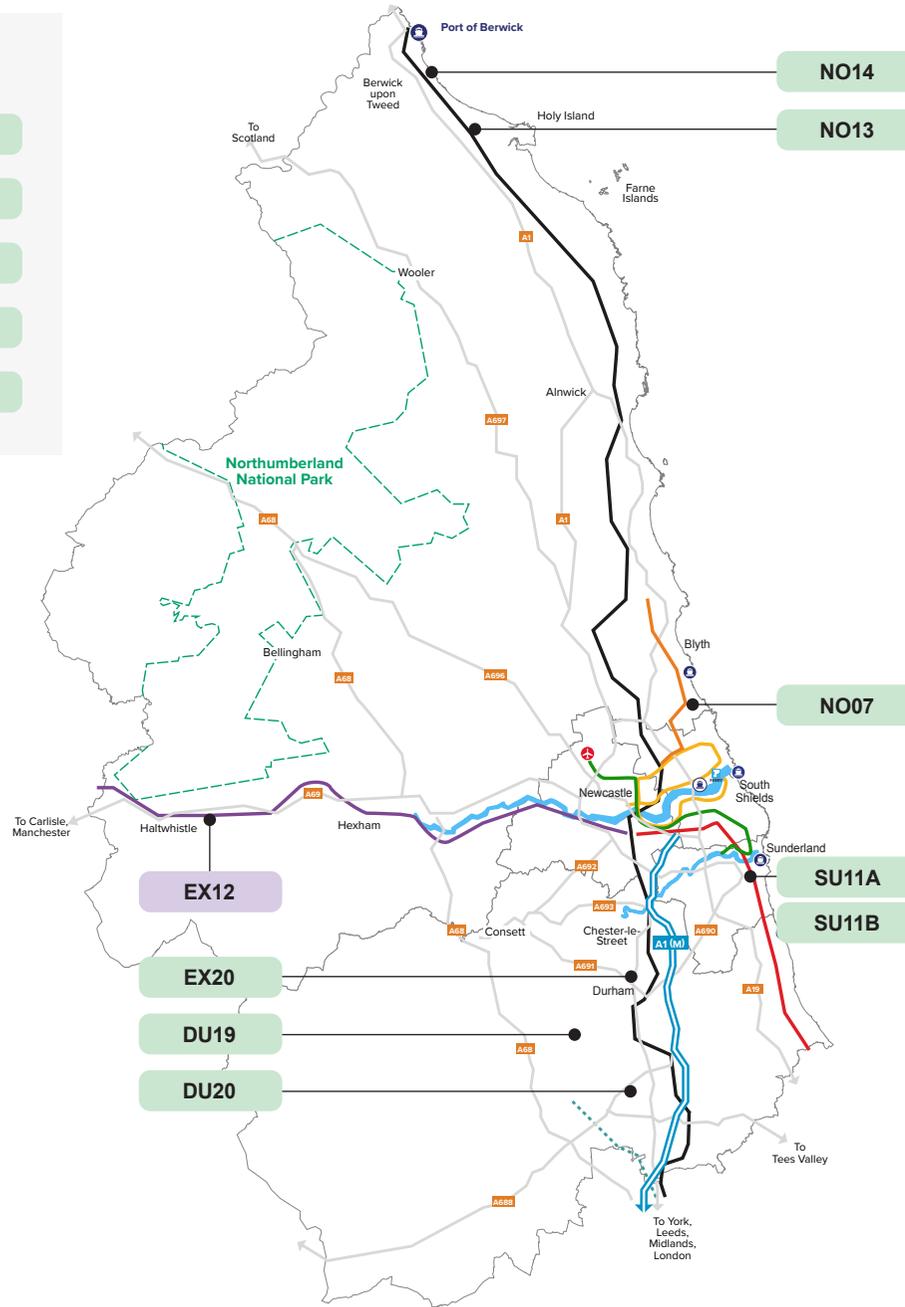
- TNE10A
- TNE10B
- TNE16
- EX16
- TNE17
- EX17
- EX18
- EX19
- TNE22
- EX22
- EX23
- EX24
- EX25
- NX29
- EX40

Metro wide schemes:

- NX08
- NX10
- NX11
- NX15
- NX16
- NX17
- NX19
- NX21
- NX26
- NX28
- NX31

Map key:

-  Tyne and Wear Metro
-  Shields Ferry
-  East Coast Main Line
-  Tyne Valley Line
-  Northumberland Line
-  Durham Coast Line
-  Motorway
-  Major Road Network
-  National Park
-  Ports
-  Port of Tyne Ferry Terminal
-  Newcastle International Airport
-  TNE/LAs
-  Network Rail
-  Nexus



Scheme number	Scheme name	Promoter	Secondary Promoter	Scheme description	Capital / Revenue
NX05	Regent Centre Interchange Upgrade	Nexus	Newcastle City Council	Refurbishment of the Metro area and the upgrading of the bus area with five new waiting shelters and removal of the canopy over the roadway outside the station entrance, improvements to the car park	Capital
NO07	Northumberland Line - Opening	Northumberland County Council	Network Rail	Upgrade and passenger service re-instatement	Capital
EX16	Improving Rail Connectivity in Northumberland	Network Rail		Enhancements to service frequency in Northumberland on ECML	Capital
EX17	Expanding the number and role of Community' stations	Transport North East	Community Rail Bodies	Through Rail Devolution regenerate underused stations as community hubs	Capital
EX12	Tyne Valley journey time improvements	Transport North East	Network Rail	Introduce improvement to reduce the end to end journey time to be more competitive with car based journeys.	Capital
EX25	Local rail Diesel fleet replacement – regional	Northern Trains Ltd	Transport North East	Support Northern in bid to secure funding for carbon zero fleet	Capital
EX18	Delivering a North East Rail Concession	Transport North East	DfT	Work with DfT to secure local rail concession/s	Revenue
EX19	Improved facilities at information at North East stations	Transport North East	Network Rail		Capital
NX08	Enhancing Public Transport passenger information	Nexus	Operators	Addressing the perception of reliability and convenience of public transport, as highlighted through market research, through the provision of accurate and easy to access information.	Capital
NX11	Small Metro Station Upgrades systemwide	Nexus	N/A	Comprehensive refurbishment and remodelling to support Transport North East the customer experience, including accessibility, access to information, perception of safety and cleanliness, reduction in vandalism and graffiti	Capital
NX13	Airport Metro Station Refurbishment	Nexus	Newcastle Airport	Refurbishment of the station and remodelling of the ramp to ensure compliance with accessibility regulations, improved information and ticketing options	Capital
NX16	Energy-saving measures on Nexus infrastructure	Nexus	N/A	Energy-saving measures on Nexus infrastructure	Capital
EX20	Increasing local rail frequency in Durham	Transport North East	Durham County Council	Chester le Street hourly service	Capital
EX22	Rationalise local rail and Metro fares and ticketing	Transport North East	Nexus/ Northern Trains Ltd	Through Rail Devolution rationalise local 'rail ' fares and ticketing to reflect local economic reality.	Revenue
EX23	Introducing earlier and later local rail services systemwide	Transport North East	Northern Trains Ltd	Achieve minimum standards regarding first and last train times to match working patterns and leisure needs,	Revenue
EX24	Small scale local rail reliability measures networkwide	Transport North East	TfN	Through line of route improvements plans implement small scale improvements to improve service reliability.	Capital
NX19	Metro Essential renewals (post 2025)	Nexus		Programme of essential renewal of the Metro infrastructure post 2025 and the end of the current funding arrangement (10 year programme) Also includes £5m for track improvement works at Howdon Viaduct	Revenue

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Scheme number	Scheme name	Promoter	Secondary Promoter	Scheme description	Capital / Revenue
NX21	Upgrade of Switchgear at Nexus Substations	Nexus		Upgrade of switchgear at substations	Capital
NX26	Development of a Multimodal smart ticketing solution for the region	Nexus		Development and implementation of a multi modal smart product through either smart cards or EMV	Capital
TNE22	Revenue and Maintenance Funding for Metro, Bus, Ferry and Highways	Transport North East		Revenue funding to recover from Covid 19 impacts on Metro, Ferry, Bus	Revenue
NX28	Bringing contactless payment to Metro	Nexus		To make Metro travel simple and convenient by introducing the ability to pay by contactless card or device with capped daily fares being charged. This would obviate the need to visit a ticket machine reducing the risk from any contamination introduced by touching. This introduces the ability to turn up and go without needing to make any ticketing provision in advance. For this to be introduced there would need to be investment in hardware at the gatelines and validators and also the back office to collect the taps and calculate and collect the best value fare.	Capital
DU19	Burngill Bank ECML Maintenance	Durham County Council		Structural repairs related to an ongoing landslip and subsidence. Protects the highway and the ECML from ongoing damage. If there was a closure would divert traffic on a significant rerouting via the A167 and A690, which are both part of the MRN. Also through the Nevilles Cross junction which is congested and is designated within the AQMA	Revenue
DU20	Reopening of Ferryhill Line and Stillington Line to passenger services to Teesside.	Durham County Council	Network Rail	Reopening of Ferryhill Station. SOBC submitted. Eventual scheme could be £12m.	Capital
NX31	New payment technologies for Metro	Nexus		New payment technology to accelerate the introduction of cashless and contactless payment options which will minimise contact with ticket machines, barriers and physical cash.	Capital
TNE16	Customer Experience Strategy	Transport North East	Nexus / Northern Trains Ltd	<p>A customers journey starts before they have even left the house. To make effective decisions customers we need to both provide the incentives to travel sustainably and break down the barriers from which to do so. We intend to develop a strategy which develops a high level accessibility standard for the region together with knitting together all aspects of the journey storyboard, setting expectations around how the transport plan will operate. A linked idea is that the strategy will be supported by funds in order to garner new ideas and make changes to the network to improve the quality and access of the system.</p> <p>This strategy will set out a framework for ideas around,</p> <ol style="list-style-type: none"> <li>1) Information and Ticketing;</li> <li>2) Access to stations the public transport network;</li> <li>3) Safety, access and security on the public transport network;</li> <li>4) Access to destinations</li> </ol> <p>The second component will be built around an access audit framework with an application to a number of case study locations.</p>	Capital

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Scheme number	Scheme name	Promoter	Secondary Promoter	Scheme description	Capital / Revenue
NX29	Delivery of North East Connect	Transport North East	Northern Trains Ltd	Working with Northern Trains and Metro to secure an additional semi fast service on the Durham Coast line. Sponsoring a programme to organize the delivery of North East Connect, ECML calling patterns, Bishop and Tyne Valley journey times	Capital
TNE17	Freight Gauge Clearance	Transport North East	Network Rail	Work closely with Network Rail and private sector to improve gauge clearance along freight routes	Capital
TNE10A	Comprehensive ticketing and information package - including single smart transport payment system	Transport North East		Sponsor the delivery of a Comprehensive cross modal ticketing, information and planning services, solution built in partnership with authorities and operators; Build on and integrate available data sources to help travellers and staff better manage and plan journeys on our network in real time; Enhance back office systems including UTMC technologies to build databases and tools for transport planners to continually enhance the offer to travellers; Deliver a single smart transport payment system that works across all modes and incentivises sustainable travel choices; Adopt strategies and technologies to reduce the cost of maintaining and operating of ticketing and information assets whilst enhancing customer experience.	Capital
TNE10B	Regionwide mapping and realtime information package for public transport	Transport North East	Nexus and Northern Trains Ltd	Utilise state-of-the-art mapping, real time information and price comparators to give a full range of transport options for users; provide users with information on the environmental impact of their transport choices; able to be extended to retailers and other commercial providers to allow discounts for using sustainable forms of travel	Capital
NO13	Belford Station	Northumberland County Council	Network Rail	The proposal is to construct a new station to serve the village of Belford and the surrounding catchment area of north Northumberland. Since the previous station closed demand for travel from Belford and the surrounding area	Capital
NO14	Enhanced service between Berwick and Newcastle	Northumberland County Council	Network Rail	The proposal is for a new hourly service to serve stations between Newcastle and Berwick-upon-Tweed on the East Coast Mainline. Currently, residents of Pegswood, Widdrington, Acklington and Chathill have a choice of just one morning commuter train and one evening return train.	Revenue
EX40	Upgrades to Active travel routes to all NE rail stations	Transport North East	All Authorities	improve walking /cycling routes to rail stations.	Capital
NX10	Increased Park and Ride at Public Transport stations and car park maintenance	Nexus		"Consideration to extending park and ride facilities at multi-modal interchanges across the North East region. Not just limited to Metro stations, but also bus / train stations. With improvements required at Hebburn, Tyne Dock, East Boldon and Fellgate within South Tyneside."	Capital
NX15	Creating Electric Vehicle charging points across Nexus car parks	Nexus	Transport North East	EV charging infrastructure at all Nexus owned car parks	Capital
NX17	New cycle parking hubs at Metro and bus stations	Nexus	N/A	Increase availability of secure cycle parking and Metro and Bus stations	Capital
SU11A	Sunderland Station Southern Ticket Hall	Sunderland City Council	Network Rail	Comprehensive Redevelopment of the Southern Ticket Hall with improved accessibility, additional station and retail facilities	Capital
SU11B	Sunderland Station Northern Ticket Hall	Sunderland City Council	Network Rail	Comprehensive Redevelopment of the Northern Ticket Hall with improved accessibility, additional station and retail facilities	Capital

Regionwide schemes:

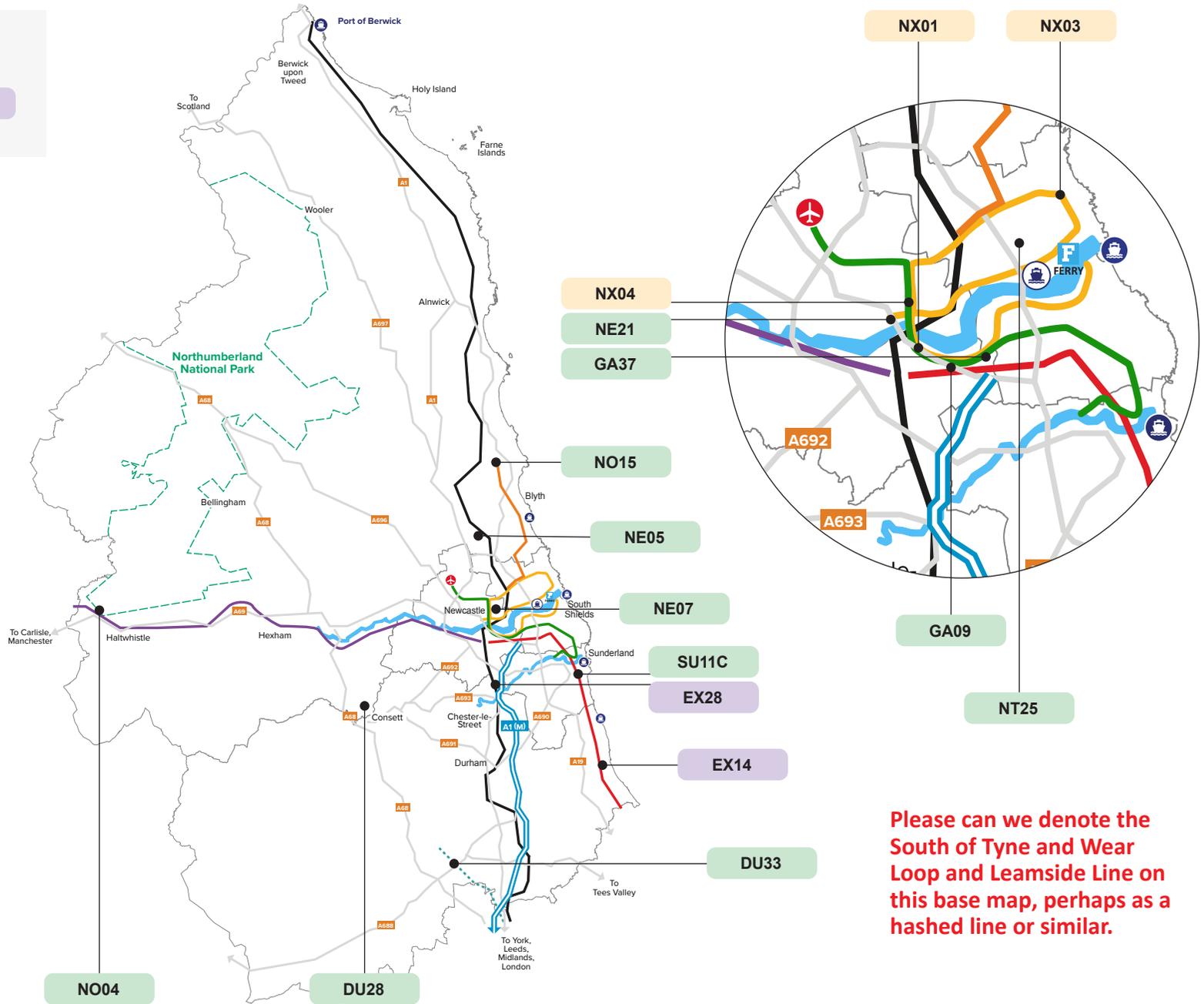
- TNE34B
- TNE36
- EX10

Metro wide schemes:

- NX20
- NX30

Map key:

- Tyne and Wear Metro
- Shields Ferry
- East Coast Main Line
- Tyne Valley Line
- Northumberland Line
- Durham Coast Line
- Motorway
- Major Road Network
- National Park
- Ports
- Port of Tyne Ferry Terminal
- Newcastle International Airport
- TNE/LAs
- Network Rail
- Nexus



Please can we denote the South of Tyne and Wear Loop and Leamside Line on this base map, perhaps as a hashed line or similar.

Scheme number	Scheme name	Promoter	Secondary Promoter	Scheme description	Capital / Revenue
NX03	Upgrading Heritage Stations on Tyne and Wear Metro	Nexus	All Local Authorities	Upgrading of Cullercoats, Whitley Bay, Monkseaton and West Monkseaton Metro stations with a distinctive historical lineage dating back to the North Eastern Railway/ LNER	Capital
NX04	Monument Metro Station Refurbishment	Nexus	Newcastle City Council	Refurbishment of Monument Metro station to match the standard of other recent station upgrades in Newcastle city centre	Capital
NE07	Newcastle Station	Newcastle City Council	Network Rail	Investment to unlock the potential around Newcastle Central Station including access improvements to Stephenson Quarter (Southern Entrance) Lengthening some of the bay platforms at Newcastle to enable longer trains to terminate in the station.	Capital
NO04	Gilsland Railway Station	Northumberland County Council	Network Rail	The proposal is to reopen the Gilsland Railway Station on the site of the former station.	Capital
NO05	Cramlington Station improvements	Northumberland County Council	Network Rail	Infrastructure improvements required to facilitate improved frequency of service from station and better station facilities.	Capital
OU11C	Sunderland Station capacity improvements and track layout improvements	Network Rail	Sunderland City Council	Sunderland Station and Sunderland Station track layout improvements	Capital
EX14	Durham Coast Line (route upgrade and service improvements)	Network Rail	Transport North East	Durham Coast Line (route upgrade and service improvements)	Capital
GA09	East Gateshead Station	Gateshead Council	Network Rail	Station to serve the Gateshead Quays development	Capital
NX20	Metro Signalling System upgrade	Nexus		Replacement of the Metro signalling system	Capital
NX30	New Metro Stations	Nexus		Improve access to the Metro system to those are disconnected from it. Reduce congestion on highway network. Reduce carbon emissions. Connect areas of new growth and development to the Metro network.	Capital
DU28	Public transport connectivity improvements between Consett and Tyneside	Durham County Council		Connectivity improvements along the Derwent Valley Line. SOBC submitted	Capital
NT25	Murton Gap - New Metro stations in North Tyneside	North Tyneside Council	Nexus	Development of new stations on the Northern Metro loop, and associated infrastructure/ equipment, linked to key sites in the North Tyneside Local Plan (Murton Gap)	Capital
TNE34B	A regional energy Package	Transport North East		Innovation - A regional energy package focused on generating energy on our transport assets, depots, stops and stations	Capital
TNE36	Metro and Local Rail Enhancements and Extensions	Transport North East		Local Rail Infrastructure Corridors	Capital
				Cobalt Link	
				South of Tyne and Wearside Loop	
				West Newcastle / Gateshead Links	
				Airport Link	

Scheme number	Scheme name	Promoter	Secondary Promoter	Scheme description	Capital / Revenue
EX10	High Speed Gateways in the region	Network Rail		Ensuring the region is high speed ready as high quality gateways to the region	Capital
N015	Future extensions for the Northumberland Line	Northumberland County Council	Network Rail	Improving accessibility to South East Northumberland by rail.	Capital
DU33	Darlington – Weardale Railway	Durham County Council		A rail service to reconnect isolated communities in Weardale, to the Bishop Auckland/ Newton Aycliffe/Darlington corridor, enhancing access to employment, education, health and leisure opportunities. The railway will become the framework for economic regeneration of the railway corridor, both in South Durham and Weardale, realising substantial tourism potential.	Capital
GA37	Heworth Interchange refurbishment	Nexus	Gateshead Council	Remodelling of Heworth Interchange	Capital
NX01	Gateshead Interchange Refurbishment	Nexus	Gateshead Council	Refurbishment of all elements of the interchange	Capital
FY28	Major upgrade to the East Coast Mainline	Transport for the North	Network Rail	Major upgrade via East Coast Main Line (and Leamside) reinstatement to include provision for 7/8 trains per hour	Capital
FY21	New PT Route delivered to the West of Newcastle	Newcastle City Council	Nexus	New Westbound public transport from Central Station/St James, either using Forth Banks alignment or any other	Capital

## 16. Conclusion

By 2035, we will achieve significant improvements in the contribution of rail and Metro towards achieving the key Transport Plan objectives. Through greater devolution of powers and funding we will improve the existing passenger experience, extend the reach of both local rail and Metro, seek freight improvements, and deliver passenger growth as part of an integrated North East public transport system. Details of the intervention proposed are included in the Delivery Plan and our success will be measured through a series of performance indicators.

Objectives	Key Commitments
 <b>Overcoming Inequality &amp; growing our economy</b>	<ul style="list-style-type: none"> <li>• Extend the reach of local rail and Metro, upgrading existing networks &amp; services, adding new routes &amp; stations.</li> <li>• Increase the capacity &amp; resilience of the East Coast Main Line and Durham Coast Line improving connectivity.</li> <li>• Ensure freight can travel sustainably by rail and delivering additional capacity where required.</li> </ul>
 <b>Carbon-neutral transport</b>	<ul style="list-style-type: none"> <li>• Increase the number of people travelling on rail and Metro in preference to the private car.</li> <li>• Increase the share of goods transported by rail.</li> <li>• Introduce new trains, more efficient electric ones on the Metro and electric / battery/ hydrogen ones on local rail and modal shift from road to rail on freight.</li> <li>• Improve stations and depots.</li> </ul>
 <b>Healthier North East</b>	<ul style="list-style-type: none"> <li>• Improve walking and cycling links to existing and new stations.</li> <li>• Increase the number of people travelling on rail and Metro in preference to the private car.</li> </ul>
 <b>Appealing sustainable transport choice</b>	<ul style="list-style-type: none"> <li>• Improve the Customer experience.</li> <li>• Integrate fares and ticketing across rail, Metro and Bus.</li> <li>• Improve reliability and punctuality of services.</li> <li>• Extend the reach of local rail and Metro to serve more communities.</li> </ul>
 <b>Safe, Secure Network</b>	<ul style="list-style-type: none"> <li>• Maintain enhanced presence on trains and at stations.</li> <li>• Provide safer routes to stations.</li> <li>• Raise the security standards at stations and on trains.</li> <li>• Undertake targeted initiatives and campaigns to improve passenger safety.</li> </ul>
 <b>Integration</b>	<ul style="list-style-type: none"> <li>• Work with GBR to seek greater influence over local rail to match the flexibility and accountability of Metro.</li> <li>• Coordinate services and improving interchange between all modes of transport.</li> <li>• Integrate fares and ticketing across rail, Metro and bus.</li> </ul>
 <b>Metro Operation, Maintenance and Renewal</b>	<ul style="list-style-type: none"> <li>• Enhance the Metro timetable made possible by the introduction of the new fleet and Metro Flow.</li> <li>• Deliver an asset renewal programme to maintain a high quality service in terms of passenger requirements.</li> <li>• Further deliver improved energy efficiency.</li> <li>• Deliver a re-signalisation scheme to ensure continued safe operations of the Metro and enable future expansion plans.</li> </ul>

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**Visit:** [www.transportnortheast.gov.uk](http://www.transportnortheast.gov.uk)



**Transport North East**

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## North East Joint Transport Committee

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**Date:** 18 January 2022

**Subject:** South of Tyne and Wearside Loop (Metro Expansion) – Strategic Outline Business Case (SOBC) development.

**Report of:** Managing Director, Transport North East

### Executive Summary

This report recommends the development of a Strategic Outline Business Case for the South of Tyne and Wearside Loop, following the conclusion of early engineering feasibility and demand forecasting work and the securing of £70,000 from the North East LEP to part fund the next step.

### Recommendations

- i) The Joint Transport Committee is recommended to approve the SOBC development work for the South of Tyne and Wearside Loop to be undertaken by Transport North East, part funded by the LEP (£70,000) and the JTC (£30,000).

### 1. Background:

- 1.1 Several studies are/ have been looked at along the ECML/Leamside corridor over recent years. Work to coordinate these various studies and assimilate them into a single coherent plan which maximises the benefits to the North East, known as the umbrella strategic outline business case (USOBC) is nearing completion. The publication of the government's Integrated Rail Plan (IRP) on the 18<sup>th</sup> November 2021 necessitates a revised approach both to delivering much needed capacity on the ECML and also the approach to take to reopen the Leamside Line which the IRP says 'would be best considered as part of any future city region settlement'.
- 1.2 The emerging USOBC shows four elements to be progressed incrementally over a period of time. These being:
- ECML capacity and resilience
  - South of Tyne and Wearside Loop (Metro)
  - Local and regional rail connectivity
  - Freight enhancements to meet future demand
- 1.4 This report focuses on the South of Tyne and Wearside Loop which has had engineering feasibility and demand forecasting work done for it and is thus the most advanced of the elements. It provides a summary of the study work to date and sets out the scope for the SOBC for which part funding has been secured from the North East LEP.

## **2. Feasibility study findings**

- 2.1 The studies have taken an initial high level look at what is required to deliver a new Metro route that would use the north end of the Leamside Line to bring the Metro through Follingsby to Washington, over the River Wear, and then across to join up with the existing Metro terminus at South Hylton. This would provide a Metro connection between Washington and Sunderland. It could also have a direct route from Follingsby to Hebburn using a bridge over the existing rail line in the Pelaw area, allowing South Tyneside to be joined to the new service.
- 2.2 As part of the programme of studies into corridors for potential Metro extensions, consultants have been working on the engineering feasibility and demand forecasting along sections of the South Tyneside and Wearside Loop. The study has considered the engineering options for the following sections and locations of particular challenges:
- Pelaw Flyover
  - Bowes Chord Grade Separated Junction (an alternative to Pelaw Flyover)
  - Boldon Junction to Tyne Dock
  - Boldon Chord Station
  - Pelaw to IAMP
  - A potential station connecting to the IAMP
  - The Victoria Viaduct

- Access beneath the A19
  - The level crossing at South Hylton and impacts on the station.
- 2.3 The report to assess the engineering feasibility provides infrastructure choices with high level costs in the region of £700 million for a twin track Metro along the full length of the route. Both the scale of costs and the significant extent of some of the infrastructure works suggest that phasing or sequencing the works would be a sensible approach to delivery.
- 2.4 In parallel to the engineering feasibility work, high level demand forecasting has also been undertaken.
- 2.5 The main highlights from the demand forecasting work are:
- Metro stations at Washington generate the greatest demand, particularly Washington South.
  - IAMP is difficult to serve and has a low density of development thus a low demand.
  - A combination of service patterns (where Metros run to and from and how regularly) and infrastructure costs give a number of leading contenders to develop further through the SOBC.
- 2.5 Funding has been secured via the LEP (with a level of match funding from the Extension budget) to progress the findings of the two (Engineering and Demand) studies to an SOBC level of development, this will derive a preferred option for the future Metro expansion scheme.

### **3. Proposals**

- 3.1 The next step is therefore to appoint consultancy support to produce the SOBC, in collaboration with Nexus.
- 3.2 As members will be aware an SOBC follows DfT guidelines and cover the 5-case model:
- The Strategic Case
  - The Economic Case
  - The financial Case
  - The Management Case
  - The Commercial Case

The consultants will be asked to build on the evidence gathered from both the specific feasibility studies and the previous RYR bid.

- 3.3 Key areas will be around the Strategic Case (upon which feedback from the DfT on the RYR indicated that we have a strong case), The Economic Case which will need to consider phasing of costs and benefits, the Financial Case which will need to consider opportunities for third party funding, the Management Case which will need to consider the best delivery model via Nexus or Network Rail and the Commercial Case which will need to consider the operational costs and revenue returns to make a viable proposition.

3.4 The study is expected to take around 4 months to complete and thus progress briefings will be provided to JTC members at appropriate milestones and the final draft SOBC will be submitted to a future JTC for approval prior to submitting to the DfT for consideration.

#### **4. Reason for the Proposals**

4.1 The SOBC for the South of Tyne and Wearside loop will ensure that the Joint Transport Committee continues to work to enhance the region's rail connectivity and seek to open up the full Leamside Line progressively and incrementally, to better connect communities in the region.

#### **5. Next Steps and Timetable for Implementation**

5.1 The next step is to progress the SOBC to develop a strong case for the detailed development of the Metro extension as the first step in the incremental reopening of the Leamside Line.

5.2 Further briefings will be provided to JTC members as the work progresses and the final draft SOBC reported to JTC when complete prior to submitting to DfT for approval.

#### **6. Potential Impact on Objectives**

6.1 The development of the SOBC for the Metro expansion is in line with the Transport Plan objectives primarily:

- Overcome inequality and grow our economy
- Accessible and sustainable travel choices
- Carbon Neutral transport

#### **7. Financial and Other Resources Implications**

7.1 The SOBC is being part funded by the North East LEP (£70,000) and part from the JTC rail and Metro extensions budget managed by TNE (£30,000).

#### **8. Legal Implications**

8.1 There are no immediate direct legal implications from this report.

#### **9. Key Risks**

9.1 The SOBC will identify the key risks, with the cost challenge and the need to maximise patronage, along with minimising environmental impacts being key consideration.

#### **10. Equality and Diversity**

10.1 There are no specific equality and diversity implications arising from this report.

**11. Crime and Disorder**

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

**12. Consultation/Engagement**

12.1 This report has been through the Heads of Transport and Transport Strategy Board in accordance with the governance of JTC reporting.

**13. Other Impact of the Proposals**

13.1 No other impacts to note.

**14. Appendices**

14.1 None

**15. Background Papers**

15.1 None

**16. Contact Officers**

16.1 Derek Gittins, Head of Heavy Rail,  
Transport North East  
Email: [derek.gittins@transportnortheast.gov.uk](mailto:derek.gittins@transportnortheast.gov.uk)

**17. Sign off**

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

**18. Glossary**

18.1 All acronyms or technical terms used are explained in the body of the report.

JTC – Joint Transport Committee

TNE -Transport North East

SOBC – Strategic Outline Business Case

ECML – East Coast Main Line

NE LEP – North East Local Enterprise Partnership

DfT – Department for Transport

IRP – Integrated Rail Plan for the North and Midlands

ECML – East Coast Mainline

SoT&WL – South of Tyne and Wearside loop  
USOBC - Umbrella Strategic Outline Business Case  
IAMP – International Advanced Manufacturing Park  
RJR – Restoring Your Railways