

**INDUSTRIAL
STRATEGY**

TRANSFORMING CITIES FUND



**NORTH
OFTYNE
COMBINED
AUTHORITY**

Transforming Cities Fund Tranche 2

NORTH EAST REGION
SOBC



Contact Mike Scott
Project Lead
Transforming Cities Fund

Email mike.scott@northeastca.gov.uk
Tel 0191 433 4424

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Foreword

On behalf of the North East Joint Transport Committee I am delighted to present this Strategic Outline Business Case (SOBC), which forms our region's Transforming Cities Fund bid. The bid demonstrates our support for the UK Industrial Strategy and is specifically designed to align with the Transforming Cities Fund objectives by:

- Boosting the region's productivity through transformed public and sustainable transport connectivity to improve social and economic benefits for the community;
- Reduce carbon emissions and improving air quality and;
- Supporting housing delivery and fostering an environment for future mobility services.

Our three vibrant city centres of Durham, Newcastle and Sunderland, plus the surrounding towns and rural villages, are showing real signs of economic rebirth. The number of businesses and the prosperity generated by our economy are both growing – but that growth is precarious and prone to economic shocks, more so than in other parts of the UK.

Transport investment has never been a higher priority for the North East. Investment in our transport networks addresses the urgent need to rebalance the UK economy and share economic wealth with regions like the North East. Transport investment also enables the North East to be resilient and ready to cope with any adverse economic impacts that may arise from the UK's planned departure from the European Union. The North East has a great public transport network and burgeoning networks for cycling and walking, with the targeted investments in our TCF programme delivered these networks will continue to flourish

and thrive, attracting new passengers and cyclists out of their cars. Failure to fund our programme will embed car use further, with all the congestion and environmental problems that this causes. The strategic case for investing in the entirety of our TCF programme is therefore clear and compelling.

Whether it is students travelling to University, families travelling to our coastline and world heritage sites, or the daily commute for work or college, public and sustainable transport can play its part in our growth with over 200m passenger journeys already being made each year. Public transport is part of our offer that enables us to draw international events to our region - without our network we would be unable to host 43,000 runners and their supporters who participate in the Great North Run each year. Metro and local rail sit at the heart of the network and we understand their value. We know that each new Metro or local rail journey generated within the region is worth £8.50 to the local economy.



Our desire is to build on these foundations, and this bid evidences our ambitious drive to increase the quantity and quality of sustainable journey options in our region. The schemes we are promoting will:

- Accommodate an additional 2.6 million passenger journeys on the North East Metro and local rail network by 2030;
- Introduce 21 kilometres of new or improved bus priority measures across the region, supported by improved technology and bus priority at 160 traffic signal junctions, all aimed at speeding up bus journey times and improving bus reliability;
- Build two new bridges in Durham (over the River Wear) and South Tyneside (over the Durham Coast rail line) that facilitate more efficient walking, cycling and public transport access;
- Create 82 kilometres of new or improved walking and cycling infrastructure; and
- Provide 1,600 additional car parking spaces in Park & Ride sites to intercept traffic and encourage modal shift.

This bid has not been prepared in isolation. Three of our local authorities – Newcastle, Gateshead and North Tyneside – are under direction from Government to develop proposals to urgently address air quality problems. Our TCF programme is dovetailed with, and builds upon, the air quality mitigation proposals currently being finalised by our partners.

The North East Local Enterprise Partnership has since 2014 been delivering an ambitious capital programme through the Local Growth Fund, aimed at achieving the objectives in the Strategic Economic Plan (SEP). Significant progress has been made to date, including major transport projects such as Newcastle Central Metro Station, South Shields Transport Interchange and Horden Railway Station. Again, our TCF programme builds on these LGF investments and adds value at a regional level. And this experience shows that we have the necessary governance and assurance processes in place to deliver an effective major programme of schemes using devolved funding.

To assure you of our commitment, our region has identified up to £73.7m as match funding which can be made available to support the bid. The schemes in our preferred programme will generate £800m of regional and national benefits that exceed the costs to Government of investing in our programme by a factor of 2.96.

The letters of support appended to this SOBC show that our TCF programme has wide and unequivocal backing from business, housing, academic, transport operations and third sector stakeholders across the North East. Plus, of course, the seven local authorities in the North East and Nexus, our Passenger Transport Executive, also fully support the programme.

I commend this bid for your consideration.

Yours sincerely,

Cllr Martin Gannon

Leader of Gateshead Council and Chair of the North East Joint Transport Committee

[on behalf of the 7 Local Authorities in the North East]

Executive Summary

Our Vision

e.i The North East welcomes the opportunity to access funding for public transport and sustainable transport investment via the Transforming Cities Fund. During the last 18 months our approach to the Transforming Cities Fund – from Expression of Interest, Tranche 1 bid and now this Tranche 2 bid – has been founded a single clear vision:

“More sustainable connectivity, and more mobility, making sustainable transport the natural choice for people moving around our city region, banishing congestion and its polluting effects, and improving air quality and public health”.

e.ii This vision is aligned to the aims and objectives that the Department for Transport and the UK Industrial Strategy are seeking to secure through the Transforming Cities Fund.

e.iii “More sustainable connectivity”, improving the availability of public and sustainable transport between locations in our region, links to the aims and objectives of:

- Supporting economic growth by improving capacity for commuting trips, improving access to employment centres and delivering sustainable links to development sites;
- Reducing carbon emissions by increasing the volume and proportion of journeys made by low carbon, sustainable modes, bringing about improvements in air quality across the region with a focus on areas that are in exceedance of target levels; and
- Extending the reach of our public and sustainable transport network and supporting housing delivery.

e.iv “More Mobility”, defined as easier access and fewer real and perceived barriers to sustainable and public transport use by:

- Delivering wide social and economic benefit for the community through transport investment;
- Future proofing our transport network in line with the Future of Mobility Grand Challenge;
- Utilising new technologies not previously seen in the North East to reduce journey times and improve customer experience; and
- Supporting the increased use of public and sustainable transport through increased customer satisfaction levels.

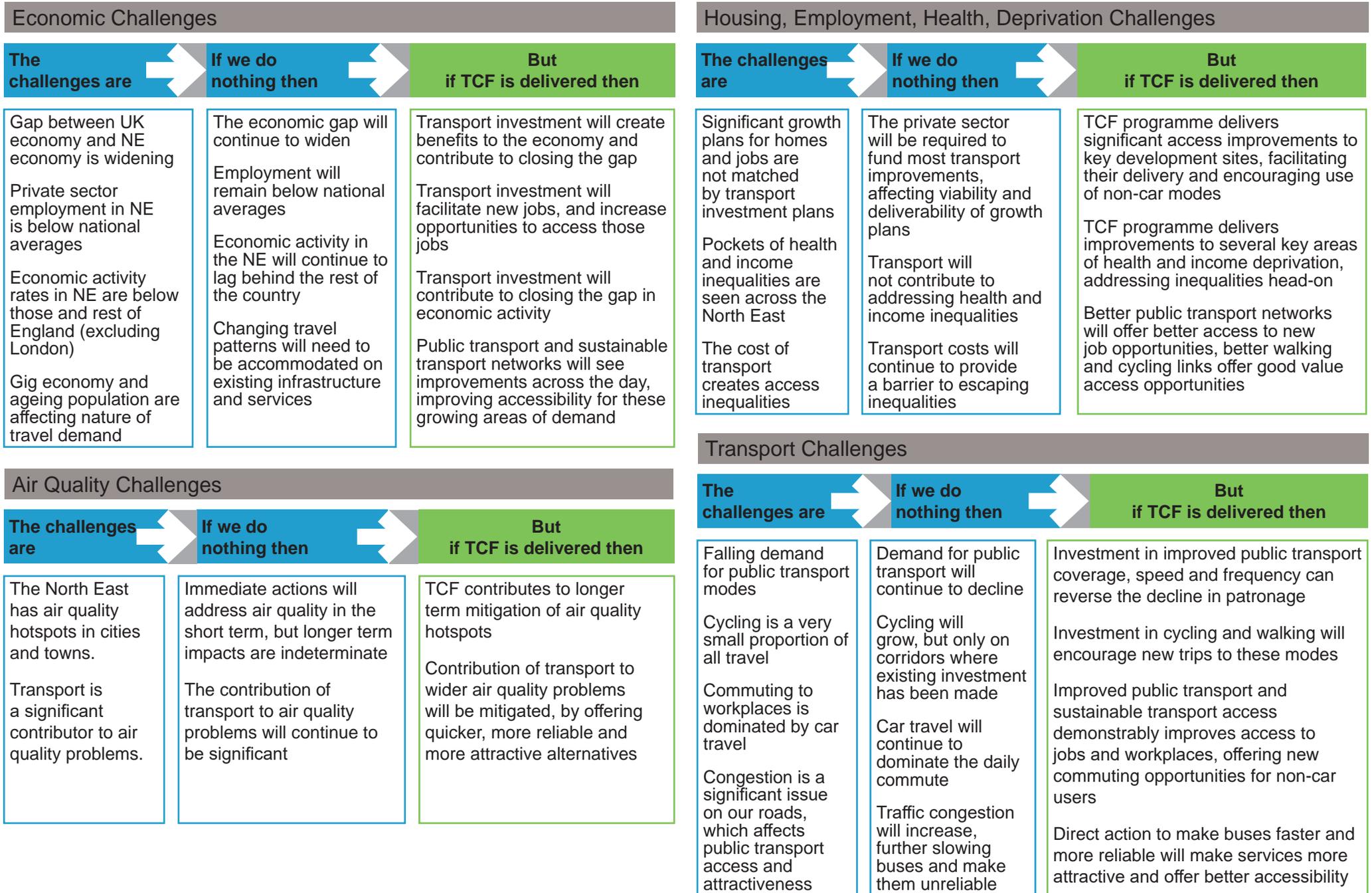
Challenges, Doing Nothing and Delivering TCF

e.v There is a strong regional case for improvements to our transport networks:

- The political appetite and structures are in place to deliver infrastructure investment that makes a significant difference to the region's economy, environment and society,
- Our Economy, measured by GVA levels (total and per capita), is performing below the national average, with a significant productivity gap and we have a smaller than average private sector economy. There are medium term capacity and resilience impacts facing the economy that can be mitigated with transport investment,
- Investment can be targeted so it maximises access to labour markets and national / international gateways for trade and investment
- We have a strong policy basis and effective implementation plans to support the region's economy and drive investment in the transport network
- We face environmental directions from Government to improve air quality in parts of the region as soon as possible, as well as a general increased awareness of the significant role public and sustainable transport can play towards providing solutions,
- The region continues to face health and social inequalities inhibiting access to future opportunities and there are initiatives in place to address skills shortages and attract inward investment.
- Transport users in the region have positive attitudes towards the public and sustainable transport network and the potential of investment to make a discernible difference in the way they travel.

e.vi We face some significant economic, environmental and social challenges and inequalities in our region that transport can play a big role in addressing. Despite the relative economic successes in the region over the last ten years of austerity, the North East lags behind the UK on many economic and well-being measures. Funding our TCF aspirations will help to reverse this lag – failing to fund TCF will embed and exacerbate this lag. The challenges and opportunities that TCF faces in the region are set out in **Figure 1**.

Figure 1 TCF Challenges and Opportunities



e.vii The importance of funding and delivering this TCF programme, to meet the challenges and avoid the risks of doing nothing, are clear.

e.viii The preferred programme for our TCF bid has been developed through close collaboration between local authorities, Nexus, transport operators and stakeholders across the region. The programme has the broadest possible support from stakeholders across the regional spectrum, as set in **Appendix A**. This transformational programme is set out in **Figure 2** and **Figure 3**.

e.ix A comprehensive suite of performance indicators has been developed to measure the success of the programme once constructed. These performance indicators are directly related to the objectives that we have set for the programme, as set out in **Figure 4**.

Figure 2 Preferred programme of schemes

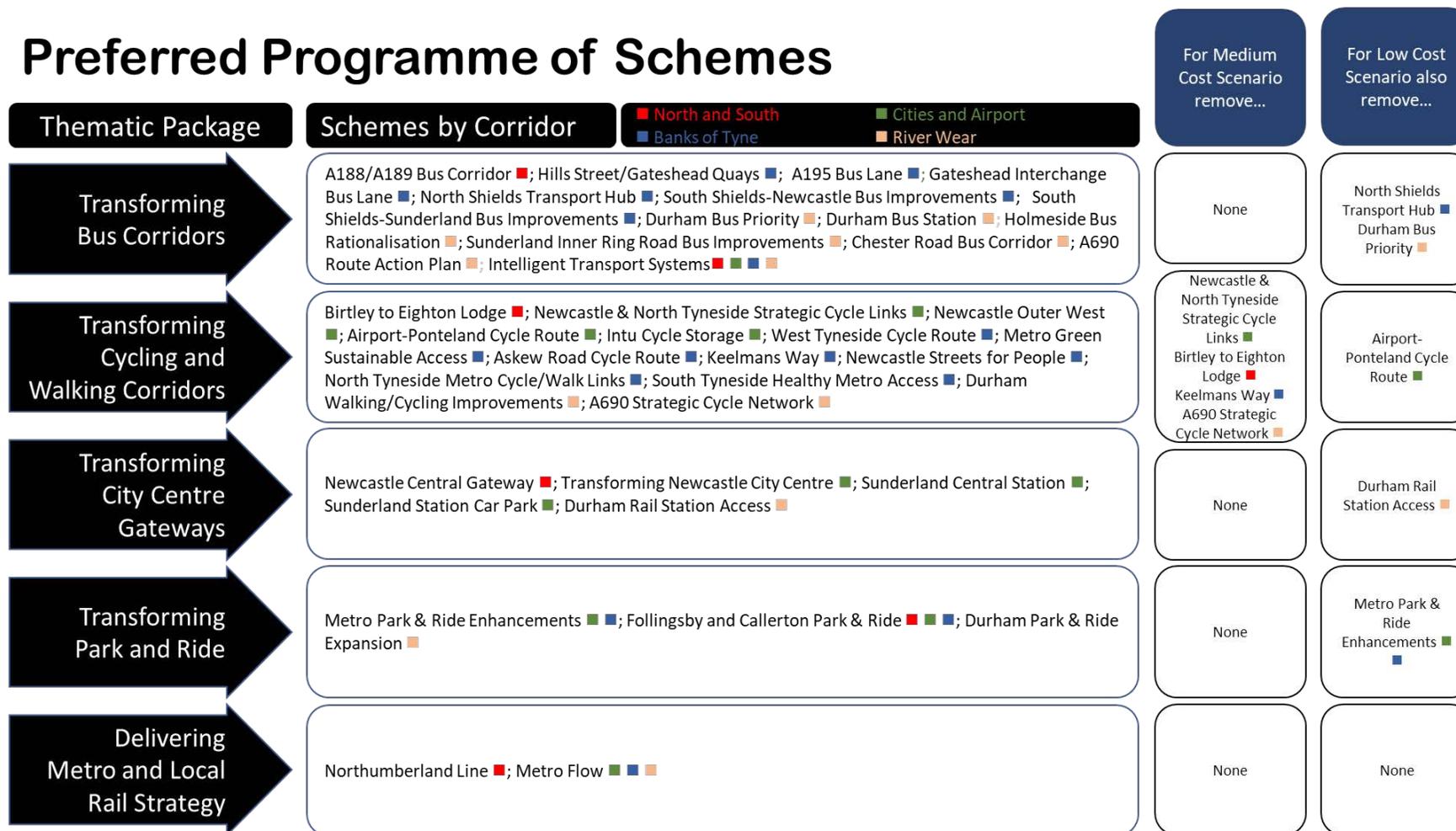
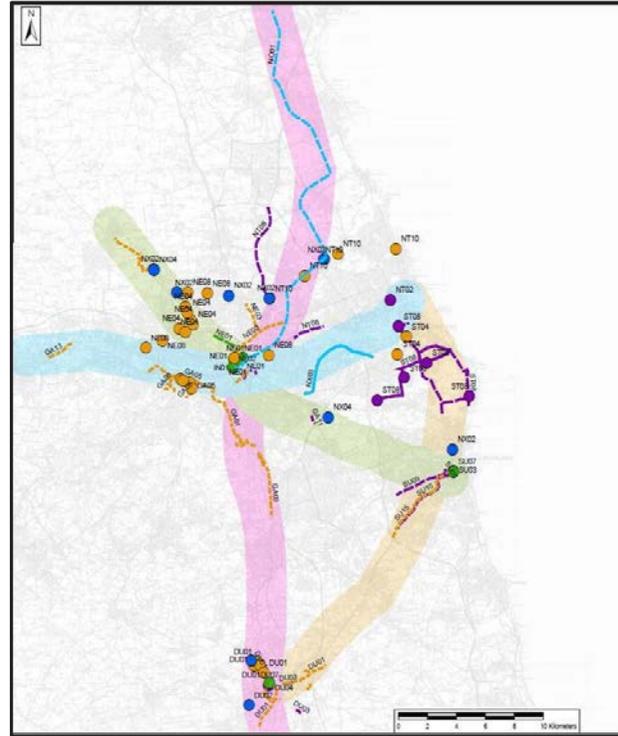


Figure 3 Preferred Programme Summary

Transforming Cycling and Walking Corridors			
Scheme code	Scheme name	Summary	High / medium / low cost scenario
GA09	Birtley to Eighton Lodge	Upgrade of cycle route, creation of shared use footways, junction improvements on main Great North cycle route corridor	H
NE03	Newcastle and North Tyneside strategic cycle links	New cycling infrastructure between Coast Road cycle route to Newcastle urban core and secondary link between Coast Road and Haddricks Mill	H
NE04	Newcastle Outer West	Junction improvements, replacement of roundabouts with signalised controls/UTMC allowing increased priority to public transport	H/M/L
NE07/NO02	Airport – Ponteland cycle route	New cycling connection between Newcastle Airport, Callerton and Ponteland	H/M
IN01	Intu cycle storage	Secure cycle storage and changing facility within Intu Eldon Square in Newcastle city centre	H/M/L
GA01	West Tyneside cycle route	Upgrading of existing cycle routes along A1 corridor	H/M/L
GA05	Metro Green sustainable access	New and improved walking/cycling facilities and bus priority measures to support housing and employment development around Intu Metrocentre	H/M/L
GA07	Askwild Road cycle route	New pedestrian and cycling facilities to provide access to housing development sites	H/M/L
GA13	Keelmans Way	Major bank stabilisation works on riverside cycle route to protect and reinstate the route. Additional work on gradient and alignment east of Wylam railway station	H
NE08	Newcastle Streets for People	Improved cycling and walking corridors to Metro stations and major bus interchanges using Streets for People Programme format (funded by CCAF)	H/M/L
NT10	North Tyneside Metro cycle/walk links	New high quality walking and cycling linkages to bus and Metro stations	H/M/L
ST04	South Tyneside Healthy Metro Access	Improvements to walking and cycling routes into Metro stations and public realm improvements at Chichester and Tyne Dock stations	H/M/L
DU01	Durham walking/cycling improvements	Improved walking and cycling links into Durham city as well as links to Sunderland and Newcastle, including new pedestrian bridge at Milburngate House	H/M/L
SU15	A690 Strategic cycle network	New cycleways into employment areas including provision of a crossing over the A19 by raising parapets on existing Herrington accommodation bridge	H

Programme summary (Preferred scenario)



Transforming Bus Corridors			
Scheme code	Scheme name	Summary	High / medium / low cost scenario
NT08	A188/A189 bus corridor	Bus priority improvements and enhancement of P&R facility at Four Lane Ends	H/M/L
GA08	Hills Street/Gateshead Quays	Upgrading of pedestrian, cycle and public transport environment on key link to Tyne Bridge	H/M/L
GA11	A195 bus lane	Northbound and southbound bus lanes on route between Heworth interchange and Follingsby / Washington / Houghton-le-Spring	H/M/L
GA16	Gateshead Interchange bus lane	Reconfiguration of bus lane exiting Gateshead interchange towards Newcastle	H/M/L
NT02	North Shields Transport Hub	New covered bus interchange alongside existing Metro station and bus priority measures on approach	H/M
ST08a	South Shields – Newcastle bus improvements	Bus priority measures on routes between South Shields and Newcastle	H/M/L
ST08b	South Shields – Sunderland bus improvements	Bus priority measures on routes between South Shields and Sunderland	H/M/L
DU03	Durham bus priority	Bus lanes on approach to Durham city centre	H/M
DU07	Durham bus station	Demolition and replacement of bus station on current site with improved facilities and relocation of DIRO stands	H/M/L
SU04	Holmeside bus rationalisation	Reassigning of highway use and provision of improved pedestrian and cyclist facilities	H/M/L
SU05	Sunderland inner ring road bus improvements	Bus priority measures in and around Sunderland city centre	H/M/L
SU09	Chester Road bus corridor	Bus priority measures at key junctions on route into Sunderland city centre	H/M/L
SU10	A690 route action plan	Bus priority measures at key junctions on route into Sunderland city centre	H/M/L
ITS01	Intelligent Transport Systems	Traffic signal updates to allow full UTMC interventions to improve bus journey times and enable real time information for passengers	H/M/L

Transforming Park and Ride			
Scheme code	Scheme name	Summary	High / medium / low cost scenario
NX02	Metro Park and Ride enhancements	Smart/digital ticket solutions, provision of data to support UTMC data and VMS. Improvements to car parks including improved CCTV and lighting Callerton: Additional parking capacity at existing Metro P&R site, increasing provision for disabled parking, EV charging points, cycle infrastructure, enhanced bus facilities to enable drop off and pick up, and enhanced walking and cycling routes on site.	H/M
NX04	Follingsby and Callerton Park and Ride	Follingsby: Development of bus-based P&R site linking IAMP and Follingsby business park with wider region	H/M/L
DU02	Durham Park and Ride expansion	Expansion of Sniperley bus-based P&R site and creation of additional site at Stonebridge, including EV charging	H/M/L

Delivering Metro and Local Rail Strategy			
Scheme code	Scheme name	Summary	High / medium / low cost scenario
NO01	Northumberland Line	Reopening of existing freight railway between South East Northumberland and Newcastle Central to passenger trains, with stations at Ashington, Bedlington Station, Newsham (for Blyth) and Northumberland Park (integrating with Metro services)	H/M/L
NX03	Metro Flow	Doubling the Metro line between Pelaw and Tyne Dock in South Tyneside by taking ownership of the existing freight line that runs parallel to existing single-track sections of the Metro line. This brings extra capacity and resilience to the entire network and allows an increase in daytime frequency of Metro trains from five per hour to six per hour across the network	H/M/L

Transforming City Centre Gateways			
Scheme code	Scheme name	Summary	High / medium / low cost scenario
NE02	Newcastle Central Gateway	Improvements to Newcastle Central Station including new East concourse, relocated car park to facilitate the new concourse, and junction improvements to improve access	H/M/L
NE01	Transforming Newcastle City Centre	Significant upgrades to Newcastle city centre including junction improvements, restriction of vehicles, provision of cycle infrastructure, and ITS upgrades	H/M/L
SU03	Sunderland Central Station	Construction of a new railway station on the footprint of the existing site; this phase comprises southern access elements above ground. Other phases not included in TCF consist of northern access and reopening of a third platform.	H/M/L
SU07	Sunderland Station car park	160 multi storey car parking facility for national and local rail passengers including EV charging infrastructure	H/M/L
DU04	Durham Rail Station access	New stair facilities linking A691 with railway station southbound platform	H/M

Figure 4 TCF Objectives and indicators

Programme Objectives	Measures of Success
Improving capacity, reach, reliability and affordability of the public transport network, with a particular focus on identified congested corridors into employment centres, to encourage increased patronage.	<ol style="list-style-type: none"> 1. Increase the proportion of households that can reach employment within 60 minutes by public or sustainable transport. 2. a) Increase Metro patronage by 3% by 2030 b) Increase daytime frequency of Metro services by 20% network-wide. 3. Improve bus punctuality to 95% for services on corridors where investment is focussed. 4. Increase local rail patronage by at least 5% by 2023.
Deliver new and improved cycling and walking links that are affordable, accessible and sustainable between some of the most deprived neighbourhoods in the city region and centres of employment, which are well integrated with the wider transport network encouraging mobility.	<ol style="list-style-type: none"> 5. Increase percentage of adults cycling for travel at least three days per week. 6. Increase percentage of adults walking for travel at least three days per week. 7. Reduce inequality in life expectancy compared to national average. 8. Increase affordable travel distance by income quintile.
Ensure that capital investment delivered by this programme makes provision for the introduction of Future Mobility Services.	<ol style="list-style-type: none"> 9. Create a conducive environment for the development, trial and introduction of Future Mobility Services. 10. Deliver efficiency improvements to the public and sustainable transport network including enhanced information services.
Reduce carbon emissions from local transport by increasing the volume and proportion of journeys made by low carbon, sustainable modes. Improving the safety of our network. Contribute to achieving a reduction in NO2 emissions in the identified exceedance areas by 2023.	<ol style="list-style-type: none"> 11. Reduce the number of private car trips along our identified congestion corridors, contributing to increased modal share of public and sustainable transport. 12. Fewer pedestrians and cyclists killed or seriously injured in the region.
Extend the reach of our public and sustainable transport network to support and enable the delivery of major housing development sites across the city region.	<ol style="list-style-type: none"> 13. Deliver improved strategic sustainable transport links (a regular bus service, a rail/Metro service or a segregated walking/cycling link) to at least 30,000 new housing units in the region.
Reduce journey times to further and higher education providers from some of the most deprived neighbourhoods in the city region.	<ol style="list-style-type: none"> 14. Increase the number of house-holding in England's top 10% most deprived areas that can access further or higher education within 60 minutes travel time.

e.x The North East region has a substantial reputation for delivering major transport investment programmes. Nexus has for the last eight years delivered a major renewal programme on the Metro that ensures the network meets modern engineering standards and is capable of operating for decades to come. Matching this infrastructure investment, Nexus is now delivering a new Metro train fleet for the system. Our local authorities also have a strong reputation for delivering major investments, most recently a new transport interchange in South Shields and The Spire bridge across the River Wear in Sunderland.

e.xi This reputation means that the region is ready and able to release the full economic benefits of our preferred programme. The Economic Case in this document reveals that the programme will deliver over £800m in economic benefits, with the value of those benefits exceeding the Government's investment costs by a factor of 2.96.

e.xii The North East has a strong and well-tested Transport Assurance Framework in place that will ensure we deliver the schemes in this programme on time and to budget, maximizing the achievement of objectives and performance indicators. Resources will be assembled to enact this Assurance Framework fairly and rigorously.

e.xiii A programme of this scale has risks associated with it, these risks have been identified – at both a programme and scheme level – and mitigated by a series of actions that are either already in place or will be put in place once funding is released to the region.

The North East's TCF programme will be the biggest single investment in sustainable transport and public transport for a generation and will deliver significant and lasting benefits that we have demonstrated to be resilient to a range of transport futures. It is a programme that is justifiably worthy of full support and funding. We stand ready, willing and able to deliver it by 2023.

e.xiv We will measure the benefits of the programme we deliver to ensure that they support Transforming Cities Fund aims and objectives as well addressing our regional challenges.

e.xv Through this programme we will seek to support the wider regional action and objectives.

e.xvi We have broken this down into programme specific measures of success which contribute to broader measures. More detailed information is outlined within our strategic case.

e.xvii Headline metrics will be monitored as checks and balances to measure the effectiveness of interventions including:

- Increases in Metro, rail and bus patronage;
- Increases in modal share of walking and cycling; and
- Reduction in modal share of car journeys.

e.xviii The programme also has impacts on a wider range of policy areas which we will monitored by the Transport Strategy Unit and / or external organisations:

- Economy increases in productivity measured through increases in GVA per hour worked across the LEP region and the overall increase in the size of the economy;
- Driving up air quality in identified Air Quality Management Areas and NO2 exceedance areas; and
- Public Health, increasing activity levels including the percentage of adults walking or cycling at least three times per week.

Table 1 Overview of key measures

Area	Key Measures
Expanding the reach, quality & capacity of our public and sustainable transport network	Increases in levels of use of the public and sustainable transport network.
Increasing modal choice and reducing air quality/congestion problems	Extending the quality reach and capacity of the network and reducing car trips on our congested polluted corridors.
Facilitating housing growth and broadening the reach of our labour markets by increasing social mobility	Deliver improved links to identified housing, employment sites and areas of deprivation.
Integrating investments with future of mobility concepts to encourage innovation	Creating a conducive environment for trial and innovation and deliver improved passenger information systems.

Our Corridors

e.xix The schemes which make up our bid, intertwine in one sustainable network linked through interventions across Metro and rail, bus, walking and cycling. Geographically they fall into four defined corridors which encourage movement around our polycentric region and across modes – see **Figure 5**.

e.xx The programme has been developed by working with a wide range of stakeholders including transport operators, Sustrans and

Living Streets, our seven local authorities and our universities. A scoring methodology was used to assess scheme performance against core objectives. This has resulted in the programme of schemes which forms our preferred scenario.

e.xxi The schemes based on thematic packages contribute towards the vision and objectives and make a substantial difference to the potential of the region to deliver a step change in how people travel.

Figure 5 Our corridors

North and South

Connectivity: This corridor links key residential sites throughout SE Northumberland, Newcastle, Gateshead and Durham, to employment opportunities including the energy sector in Blyth, and the International Advanced Manufacturing Park (IAMP)

Mobility: Local commuter and long-distance traffic conflict on the East Coast Main Line and A1 causing overcrowding on trains and traffic congestion. SE Northumberland and Washington are unserved by rail, leading to over-reliance on the congested road network and economic isolation for people without a car

Cities and Airport

Connectivity: This corridor links current and future major employment opportunities at Newcastle International Airport, Sunderland Enterprise Park, IAMP and Follingsby Park with city centres, new housing in Callerton and numerous residential areas including areas of higher deprivation

Mobility: Peak-hour congestion is severe leading to poor air quality and unreliable bus journeys, particularly on Tyne crossings and the strategic highways network. Overcrowding on Metro and reliability of the existing fleet are growing issues, as is station quality.

Banks of the Tyne

Connectivity: This corridor links Newcastle with major employment sites including Cobalt, Silverlink and Port of Tyne and residential areas including areas of high deprivation in East Newcastle, North Tyneside and South Tyneside. It also covers several Enterprise Zones and new housing opportunities

Mobility: This corridor suffers from severe peak-hour congestion throughout its length, particularly at city centre river crossings. This leads to unreliable bus journey times and poor air quality

River Wear

Connectivity: This corridor links existing and new housing sites with areas of employment in Durham and Sunderland city centres, Doxford Park, Rainton Bridge, Port of Sunderland, South Shields and Aykley Heads. Car-based commuting dominates with no direct rail services and limited bus services outside city centres

Mobility: Public and Sustainable transport options on this corridor are unattractive compared to cars. Journey times on infrequent buses are affected by traffic congestion

Deliverability

e.xxii Our region has a substantial track record in delivering major programmes including in excess of £350m for asset renewals on the Tyne and Wear Metro system and The North East Local Enterprise Partnership's Local Growth Fund is a capital programme of £270 million that forms a key element of the North East Growth Deals agreed with Government between 2014 and 2017.

e.xxiii Furthermore, our Joint Transport Committee oversees transport operations discharged by Nexus, our region's Passenger Transport Authority therefore confirming our regional transport powers and track record of working in partnership with organisations including Network Rail.

e.xxiv Our region has identified up to £73.6m as match funding which can be made available to support the programme which when delivered alongside schemes in our preferred high cost scenario will generate a BCR of 2.96.

1 Introduction

1.01 This Strategic Outline Business Case (SOBC) has been prepared for the North East Joint Transport Committee (JTC) to support its bid to the Government's Transforming Cities Fund (TCF). The SOBC investigates the core challenges and opportunities associated with the public and sustainable transport networks in the region and identifies opportunities for investment aligned to the objectives of the TCF. The purpose of this document is to identify opportunities for investment, examine a counterfactual where no investment is made, and detail the benefits that the North East's economy, society and environment will enjoy as a result of our investment programme. The document then reviews the practical issues around managing, procuring and monitoring the programme of schemes, building on our existing structures and track record of delivery in the transport sector.

1.02 The SOBC is supported by a Strategic Economic Narrative that makes the case for investment in the North East based on the current economic opportunities and constraints faced by the region. This narrative sets out a compelling high level case for why our TCF bid for the North East should be funded in full, which is developed in further detail in this SOBC.

Background

1.03 The work to produce this SOBC has comprised several stages:

- Expression of Interest (June 2018): This process identified the structural context of the region's transport network, economy and society and some of the drivers for investment. This Expression of Interest was accepted by Government and the North East was one of 12 city region authorities invited to create a TCF bid.
- Tranche 1 (January 2019): A Tranche 1 programme was developed that delivered early wins for public and sustainable transport, which

was submitted in January 2019. In February 2019 the North East region was awarded £10m of capital funding to be spent on schemes that encourage more travel by bus, cycling and walking, improving connectivity to city centres and employment sites.

- Tranche 2 (this SOBC): A further much more comprehensive programme of transport scheme across five thematic packages has been developed, tested extensively with regional delivery partners and stakeholders and finalised to underpin this SOBC.

Business Case Scope

1.04 This SOBC has comprised several key tasks and phases which can be summarised as follows:

- Phase 1: Background and Context: Linked to our EOI, the identification of core challenges and opportunities facing the network, economy and society. This is inclusive of but not limited to travel trends, network capacity, performance and resilience, productivity levels and economic strategies, air quality, growth targets and health inequalities.
- Phase 2: Objectives Identification: Building from the problems and trends identified, we identify objectives and a vision for change.
- Phase 3: Option Identification: Schemes were identified in accordance with the objectives and scored accordingly to develop preferred (high) medium and low-cost scenarios.
- Phase 4: Costing and Delivery: Through our SOBC, we review the affordability, deliverability, finance, management and communication in our subsequent cases.

STRATEGIC CASE



2 Strategic Case

Structure and Assumptions

2.01 This strategic case has been developed to examine the current and future trends and attitudes for travel, our economic background and ambition, challenges for growth and a review of the existing transport network. We have undertaken a cross thematic analysis of our challenges and opportunities, highlighting the focus on environmental improvement and economic growth in existing and new markets across the region, considering the transport implications of this growth. Through this work, we identify objectives and projects that can deliver a profound change in how we travel sustainably across the region in accordance with the policy objectives of the fund.

2.02 The Structure is as follows:

- Introduction;
- Context;
- Policy and strategy;
- Our challenges;
- Drivers for change;
- Impact of do nothing;
- Objectives;
- Our options and proposals;
- Future Proofing;
- The case for intervention;
- Contribution of schemes to objectives; and
- Conclusion.

2.03 There are several important assumptions to be recognised when reading this document.

2.04 Statistics: We generally present statistics at a Local Enterprise Zone geography, unless specified. The North East LEP covers the local authority areas of County Durham, Gateshead, Newcastle, North Tyneside, Northumberland, South Tyneside and Sunderland. This is mapped in further detail in **Figure 6**. Data has been sourced from a variety of sources and includes data presented through our North East Data Hub [\[link\]](#). Where statistics are available at a Local Transport Authority geography, we have combined the figures for Tyne & Wear, Northumberland and County Durham. Where figures are only available at a former Government Office North East geography, we have noted this in the text.

2.05 Economic Review: We review and reference material throughout the document. This document is supported by a Strategic Economic Narrative, this is available as Appendix B.

2.06 Productivity: The measure of productivity used in this study is output per unit of labour, otherwise known as labour productivity. Output is measured by gross value added, in constant prices to remove the effects of inflation, while employment is the number of workplace jobs.

2.07 GVA: There are two indicators of GVA in the report: GVA per capita and total GVA for the LEP area.

2.08 Public and Sustainable Transport: Throughout this SOBC we differentiate between public and sustainable transport. Public transport refers to capital investment in measures and technologies to improve existing links and offer new links by bus, rail, Metro and Park & Ride. Sustainable transport refers to capital investment in walking links, cycling links and public realm.

2.09 Business Case development: The schemes we include are at varying stages of development, where business cases have been developed these have been referred to. We have ensured that there is consistency with the business cases and the programme. This incorporates elements such as the objectives.

Geographical Scope of this SOBC

2.10 The geographical scope of this bid is the **North East city region**, which corresponds with the geography of the North East LEP (NELEP). The TCF guidance requires that our bid must be focused on public and sustainable (low carbon) transport interventions that improve access to employment centres within this geographical area. Schemes that prioritise benefits to private vehicles or benefit general traffic with no additional benefit to sustainable transport, that are not deliverable within the TCF timescales or that require revenue funding are out of scope. The geographic scope of this bid is illustrated in **Figure 6**.

Context: Our Geography

In this section we

Profile the geographic context of the region;

Consider its economic and spatial structure, which result in challenges and opportunities in providing our communities with high quality public and sustainable transport links.

Places and Spaces

2.11 The North East city region is diverse, comprising a mix of urban and rural communities with a proud heritage and flexible economy. The polycentric nature of the region's economy results in complex demands for travel. Our city region is mapped in **Figure 6**.

2.12 The three vibrant cities of Newcastle, Sunderland and Durham combine to provide a rich collection of employment, cultural, historical and educational assets. These cities are surrounded by a diverse range of towns and villages, plus out of town commercial and industrial sites, each of which provide economic systems and community assets.

2.13 The geographic nature of the region results in a relatively self-contained economy, albeit with links to the south of the area into the Tees Valley. The region's academic sector includes four major universities plus assets such as the National Innovation Centres for Ageing, Data and Energy Systems. Together with organisations such as the Urban Observatory and Catapult Centres for Digital, Energy Systems and High Value Manufacturing, we are equipped to trial new forms of urban development and mobility, shaping the future of public and sustainable transport network.

2.14 The region is home to miles of unspoilt coastline and acres of countryside including a National Park all easily accessible from the main settlements. This forms part of a rich leisure and historic offer, which includes many sporting teams and events, UNESCO world heritage sites and historically significant industrial locations.

2.15 Our pioneering spirit, industrial innovation, flexibility and resilience have created a growing economy that provides 882,000 jobs¹. Our ambition in our Strategic Economic Plan is that by 2024 there will be 100,000 more jobs in the regional economy compared to 2014. Our current Gross Value Added (GVA) a measure of economic success is £40.1 billion (2.6% of overall English output)².

The diversity of our region and its economy, Clockwise from top left, Newcastle's Grey Street, Penshaw Monument, Durham University and Blyth Offshore Wind Farm



1 ONS (2019), Annual Population Survey – Workplace Analysis, Nomis, viewed 14 October 2019, <http://www.nomisweb.co.uk/articles/1157.aspx>

2 NELEP (2019), Our Economy, Our Economy 2019, NELEP, viewed 14 October 2019, https://www.nelep.co.uk/wp-content/uploads/2019/05/our-economy-2019_full_report__north-east-local-enterprise-partnership.pdf

Polycentric Economy

2.16 The region is polycentric both in terms of the economy and in patterns of settlement and development, which provides challenges and opportunities around sustainable and public transport options. Employment hubs are located in our three city centres of Newcastle/Gateshead, Durham and Sunderland, major business parks across the conurbation, and towns. These economic assets are demonstrated in **Figure 6**.

2.17 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.

2.18 Connectivity is of a reasonable quality within the urban core, mainly thanks to the well-developed Metro and bus system. However, these networks are not performing to their maximum, as a result of congestion and capacity constraints. Connectivity remains a challenge to more remote rural areas and deprived areas in the urban periphery.

Summary Box: Our Geography

- Polycentric geography means that there is more than one major node and multiple destinations need to be served;
- There is a strong market for travel in the region with growth potential driven by the number of travel destinations; and
- Potential to change travel habits and increase trips by public and sustainable transport.

Context: Our Transport Network

In this section we

Review the existing transport assets in the region and explain how they are used by the travelling public; ; and

Introduce ways of increasing the use of our public transport and sustainable transport network and extending its reach.

2.19 Our region is a diverse mix of urban and rural areas and our public and sustainable transport networks that support these areas are similarly diverse.

2.20 Our existing transport network contributes a significant amount to the region's economy and ease of connectivity. For example, research has shown that every new journey on the Metro and Local Rail network brings a £8.50 direct benefit to the economy³. We have a comprehensive and well used urban bus network that provides thousands of connections every day, but these links are hampered by congestion and inefficiency. We have a developing cycling network that requires further investment to deliver its economic potential in full.

³ NECA (2018), Transport North East Committee: 11 October 2018 Agenda Pack, viewed on 14 October 2019 <https://northeastca.gov.uk/wp-content/uploads/2018/10/Transport-North-East-Committee-11-October-2018-Agenda-Pack.pdf>

Buses

2.21 Buses are our most used form of public transport with 156.3 million passenger journeys made in 2017/18, which means the region has the 4th highest bus use per household in England⁴. However, bus use has declined by 22% since 2006/07 when 178.5 million journeys were made⁴. Around 650 different registered bus services operate in the region. Around 88% of mileage on these services is operated on a commercial basis with the remaining 12% subsidised by the local transport authorities (Durham County Council, Northumberland County Council and Nexus). In our large towns and cities bus networks are comprehensive and services operate frequently during weekdays, and often throughout the entire week. The secured bus network fills gaps in the commercial network – at certain times of the day, certain times of the week or along unserved routes – and comprises 5.3 million bus miles per annum in Tyne and Wear, 1.3 million bus miles per annum in Northumberland and 2.1 million bus miles per annum in Durham. Across the North East these services accommodate approximately 11 million passenger journeys, 6.5% of all passenger journeys.

2.22 There is generally a high level of satisfaction with bus services amongst today's users⁵ and the fleet continues to be renewed or retrofitted with greater levels of technology in emissions controls, passenger real time information/announcements and Wi-Fi / charging sockets. NEbus is the new name for bus operators' association in the region, whose aim is to further improve the quality of the bus network.

Buses are the most used form of public transport in the North East



⁴ DfT (2019), Annual Bus Statistics 2017/18, viewed on 1st October 2019, https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/774565/annual-bus-statistics-year-ending-mar-2018.pdf

⁵ 2018/19, Transport Focus, Bus Passenger Survey

Metro

2.23 The Tyne and Wear Metro serves 60 stations across Tyne and Wear. It connects the cities of Newcastle and Sunderland with coastal communities in North and South Tyneside, Gateshead and the north of Newcastle. The service operates at a daytime 12-minute frequency on each of two lines (Airport to South Hylton and St James to South Shields), which provides a train every six minutes where the two lines merge through Central Newcastle and Gateshead. Frequency is boosted by additional morning and evening peak period trains in the central section of the network to provide a train every three minutes. The system intersects with national and international connectivity hubs at Newcastle and Sunderland stations and Newcastle International Airport.

2.24 In 2017/18 the Metro carried 36.4 million passenger journeys, with 53 million trips a year forecast by 2030⁶. Even under a conservative estimate, annual patronage is expected to grow to 45 million journeys across the Metro network by 2030. A new Metro fleet is planned with the first new trains entering service in 2021. Metro carries a significant number of passengers across the region and is important for regional success, connecting people to future opportunities. A current fully laden Metro train has the potential to take 119 cars off the road network.

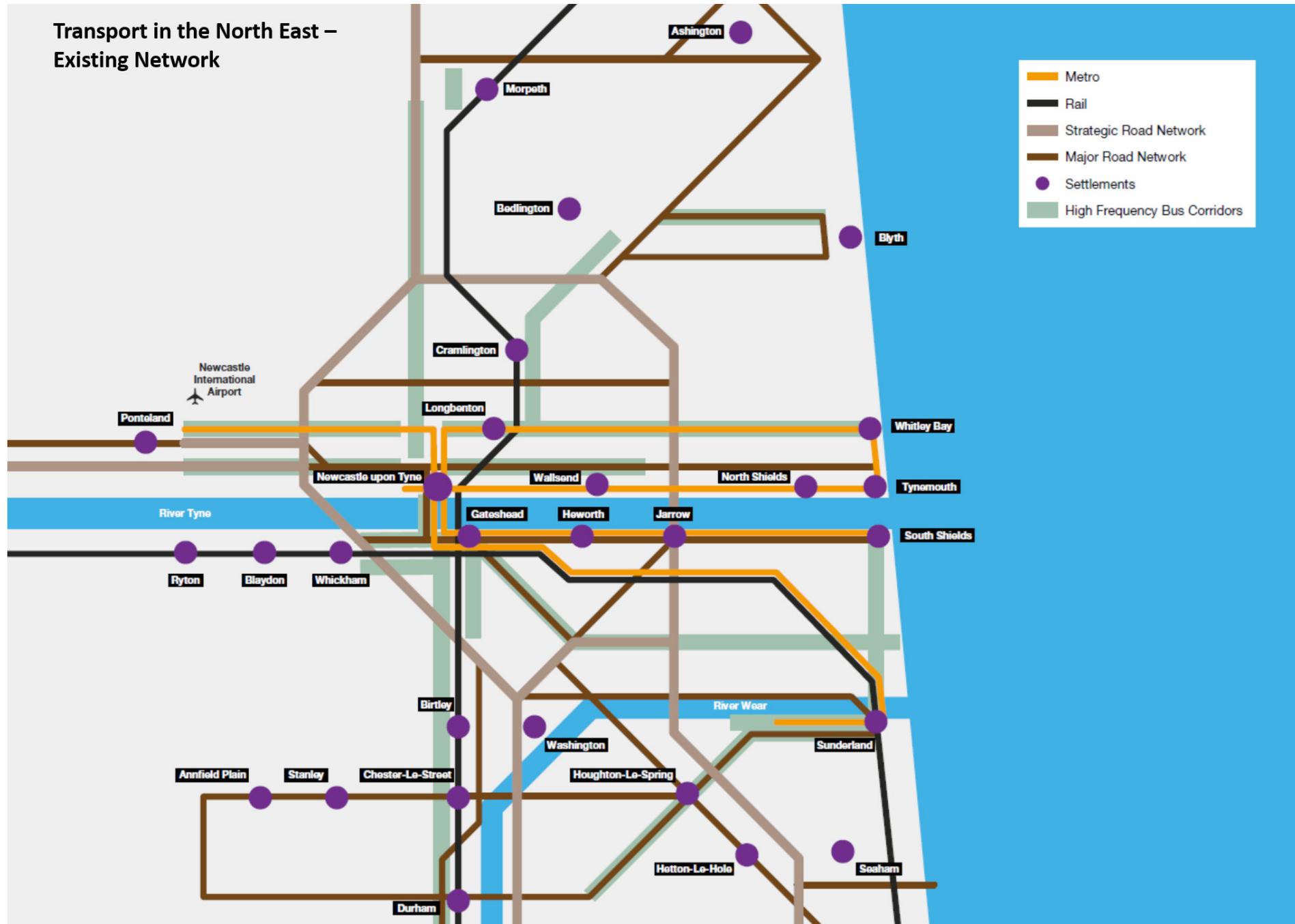
2.25 Metro also plays an important role in multi-modal journeys. Metro, Bus and taxi interchanges at locations such as Heworth, Sunderland, South Shields, Park Lane, Regent Centre, Gateshead and Four Lane Ends enable integrated journeys to be made, with through- ticketing products available. Some of these locations also offer Park and Ride opportunities. This submission recognises these important interchanges and looks to enhance them and develop new interchanges that reflect patterns of movement. **Figure 7** below shows the extent of the network and current interchange opportunities.

The Metro connects communities to City Centres, the Airport and the coast



⁶ Systra (2012), Metro Demand study, available on request

Figure 7 Transport in the North East



Local Rail

2.26 Local rail usage (Durham Coast, Tyne Valley, Bishop Line and Northumberland services on the East Coast Main Line) is increasing, resulting in capacity issues at peak times. Older and less comfortable trains are progressively being replaced by newer and refurbished trains cascaded from other regions. Local services tend to fall below the minimum standards of the Transport for the North (TfN) Long Term Rail Strategy (two trains per hour and a minimum speed of 40mph).

Ferry

2.27 The Shields Ferry provides a valuable service linking North and South Shields, with 437,000 trips in 2017/18. The ferry provides connections for pedestrians and cyclists and is important for commuters and leisure passengers.

Ticketing and Technology

2.28 Nexus has a smart ticketing platform called Pop, which is an ITSO international standard system that allows for the purchase of tickets and production of a paperless token for travel across all Metro and most bus services in the North East. The cards can also be used to access Cycle Lockers at Metro stations. The Pop technology is currently being integrated with android smartphone technology so that it can be integrated with a travel app. The Bus Open Data programme will ensure that by 2021 all bus timetable, real-time location and fares information will be available online and published through API feeds.

Pop can be used on the Tyne and Wear Metro and almost all buses across the region



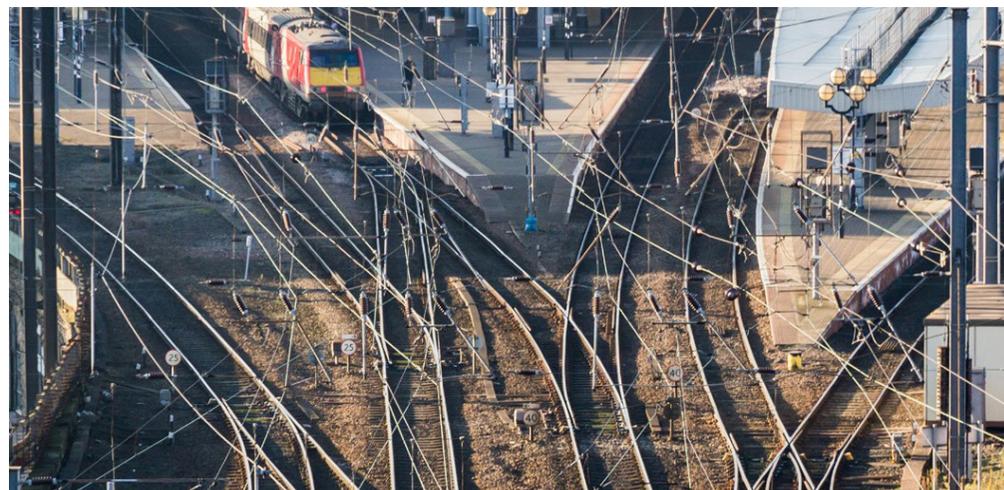
2.29 Nexus has a journey planner, as do individual bus operators. This relies on scheduled timetable information and real-time information about the location of buses and predicted arrival times at stops.

2.30 Public transport disruption information is already available from a variety of social media sources and is being rationalised into one online source by a Transport for the North (TfN) project.

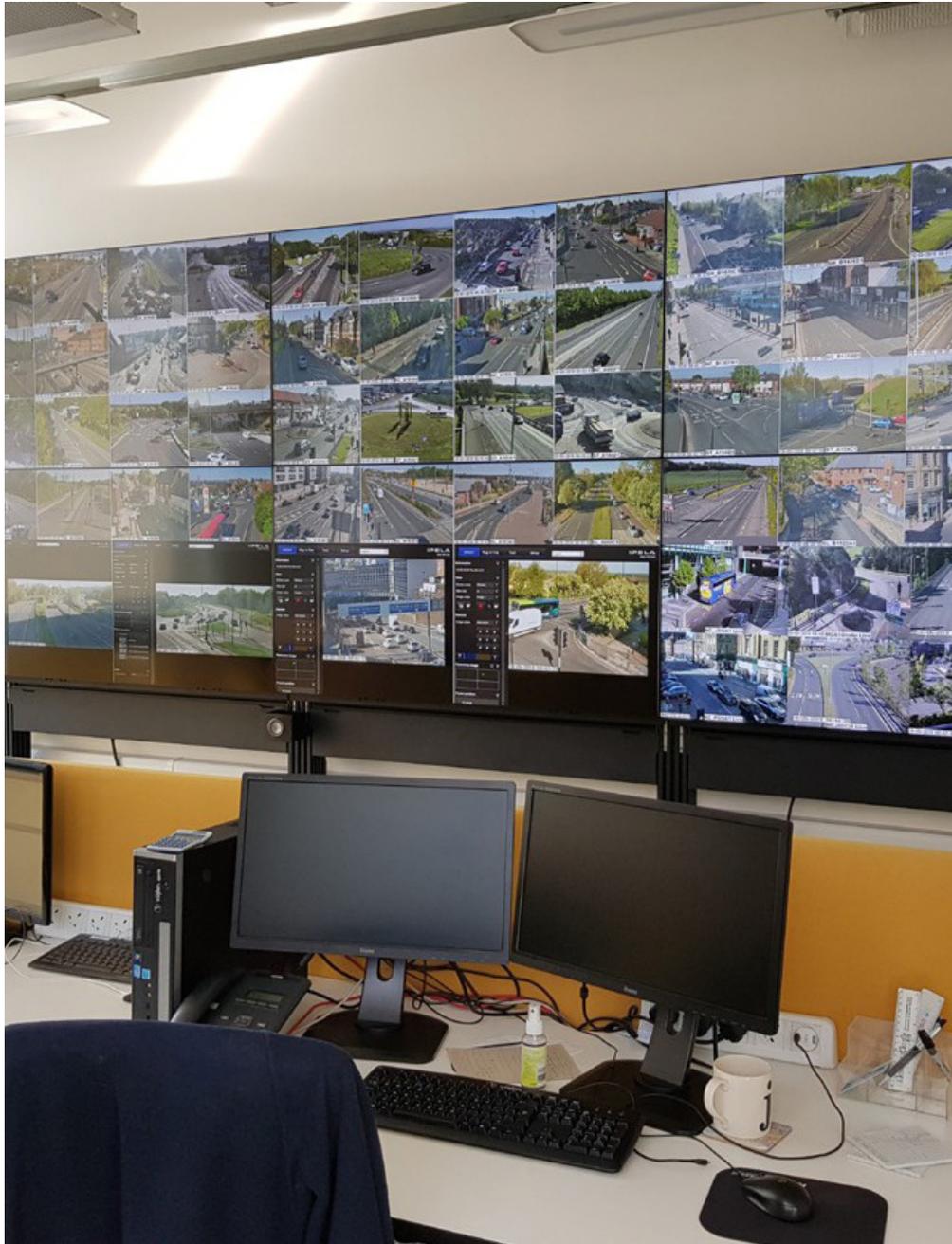
2.31 Comprehensive information about the live operation of our local highway networks is available from our Urban Traffic Management Centres (UTMC) in Tyne and Wear and Durham, which can remotely change traffic management plans at signalised junctions to address local issues or give priority to buses.

2.32 Over the past 10 years, significant investment has been made in developing and enhancing the UTMC centres, managing and influencing transport across large parts of the North East. This investment has expanded its capability and complexity using grants for Better Bus Areas, NPIF and Tranche 1 of this TCF fund. Excellent results have been achieved where UTMC interventions have been made to improve bus journey time reliability, and significantly more is planned to maximise its effectiveness.

Our plan will support national connections with regional and local links



The region's UTMCs allow for the management of the network including supporting the reliability of bus services



Walking and Cycling

2.33 The region has an established walking and cycling network, which has been subject to investment over recent years through funds such as the Local Growth Fund, the Local Sustainable Transport Fund, the Cycle City Ambition Fund and local capital projects. The region works closely with partners including Living Streets and Sustrans in the development of walking and cycling initiatives and investment in the network. The work by Sustrans and our own analysis demonstrates that there is a clear opportunity for modal shift to cycling and walking which can have demonstrable benefits to health and wellbeing. For example, within Newcastle, 31% of the population live within 125m of a signed cycle route yet only 7% of the city's population currently cycle. This reduces to 2% across the wider North East geography⁷.

2.34 Figures from Sustrans suggest that people in the North East feel positively about cycling as a mode of transport and are ready to build on the 9 million journeys made by bike in Newcastle in 2016/17 (which took the equivalent of nearly 7,000 cars off the city's roads)⁷.

2.35 There is a core of cycle commuting⁸ within Newcastle and to some extent between Newcastle and Gateshead. There are further hotspots of cycle commuting within Durham City, Newton Aycliffe, Ashington and Blyth. This is due to a combination of factors including convenience, urban density, on and off-road infrastructure and demographic profiles. There is a significant opportunity to encourage further modal shift to cycling and walking. As highlighted by the Cycle City Ambition Programme Interim Report⁹, Newcastle has experienced a 12% increase in the number of cyclists as result of the delivered schemes.

⁷ Sustrans, Bike Life, Newcastle, <https://www.sustrans.org.uk/bikelifenewcastle>

⁸ 2011 Census, Travel to Work data

⁹ Technopolis / Sustrans (2019), Cycle City Ambition Programme, Interim Report, viewed 14 October 2019, https://gallery.mailchimp.com/a48e5036bdadd8d6146783324/files/cbebe4c4-db5d-4090-8492-4ea-36dc91be8/ANNEX_B_CCA_Interim_Report_FINAL_002_.pdf

Millennium Bridge : walking and cycling bridge over the River Tyne Gateshead-Newcastle



Tranche 1: Broadway to Brunton Lane Cycle Scheme in Newcastle



2.36 Cycling is an important form of transport for people from lower income groups, including students and people in lower supervisory and technical occupations. Students, who form a large part of the North East population including that of the three cities, are more likely than the general population to cycle two or three times a week. Where infrastructure is provided, people in managerial, administrative and professional roles have markedly higher than average rates of cycling. Improved cycling opportunities will appeal to a cross spectrum of society as an affordable transport option and a mode of choice.

Park & Ride

2.37 The region has an established Park & Ride offer, our current sites offer over 4,300 spaces at:

- 30 Tyne and Wear Metro stations;
- bus-based Park & Ride at three sites in Durham City;
- Newcastle Great Park; and
- 19 National Rail stations across the area.

2.38 Park & Ride plays an important role in improving the efficiency of our transport network in the North East and relieving urban congestion, helping to improve air quality and enhance our economy. From Nexus' research¹⁰, 75% of people using Metro Park & Ride are doing so for business and commuting purposes, compared to 42% of all Metro passengers. The research suggested that people chose to use Park & Ride due to cost and because of a lack of parking near the destination.

2.39 Occupancy at Metro Park & Ride sites varies, some car parks are regularly over capacity whilst others are under-used. In some cases, traffic congestion in the vicinity of existing Park & Ride sites limits their attractiveness and use. In addition, there is a variety of approaches to parking charges at different stations that influences their popularity.

2.40 We have bus-based Park & Ride options available in Durham and at Newcastle Great Park. Durham's Park & Ride sites offer reductions to congestion in the city centre, with sites located around the periphery of the city on busy arterial routes. Demand is high, and the sites benefit from single payment options and 10-minute bus frequencies into the city. Newcastle's Great Park site located just off the A1 is an operator led facility which offers free parking and 15-minute frequencies on route into Newcastle.

Durham Park and Ride



¹⁰ Nexus (2019), Independent Research for the Strategic Outline Business Case, Smart and Digital Car Parks, available on request.

National Connectivity

2.41 Our TCF programme must complement the work being developed by organisations such as Transport for the North, Highways England and High Speed 2 in improving pan Northern and national connectivity. Our regional assets are exemplified in **Figure 6** and include our national and regional rail routes and our strategic and major highways. For transforming cities, the focus is on the interrelationship between these national assets and local interventions. As examples our station gateway sites in this programme will reflect wider interventions being promoted and will support last mile connectivity to these stations and assets. In addition, local rail enhancements at stations benefit wider national links and future capacity.

2.42 This approach also applies to roads, with a complementary package of works at a local level that supports the investments planned on the Strategic and Major Road Network, freeing up space for those who need it most and boosting journey times for road based public and sustainable transport.

Congestion in Newcastle



International Connectivity

2.43 The North East's airport and seaports welcome millions of passengers and manage millions of tonnes of freight, supporting our exports, tourism and education economy. They need to retain their markets and grow, doing so sustainably.

2.44 Some 5.4 million people used Newcastle International Airport in 2017¹¹. The airport serves 80 domestic and international destinations direct, linking seven international hubs for onward global connectivity, and has just announced new route to Germany. Newcastle International Airport is the largest airport in the North East. It is a jobs generator, supporting 3,500 jobs on site and a further 18,300 across the region. Enhancing the connections to the airport by sustainable modes is a priority. Durham Tees Valley airport also offers international and national connections.

Newcastle International Airport



¹¹ Newcastle International Airport (2019), About your airport, available at, <https://www.newcastleairport.com/about-your-airport/airport-facts/passenger-statistics/> (Accessed on 29/10/2019)

2.45 Although freight traffic is the primary focus of our five regional ports, handling 6.36 million tonnes in 2018, the Port of Tyne is also significant for passenger movement, both in terms of daily ferry services to Amsterdam and calls by cruise liners¹². In the period 2010 to 2015 passenger numbers averaged 583,000 per annum¹³. The number of cruise ships calling at the Port of Tyne is increasing with over 50 calling in 2019. Whilst international connections are not the focus of this programme, we can ensure that high quality intra-regional connections are available to encourage inward tourism. By encouraging an increase in public and sustainable transport trips we can free up more road space for freight and other vehicles that rely on the network to perform their functions for a successful regional economy.

Port of Tyne



¹² DfT (2018) Port Freight Statistics 2018, All UK major and minor port freight traffic, by port and year (direction filter) from 1965', viewed 14 October 2019, <https://www.gov.uk/government/statistics/port-freight-annual-statistics-2018-final-figures>

¹³ Port of Tyne, (2019), viewed on the 1st June 2019, available at, <http://www.portofTyne.co.uk/business-divisions/cruises-and-ferries/>

Summary Box: Our Transport Network

We have a well-established integrated public and sustainable transport system with potential to improve this further to expand its reach and capability;

We have established Park and Ride infrastructure and the ability to strengthen this offer;

Our UTMC centres and data collection services allow us to collate, analyse and make decisions on effective public and sustainable transport management, as well as highways operations,

The integrated nature of the network, is supported by ticketing solutions and interacts with national and international links,

The geographical nature of the network provides a platform to encourage effective modal shift.

Context: Our People

In this section we

Profile our current population; and

Introduce changing trends

Population overview

2.46 The population of the North East city region is 1,983,625¹⁴ with a workday population of 932,000¹⁵ people. Taking into consideration that the region draws activity from and to its neighbours in Tees Valley, the combined workday population increases to over 1.2 million people¹⁶.

2.47 Table 2 shows that our population structure includes a large proportion of people in the older age bands than England and Wales as a whole, as, there is a lower proportion of persons aged 0-15 years compared to the national average.

Table 2 Population age profiles

Age profile – Mid Year Population Estimates 2017

Area / Age profile	0-15	16-24	25-49	50-64	65+	Working age population (16-64)
North East	17.2%	12.0%	31.2%	20.2%	19.5%	63.3%
England and Wales	19.0%	11.1%	33.4%	18.5%	18.0%	63.0%

¹⁴ ONS (2019), Mid-Year Population Estimates, ONS, viewed 14 October 2019, <https://www.nomisweb.co.uk/articles/1165.aspx>

¹⁵ ONS (2019), Annual Population Survey 2019, ONS, viewed 14 October 2019, <https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/employmentandemployeetypes/methodologies/annualpopulationsurveyapsqmi>

¹⁶ ONS (2019), Labour Market Profile - North East, ONS, viewed 14 October 2019, <https://www.nomisweb.co.uk/reports/lmp/2013265921/report.aspx>

Changing Trends

2.48 Over the last 10 years, the population of the North East city region has grown by 3.5%. This is less than half the rate of growth experienced by England excluding London (7.1%) and England (8.2%). The region's lower population growth reflects both a lower rate of natural change (births minus deaths) and lower rates of migration into the area.

2.49 Based on 2016 data, the North East LEP area population is projected to grow by 2.0% over the 10 year period from 2018 to 2028. This is below the rate of growth projected for England excluding London (5.0%) and England (5.4%). By 2028 it is projected that there will be 32,000 fewer individuals of working age (16 to 64) in the North East LEP area, higher than the rate of the national average¹⁷. The increase in life expectancy, changes in social attitudes and better health may lead towards an increase in mobility because:

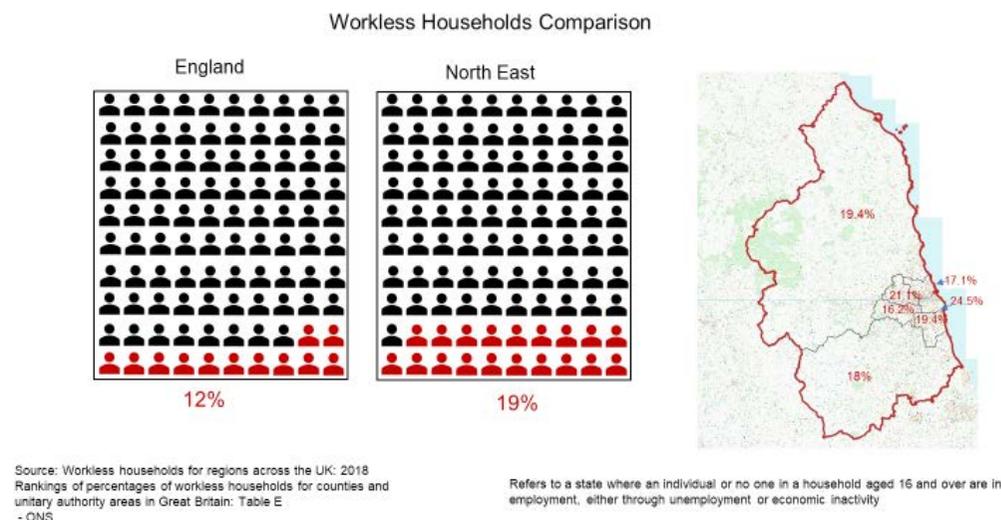
- People may remain in work later in life;
- Future generations will be used to high levels of personal mobility and remain determined to maintain this; and
- “Ageing in place” (being able to remain in their same place and not having to move or go into care) and independent living are highly valued: independent living for a longer period can generate more demand for travel than sheltered living.

2.50 Thirty two percent of the region's workday population have a degree or equivalent qualifications with qualification levels rising. However, at the same time, against a backdrop of a post-industrial population, we have concentrations of worklessness that are higher than the average of England as shown in **Figure 8**. We also experience an uneven spread of qualifications and factors affecting the take up of apprenticeships We will reflect on this in developing effective transport solutions.

¹⁷ North East Data Hub (2019), Population projections (2016-based) local authority based by single year of age [Nomis, last updated on 24 May 2018]

2.51 Unemployment in the region is at 5.4% (Between July 2018 and 2019). Whilst this has decreased in the region from 9.4% in 2013 it remains above the average for England excluding London at 4% and the second highest rate among the eight-core city LEPs.

Figure 8 Workless Households in England and the North East



Summary Box: Our People

Our population is growing, which needs to be accommodated on our networks;

We have a growing ageing population with specific travel needs;

We have concentrations of worklessness which can be supported by investments in transport.

Context: Policy and Strategy

In this section we

Set out local, regional, pan regional and national policies and strategies;

Explain why these policies and strategies are relevant; and

Indicate how our programme can seek to respond to the aims, objectives and requirements of these policies.

2.52 The Transforming Cities Fund is designed to deliver infrastructure as part of the Government's Industrial Strategy. TCF can also deliver a range of other published strategies and policies at national and regional levels, especially around the themes of economic growth, productivity and clean growth.

2.53 The Policy and strategy context is summarised in **Figure 9**.

Figure 9 Policy Toolkit; A snapshot of relevant policy and measures

	National	National / Sub National	Regional	Local
Transport	 <p>INDUSTRIAL STRATEGY TRANSFORMING CITIES FUND</p> <p>Department for Transport single departmental plan June 2019</p> <p>Future of Mobility: Urban Strategy</p> <p>Moving Britain Ahead</p>	 <p>TRANSPORT FOR THE NORTH</p>  <p>NATIONAL INFRASTRUCTURE COMMISSION</p>	 <p>North East Combined Authority BIRMIHAM - GATESHEAD - SOUTH TYNESIDE - SUNDERLAND</p>  <p>NORTH OF TYNE COMBINED AUTHORITY</p>  <p>Transforming Cities Fund Tranche 2</p> <p>Forthcoming Transport Plan</p> <p>Metro / Local Rail, Park and Ride Strategies and Local Transport Plan</p>	<ul style="list-style-type: none"> Local Transport Plans Cycling and Walking Infrastructure Plans
Economy	 <p>INDUSTRIAL STRATEGY</p>  <p>UKRI</p> <p>Innovate UK</p>	 <p>NORTHERN POWERHOUSE Strategy</p>	 <p>North East Local Enterprise Partnership</p>  <p>The North East Strategic Economic Plan</p> <p>Forthcoming Local Industrial Strategy</p>	
Environment	 <p>CLEAN AIR STRATEGY 2019</p>  <p>HM Government</p> <p>A Green Future: Our 25 Year Plan Improve the Environment</p>	<p>The Road to Zero Next steps towards cleaner road transport and delivering our Industrial Strategy</p>	 <p>BREATHE</p> <p>AQMAs</p>	Local Climate Change and Environmental Plans
Planning, Housing and Design	 <p>Ministry of Housing, Communities & Local Government</p> <p>National Planning Policy Framework</p> <p>National Design Guide Planning practice guidance for beautiful, enduring and successful places</p>	<p>Fixing our broken housing market</p>		Local Plans Transport Planning Guidance
Public Health and Wellbeing	 <p>Public Health England</p> <p>PHE Strategy 2020-25</p> <p>Protecting and improving the nation's health</p>	<p>The English Indices of Deprivation 2019 (IoD2019)</p> 	<p>Public Health Strategies / Annual Reports</p> 	<p>Wellbeing for life</p> 

National Strategy Context

The UK's Industrial Strategy and Future of Mobility Grand Challenge 2017

2.54 The UK's Industrial Strategy sets out four Grand Challenges to which the UK must respond and which present opportunities for future innovation and growth:

- Artificial Intelligence and data economy – we will put the UK at the forefront of the artificial intelligence and data revolution;
- Clean growth – we will maximize the advantages for UK industry from the global shift to clean growth;
- Future of mobility – we will become a world leader in the way people, goods and services move, and;
- Ageing society – we will harness the power of innovation to help meet the needs of an ageing society.

TCF is part of the Government's Industrial Strategy



**INDUSTRIAL
STRATEGY**

TRANSFORMING CITIES FUND

2.55 There are clear links between the Industrial Strategy and TCF, best illustrated by the TCF objective to drive up productivity and improve connectivity between suburbs and urban centres. Thematically, TCF focusses on improved access to employment sites, supports established and emerging industries and sets out a desire to reduce carbon emissions linking to the clean growth agenda. Our TCF programme responds to these priorities and contributes to the four grand challenges in the Industrial Strategy.

Future of Mobility: Urban Strategy 2019

2.56 The Future of Mobility Urban Strategy is a central part of the Government's Industrial Strategy. It identifies the opportunity we face now as a nation to influence the speed of innovation, with new forms of transport through nine principles.

2.57 This strategy is relevant because TCF is an enabler to enhanced provision of infrastructure for walking, cycling and mass transit. TCF spreads benefits across England and across segments of society.

2.58 Our programme offers significant walking and cycling interventions in a polycentric region and increases the capacity, resilience and frequency of mass transit. Its broad coverage includes areas of above average multiple deprivation.

Transport Investment Strategy 2017 (TIS)

2.59 TIS outlines how the Government will invest in transport to achieve the goals of the Industrial Strategy and that through investment, Government will seek to:

- Create a more reliable, less congested and better-connected transport network that works for the users who rely on it;
- Build a stronger, more balanced economy by enhancing productivity and responding to local growth priorities;
- Enhance our global competitiveness by making Britain a more attractive place to trade and invest; and
- Support the creation of new housing.

2.60 Under the umbrella of the Industrial Strategy, the TCF and the TIS align their thematic goals of connectivity, productivity and increased housing.

2.61 Our programme delivers schemes, especially in Metro and local rail, which enhance network reliability and connectivity in the region, including to new housing sites.

DfT Single Departmental Plan 2019

2.62 The six core objectives of the DfT Single Departmental Plan correlate closely with the aims and objectives of this submission, including through balancing investment across the country, connecting people and places via sustainable modes, driving up the reliability of journeys and preparing the transport network for technology progress. We explore through this submission how we address these objectives.

Clean Air Strategy (2019)

2.63 This strategy sets out how all sources of air pollution should be tackled, making air healthier to breathe, protecting nature and boosting the economy. Specifically, in the chapter dedicated to transport, it states that: “[the] immediate air quality challenge is to reduce emissions of nitrogen oxides in the areas where concentrations of these harmful gases currently exceed legal limits.”

2.64 Relevant to TCF is the undertaking that: “We [Government] are taking action to encourage the use of the cleanest modes of transport for freight and passengers, including active travel”. The role of public transport in reducing emissions is also highlighted: “modal shift to rail, can help to reduce road traffic congestion and emissions”.

2.65 Our programme responds with a clear desire to reduce nitrogen oxides through an attractive regional walking, cycling and public transport offer including bus rail, Metro and Park and Ride. It builds on the extensive work and proposals being promoted by Newcastle, Gateshead and North Tyneside, who are currently under instruction from Government to address transport related NOx exceedances in the shortest possible time.

Tyne Bridge congestion



National Planning Policy Framework (2019)

2.66 This Framework has 3 overarching objectives:

- **an economic objective** – to help build a strong, responsive and competitive economy,
- **a social objective** – to support strong, vibrant and healthy communities,
- **an environmental objective** – to contribute to protecting and enhancing our natural, built and historic environment; A section on “Promoting Sustainable Transport” states that “Transport policies have an important role to play in facilitating sustainable development but also in contributing to wider sustainability and health objectives”. The transport system needs to be balanced in favour of public and sustainable transport modes, giving people a real choice about how they travel.”

2.67 NPPF also encourages solutions that support reductions in greenhouse gas emissions and reduce congestion, stating that Local Plans should facilitate public and sustainable transport use with developments located and designed where practical to:

- accommodate the efficient delivery of goods and supplies;
- give priority to pedestrian and cycle movements, and have access to high quality public transport facilities;
- Create safe and secure layouts which minimise conflicts between traffic and cyclists or pedestrians, avoiding street clutter and where appropriate establishing home zones; and
- incorporate facilities for charging plug-in and other ultra-low emission vehicles; and consider the needs of people with disabilities by all modes of transport.

2.68 Our programme aligns with this framework, supporting of prioritised cycle and pedestrian movements and high-quality public transport.

2.69 Furthermore, a Design Guide¹⁸ was published by the Ministry of Housing, Communities and Local Government. This encourages an integrated approach to the design of places, including the prioritisation of space for pedestrian and cycle movement to reduce the reliance on the car. Housing Policy has evolved over recent years with planning policy following suit. In the 2017 Fixing the Broken Housing Market, there is an explicit focus on investment policies supporting the delivery of new homes¹⁹. This is supported by the MHCLG Single Departmental Plan looking at homes in the right places and boosting supply²⁰. This programme will unpick how we support housing growth across the region.

¹⁸ MHCLG (2019), National Design Guide, viewed 10 October 2019, https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/835212/National_Design_Guide.pdf

¹⁹ MHCLG (2017), Fixing the Broken Housing Market, available at, <https://www.gov.uk/government/publications/fixing-our-broken-housing-market>, viewed on the 31st October 2019.

²⁰ MHCLG (2018), Single Departmental Plan, viewed 31 October 2019 <https://www.gov.uk/government/publications/department-for-communities-and-local-government-single-departmental-plan/ministry-of-housing-communities-and-local-government-single-departmental-plan#deliver-the-homes-the-country-needs>

National Infrastructure Commission (NIC), National Infrastructure Assessment

2.70 The NIC was established in 2015 tasked with providing government with impartial, expert advice on major long-term infrastructure challenges. In 2018 the commission published a National Infrastructure Assessment that sets out a view on the long-term economic infrastructure needs. The assessment encourages Metro Mayors and city leaders to develop and implement long-term strategies for transport and other forms of infrastructure. It recommends long term sustained investment in transport within cities with integrated strategies that make a real difference to local economic growth, societal needs and environmental quality.

2.71 Relevant to TCF is the work by the NIC through the ‘Next Steps for Cities’ programme, in which cities develop long-term transport strategies that unlock new job opportunities and deliver new homes. Our region is actively engaged with the NIC on this programme.

Rail Network Enhancements Pipeline

2.72 Department for Transport has embarked on a programme of modernisation to meet the surge in rail demand, with passenger journey numbers having more than doubled in recent years. Alongside the funding for maintenance and renewals that Government is providing for the period 2019-2024, it has committed substantial investment in enhancements to provide new capacity and improve journey times. The investment will make today’s railway safer and more reliable – but also enable the railway to offer new opportunities for citizens and businesses, and to unlock housing and economic growth. The intention is for more enhancements to be promoted, funded and/or financed by a range of parties, for example the Transforming Cities Fund.

Regional Policy and Strategy Context

TfN Strategic Transport Plan (STP) 2019

2.73 Transport for the North's Strategic Transport Plan sets out the case for transport infrastructure investment through to 2050 with four pan-Northern objectives:

- Increase efficiency, reliability and resilience in the transport system
- Transforming economic performance
- Improve access to opportunities across the North
- Promote and support the built and natural environment.

2.74 The STP is focused on Northern inter-city connectivity and travel within regions to bolster wider economic growth. It also identifies the need to continue to invest locally to provide links in and out of the pan northern network.

2.75 The Agglomeration and Clustering Analysis from TfN²¹ demonstrates the economic clusters that exist across the North, explains how we can understand the economic activity that is undertaken and best plan for it. Across the North East, we have a mix of large conurbations surrounded by industrial and rural hinterlands. Looking at our sectoral strengths these differ between our economic clusters but all capabilities (prime and enabling) are represented across the region.

2.76 The Connectivity and Labour Markets in the Northern Powerhouse report looks at future travel demands across the North. It includes analysis that shows 61% of workers in the North were resident workers who live and work in the same Local Authority District (LAD), with the Northern Powerhouse Independent Economic Review, economic transformational scenario, this is projected to

reduce to as much as 32% depending on the scenario²². TfN has examined the cause and effects of travel behaviour across the North, revealing that sizeable proportions of the sample surveyed were constrained in their travel patterns by factors including levels of public transport accessibility²³.

2.77 Underpinning the TfN Strategic Transport Plan and the Investment programme are a series of Strategic Development Corridors (SDC) studies. These documents analyse travel patterns within the subregions of the North and look to demonstrate investment in transport infrastructure that will enable transformational economic growth. The region is impacted by the work of three corridor studies which together look at the vital infrastructure required to deliver pan Northern growth²⁴.

2.78 Our programme seeks to build on TfN's work by improving connectivity between cities in our region, improving access to jobs with the aim of reducing the North/South productivity gap. It improves connectivity between our area and the rest of the North of England through improved rail gateways and better access to interchange into the wider rail network. By focusing on intra-regional connections, we can complement the work progressed by Transport for the North for inter-regional impacts. Where there are overlaps, we reference this within the submission. The objectives surrounding housing development and access to education and apprenticeships ensure that the programme will put the North East in the best position to sustainably increase economic growth into the longer-term future.

²¹ TfN Agglomeration and Clustering Analysis (2019), available online at, <https://transportforthenorth.com/wp-content/uploads/TfN-Agglomeration-and-Clustering-Final-Report.pdf> (last accessed on 4th November 2019)

²² Cambridge Economics, available as part of the TfN Connectivity and Labour Markets in the Northern Powerhouse report (2018), <https://transportforthenorth.com/wp-content/uploads/Connectivity-and-Labour-Markets-in-the-Northern-Powerhouse-Report-min.pdf> (last accessed on 4th November 2019)

²³ TfN, User Insight Phase 2 (2019), available online at, <https://transportforthenorth.com/wp-content/uploads/TfN-User-Insight-Phase-2-Final-report-June-2019.pdf> (last accessed on 4th November 2019).

²⁴ TfN, Strategic Development Corridors (2019), available online at, <https://transportforthenorth.com/strategic-development-corridors/> (Accessed on 4th November 2019).

These interventions support a sustainable integrated transport network across the North and beyond, image courtesy of TfN

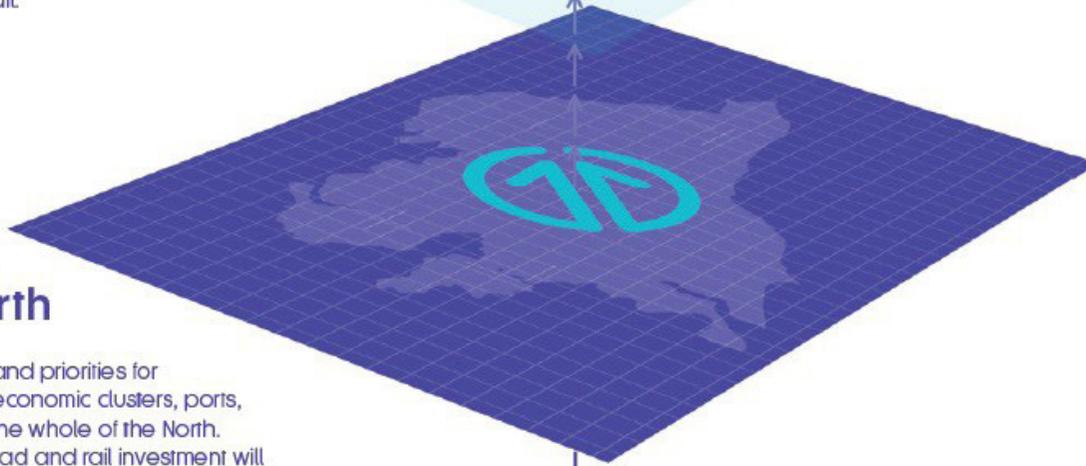
Local Transport Authorities

Managing and investing in local transport networks within economic clusters, such as investment in local roads, cycling, walking, and buses, and in some cases light rail.



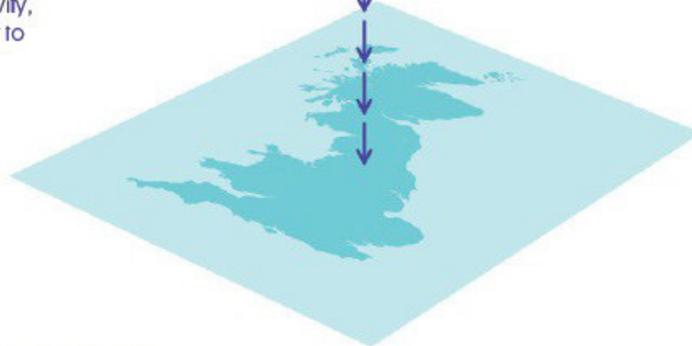
Transport for the North

Setting out the case and priorities for connecting different economic clusters, ports, and airports across the whole of the North. TfN's 'blue print' for road and rail investment will enhance strategic pan-Northern connectivity, complementing local transport investment to improve the 'whole journey'.



National connectivity

Working with the Department for Transport and the North's cross-border authorities, the pan-Northern investments will support enhanced connectivity across the UK.



North East Strategic Economic Plan (SEP) Refreshed 2019

2.79 Our SEP has been prepared by the North East Local Enterprise Partnership (NELEP). It provides the region with a framework for economic growth that is responsive and relevant to a rapidly-changing national and global context. The Plan's ambition is to increase the number of jobs in the North East by 100,000 between 2014 and 2024, with 70% of these being better jobs, defined as managerial, professional and technical roles.

2.80 It has four targets where we aim to improve our performance relative to England excluding London which are to:

- Reduce the gap in private sector employment density by 50% by 2024;
- Close the gap in the employment rate for people aged 16-64 by 50% by 2024;
- Reduce the gap in economic activity for people aged 16–64 by 100% by 2024; and
- Reduce the gap in productivity by 50% by 2024.

2.81 Our SEP's ambition and targets are aligned to TCF through the strategic TCF goal of driving up productivity, and cross-cutting priorities to improve access to work and deliver more apprenticeships. The Transport Connectivity section of the SEP states that: "Our ambition is one of improved, greener and more sustainable transport options, including public transport, cycling and walking".

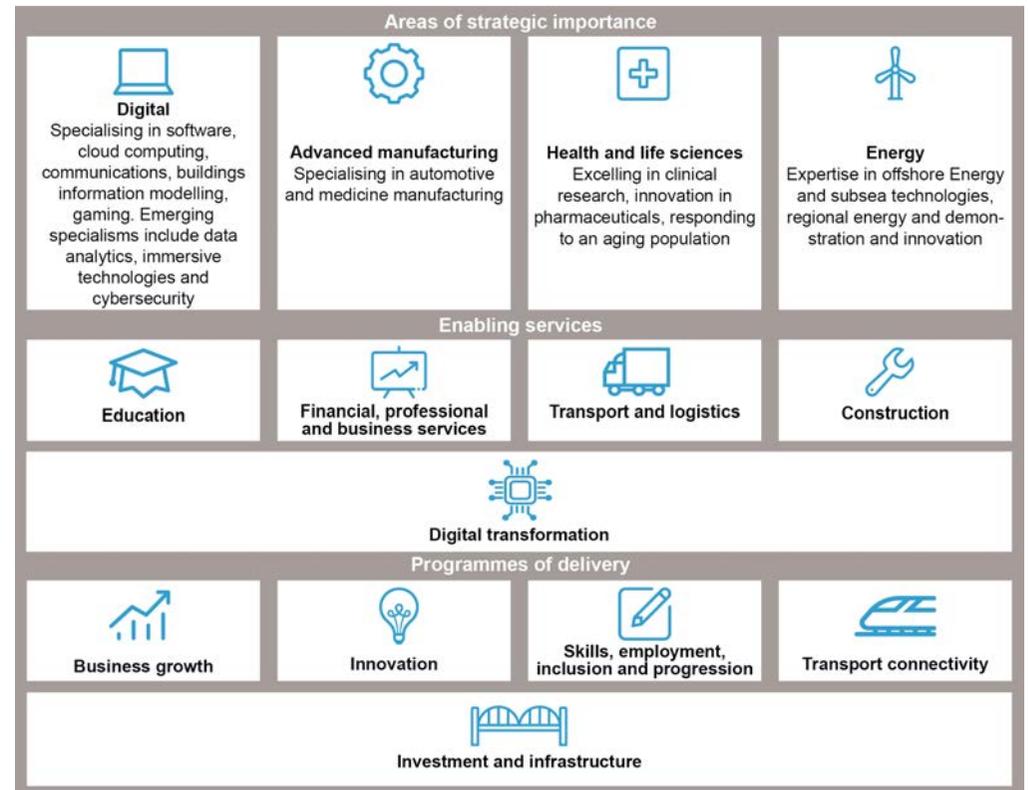
Opportunity sectors for the Region's economy



2.82 To achieve these economic targets NELEP, through the SEP, has identified four specialisms that provide distinctive growth opportunities in the region, three enabling services that will support the wider economy as well as offer more 'better jobs', and five programmes of delivery to support these activities. These are illustrated at **Figure 10**.

2.83 Our programme will be aligned to the ambition of our SEP as we focus on schemes which drive productivity and access to skills and employment. Securing funding through TCF is cited as a measure of success in our SEP.

Figure 10 North East SEP, Our Plan



Local Industrial Strategy (LIS)

2.84 The North East Local Industrial Strategy (LIS), currently in development by NELEP, will form a bridge between the 2019 SEP and the National Industrial Strategy. It will work seamlessly with the SEP, focusing on productivity and economic growth within the region. In the challenging context of the UK's planned withdrawal from the European Union, it will focus making the most of the region's strengths and potential, as well as boosting confidence to innovate and grow.

2.85 An important task for the LIS is to support the North East economy to 'look outwards' towards other regions in the North of England, the rest of the UK, and internationally. Historically this has been a vital source of prosperity for the North East. The region now needs strong and dynamic transport links that make the most of the opportunities of the Industrial Strategy nationally and forge its post-Brexit global role. The region's TCF programme will link our internal assets to the national and international economies, connecting people and places to new opportunities.

2.86 The Local Industrial Strategy will be grounded in a robust evidence base. This includes a review of the region's productivity position and potential, and of its assets for economic growth. The programme of work set out in this bid offers a vital opportunity to make the most of these identified opportunities. The combination of this ambitious programme of work with an effective SEP and LIS offer a test-bed to demonstrate the economic and social value of sustainable and low-carbon transport infrastructure within a region. In addition, evaluations and learning can build on an excellent baseline of data.

2.87 Transport plays a substantial role in the achievement of the goals of the LIS through the delivery of improved connectivity to all growth sectors, including opportunities to trade efficiently and widen labour markets. Our TCF programme reflects the emerging LIS and includes investments in infrastructure that enhance access to key growth nodes.

Local Policy and Strategy

Local Transport Plans (Durham, Northumberland, Tyne and Wear)

2.88 Each of the three local transport authorities in the North East has developed a Local Transport Plan, setting out how transport policy will address the issues facing their area and help to create a sustainable local transport network that is resilient and responsive to changing needs. The LTPs generally cover a period up to the early 2020s and will remain current until superseded by the regionwide North East Transport Plan currently in development.

2.89 The three plans share similar aims around economic development and regeneration, reducing carbon emissions, creating healthier and safer communities, promoting equal opportunities and social mobility, and improving accessibility. These aims correspond with those of the Transforming Cities Fund, our programme of interventions will align with and build upon the LTPs at a coordinated region-wide level.

Metro and Local Rail Strategy (MLRS)

2.90 This is an ambitious blueprint aimed at creating “an integrated, modern and sustainable Metro and local rail network, that supports the local economy, environment and society”. It sets out the ambitions for:

- Current and future demand, and how this will be met;
- Possible new stations and extensions to both Metro and local rail networks;
- Metro fleet renewal;
- Better integration between Metro and Local Rail;
- Improving service quality; and
- Funding.

2.91 TCF interacts with MLRS with shared economic, environmental and societal aspirations. It is also a means to attract capital funding for schemes in the Plan that are capable of early delivery.

Local Cycling Walking Infrastructure Plans (LCWIPs)

2.92 All our seven local highway authorities are developing LCWIPs and this SOBC builds on the expected outcomes through detailed engagement with our local authority partners.

Summary Box: Our Policy

The North East Strategic Economic Plan sets a significant challenge to the transport network to help close the productivity gap between our region and the English average;

The aims of TCF are complementary to a host of national and regional strategies;

The region’s transport network is not currently sufficiently configured to respond fully to the economic and environmental challenges set by national and regional policy;

Introduction of a programme of improved cycling, walking, Metro, local rail and bus services is a clear link to the aspirations of environmental and economically focused strategies; and

Our region’s policy landscape calls for the delivery of schemes that TCF can enable delivery of schemes through TCF is a success criterion in our SEP.

Our Challenges

In this section we

Consider the challenges that we face in delivering our TCF vision for more sustainable connectivity and more mobility. Challenges relate to our economy, the transport network, congestion, vehicle ownership and use, our low carbon economy and air quality;

We summarise these challenges and consider the opportunities to intervene to deliver a step change in how people access public and sustainable transport across the region.

Our Economic Challenges

Challenges Identified in our Strategic Economic Plan

2.93 The economic challenges faced by the region can be summarised as:

- Our economy is underperforming, despite growth of 12.2%²⁵ since 2014 the gap between the region and the rest of England excluding London remains 16% below the national average;
- Productivity levels remain challenging despite increases of 8.6% since 2014, but we can go further²⁶;
- Employment in the private sector remains below the national average with the gap widening over recent years, and growth in this sector in the North East (1.9%) is lower than growth achieved across England (3.3%)²⁷; and
- Economic activity rates continue to lag behind the rest of the country: there remains a GVA gap between the North East city region and England excluding London of £3,843 per capita²⁸.

²⁵ North East Data Hub (2019), GVA per capita in 2017

²⁶ North East Data Hub (2019), GVA per hour worked

²⁷ ONS (2019), Business Register and Employment Survey and Population estimates, ONS, viewed 14 October 2019, <https://www.ons.gov.uk/surveys/informationforbusinesses/businesssurveys/businessregisterandemploymentsurvey>

²⁸ ONS (2019), Annual Population Survey, ONS, viewed 14 October 2019, <https://www.nomisweb.co.uk/query/construct/summary.asp?mode=construct&dataset=17&version=0#>

2.94 The North East economy was traditionally dominated by mining and manufacturing, but the region has come a long way in reinventing itself. Whilst manufacturing remains an important part of the regional economy, this is increasingly high value, advanced manufacturing, with clusters in several sectors including automotive and medicines.

2.95 There are fewer businesses born in the North East LEP area than in England excluding London, with 44 business births per 10,000 adults in the North East LEP in 2017 compared to 65.1 in England excluding London²⁹. The agglomeration benefits of transport investment can help to address this disparity.

2.96 Additional detail on the economic make-up of the region is available in our Strategic Economic Narrative (produced by IPPR North) supporting this SOBC (see **Appendix B**). To achieve economic success, we must look outwards towards other regions in the North of England, the rest of the UK, and internationally. To do this we need strong and dynamic links that make the most of the opportunities of the Industrial Strategy nationally and forge a post-Brexit global role.

2.97 Jobs and output are currently underpinned by the public sector, retail and manufacturing. We have emerging strengths in nationally growing sectors such as advanced engineering, life sciences, the digital economy and other professional services with increasing agglomeration in urban areas, but there is much more potential in these sectors that the region can exploit. These sectors are critical to harnessing future growth, and our transport networks have a role to play in facilitating that potential. There are fewer private sector jobs per head (16-64 population) in the North East than in England excluding London and the target is to reduce this gap by 50% by 2024.

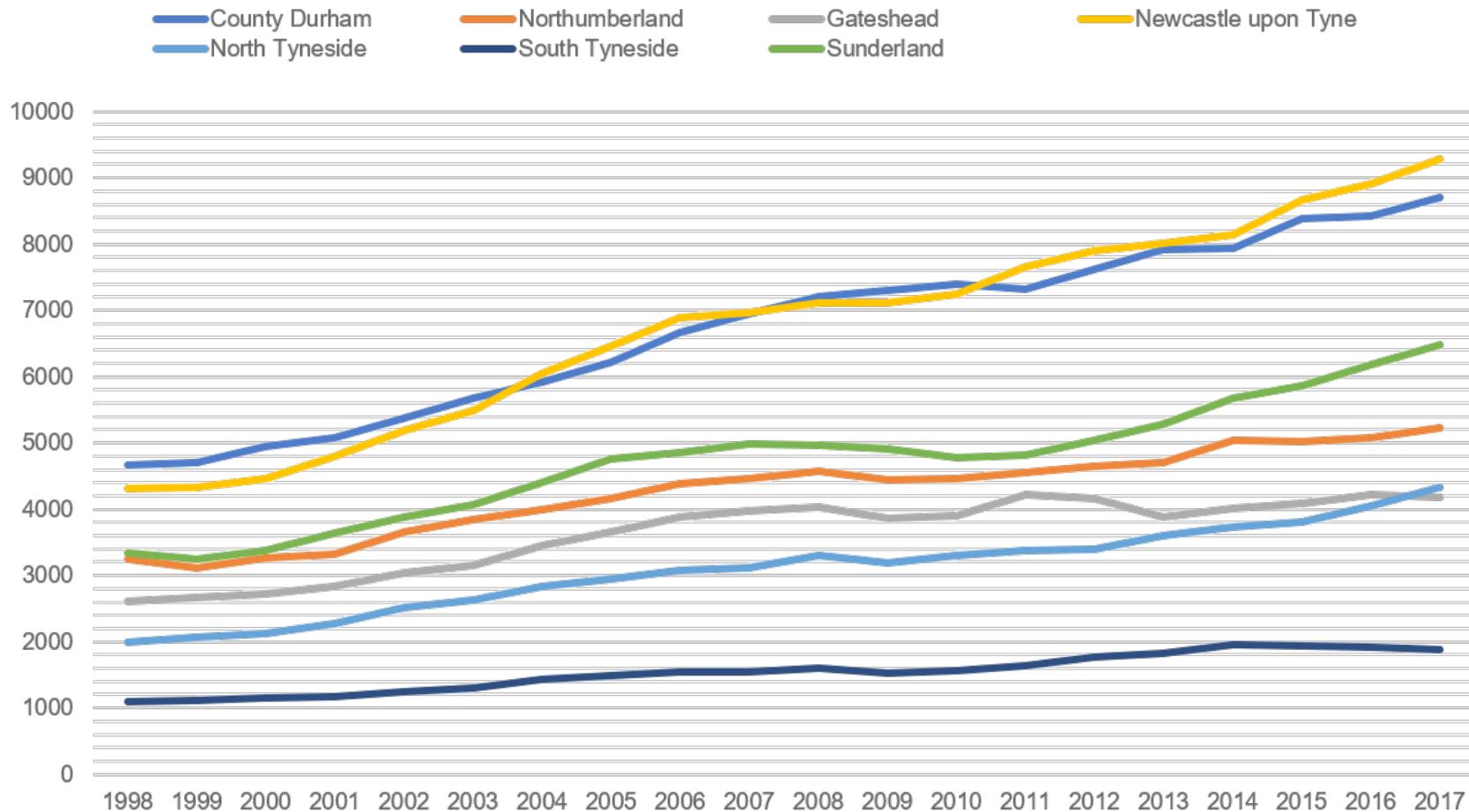
2.98 The GVA of the region is £40.1bn (2017) which represents a GVA per capita of £20,338. This is below the national average of £24,181 (2017) for England excluding London³⁰.

²⁹ Nomis (2018), Business Register and Employment Survey: open access

³⁰ NELEP (2019), Our Economy 2019, NELEP, viewed on 14 October 2019, https://www.nelep.co.uk/wp-content/uploads/2019/05/our-economy-2019_full_report__north-east-local-enterprise-partnership.pdf.

2.99 Across the North East, **Figure 11**³¹ shows that GVA has grown steadily over the past decade, but pace differs across the region. The proposed programme includes schemes that both improve internal links for these parts of the region with lower growth rates, facilitating swift, affordable and sustainable transit to the region's main centres of employment and learning.

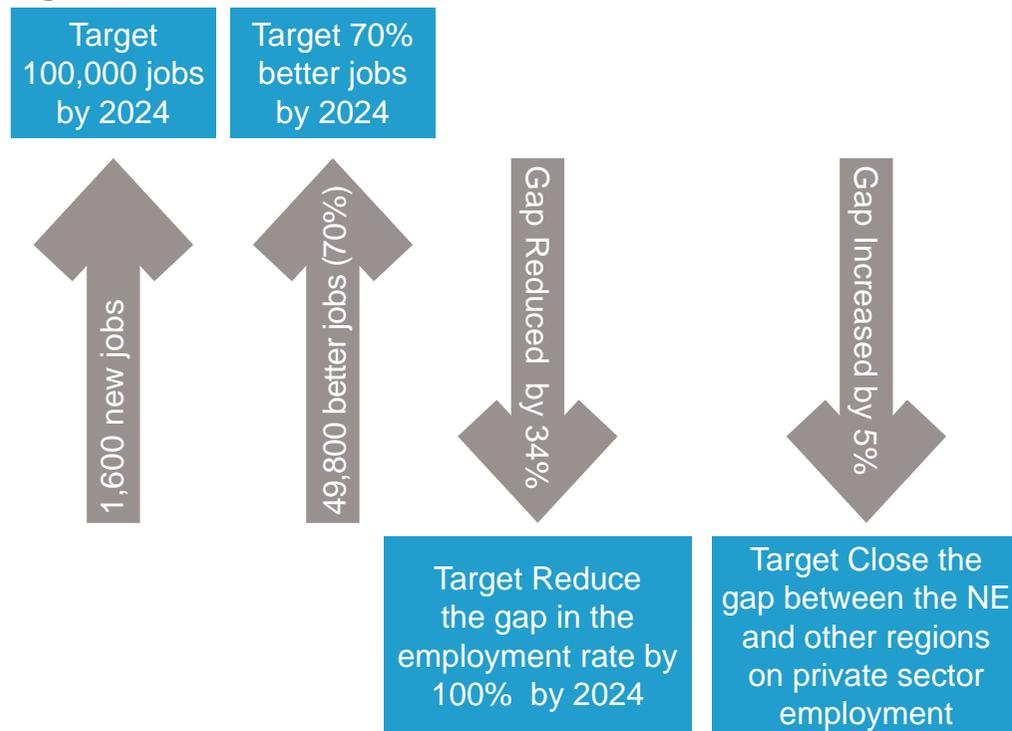
Figure 11 Regional Gross Value Added (balanced), North East local authorities: in 2016 pounds (All industries), 1998 to 2017



31 ONS (2019), Regional Gross Value Added for North East Authorities, viewed on 15 October 2019, <https://www.ons.gov.uk/economy/grossvalueaddedgva/datasets/regionalgrossvalueaddedbalancedlocalauthoritiesbynuts1region>

2.100 Performance against targets in our Strategic Economic Plan is shown in **Figure 12**. These indicators suggest the region is on track to achieve our headline targets of more and better jobs, but this is stifled by the size of the private sector.

Figure 12 North East Economic Indicators



2.101 Underpinning future economic growth is the need to increase productivity across the region. Yet in the coming year the North East economy will face additional challenges associated with the UK's withdrawal from the EU. Economic analysis suggests that the impacts of Brexit will be particularly hard-felt in this region in the short-term at least, with potentially greater impacts than all other regions and devolved nations³².

³² Harari D (2018), Brexit and the economy: Government analysis of the long-term impact, House of Commons Library, viewed on 24/10/2019, available at, <https://commonslibrary.parliament.uk/brexit/brexit-and-the-economy-government-analysis-of-the-long-term-impact/>

Table 3 Impact on Economic Output of leaving the EU

	No deal	FTA	EEA	Chequers	Chequers minus
North East	-10.5	-6.5	-1.5	-0.4	-2.1
North West	-9.4	-5.8	-1.4	-0.5	-2.2
Yorkshire and the Humber	-8.5	-5.4	-1.3	-0.3	-2.1
East Midlands	-8.5	-5.1	-1.4	-0.4	-1.9
West Midlands	-9.6	-5.7	-1.5	-0.4	-2.0
East of England	-8.4	-5.3	-1.3	-0.4	-2.0
London	-6.0	-4.0	-0.9	-1.0	-2.5
South East	-7.8	-5.0	-1.2	-0.7	-2.1
South West	-7.6	-4.7	-1.4	-0.4	-1.9
Wales	-8.1	-4.9	-1.2	-0.1	-1.8
Scotland	-8.0	-4.8	-1.0	0.0	-2.0
Northern Ireland	-9.1	-5.6	-1.6	-0.2	-1.9

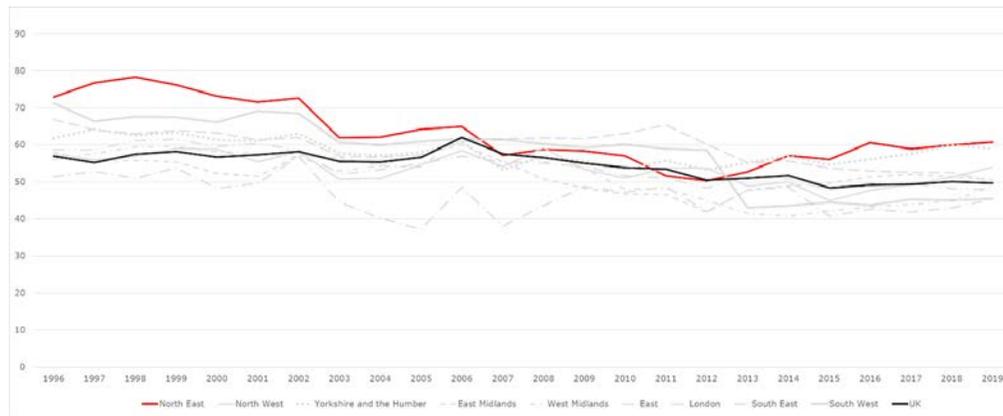
Notes: A description of all scenarios is provided earlier in this briefing paper.
GVA is Gross Value Added, which is very closely related to GDP
This does not include other factors such as migration or regulatory effects modelled elsewhere in the Government's analysis
Source: HM Government, *EU Exit: Long-term economic analysis Technical Reference Paper*, Nov 2018, table 7.A

2.102 Analysis also suggests that the North East economy is particularly exposed to the potential negative impacts of Brexit, including that regional GDP could be impacted across these sectors:

- 22 per cent of GVA for primary industries;
- 35.5 per cent of GVA for manufacturing;
- 3.1 per cent of GVA for construction;
- 8.4 per cent for services;
- 12.2 per cent across the economy

2.103 The North East economy has a significant reliance on exporting to the EU. The proportion of goods exports (by value) to the EU is the highest for any English region at 61 per cent, as shown by **Figure 13**. This places our international connections at particular risk and emphasises the importance of funding our TCF programme. The value of service exports per adult is lower in the North East than across England excluding London³³.

Figure 13 Proportion of goods export value accounted for by exports to EU countries, English regions and UK average (HM Revenue and Customs, 2019)



³³ North East LEP, (2019), Our Economy, <https://www.nelep.co.uk/wp-content/uploads/2019/06/nel605b-our-economy-web-v13.pdf>

Productivity

2.104 Average productivity in our region remains 6% below the output for England - output per hour worked was £30 in 2017, compared to £34.20 across the country as a whole³⁴. As a result, the North East economy lacks some of the 'headroom' that supports increased wages and living standards. A review for the North East LEP has suggested productivity is underpinned by five thematic areas of the UK economy.

- Ideas;
- People;
- Infrastructure;
- Business Environment; and
- Place.

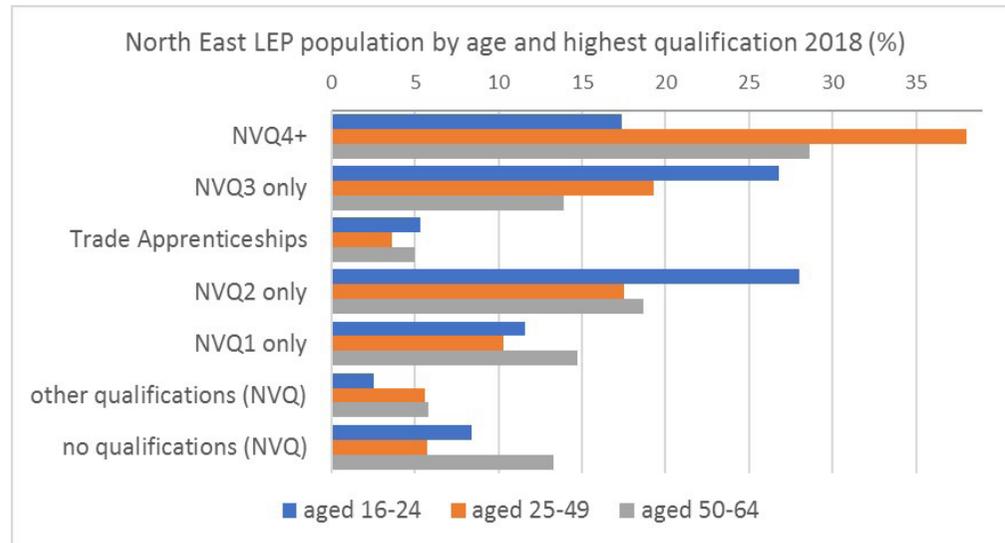
2.105 While there are signs that the productivity gap is narrowing in some sectors, there is more that we can do and achieve. Investment in transport infrastructure is identified as a key enabler to address this gap.

³⁴ ONS (2019), Regional Productivity, ONS, last viewed on 15 October 2019, <https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/labourproductivity/articles/regionalandsubregionalproductivity-intheuk/february2019#results-for-nuts1-regions-and-countries>

People – Skills and Apprenticeships

2.106 The region displays a mismatch between the skills and occupational profile of its people, and the requirements of the future economy. Qualification levels within the area are low and especially pronounced at older and younger age groupings. Some 38% of the working-age population is qualified to NVQ4+ in the region, but this reduces to 29% in the 50 to 64-year old sector and just 17% for 16 to 24-year olds. The North East also has the third highest proportion of working age adults with no qualifications. Residents with no or lower-level qualifications are more likely to be workless, reinforcing deprivation and inequality.

Figure 14 Qualification levels in North East England

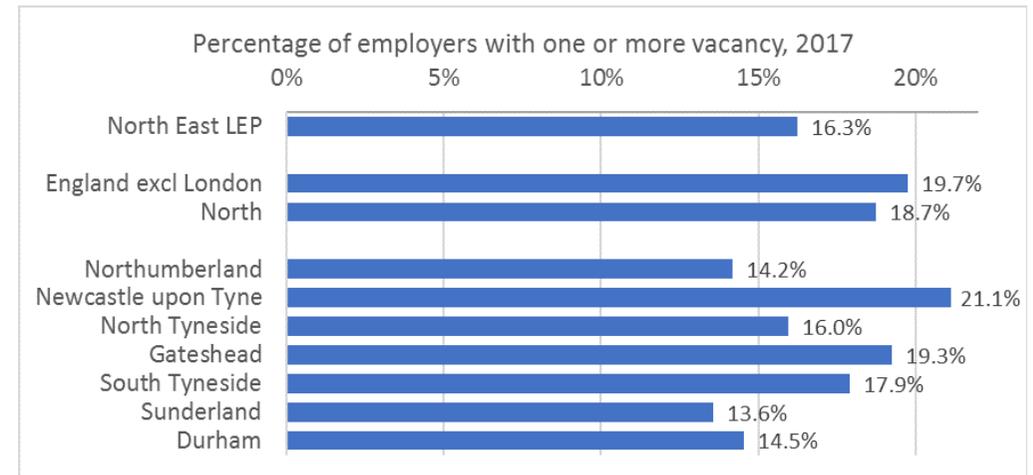


2.107 Professional, associate professional and skilled trade roles are identified as the occupations with the highest rates of skills shortage vacancies. **Figure 15** shows that 16% of North East LEP area employers had at least one vacancy in the last 12 months. In 2017 almost 7,500 employers in the North East reported that they had one or more vacancy³⁵. This suggests that the relative deficit of high-skilled workers is a supply side issue.

2.108 An issue for the North East is the need to attract skilled workers with the option of building a career in the region. A well-integrated and reliable transport network, that links pleasant places to live with a wide range of good quality job opportunities is an important driver to address this issue, which our TCF programme delivers.

2.109 Another consideration in a region with relatively low levels of wealth and income is the need for reliable low-cost transport. Lower-income workers and jobseekers rely more heavily on public transport, and poor connectivity with unreliable or infrequent services can be a barrier to getting work or remaining in work.

Figure 15 Analysis of regional vacancy rates



³⁵ Source: DfE Employer Skills Survey 2017

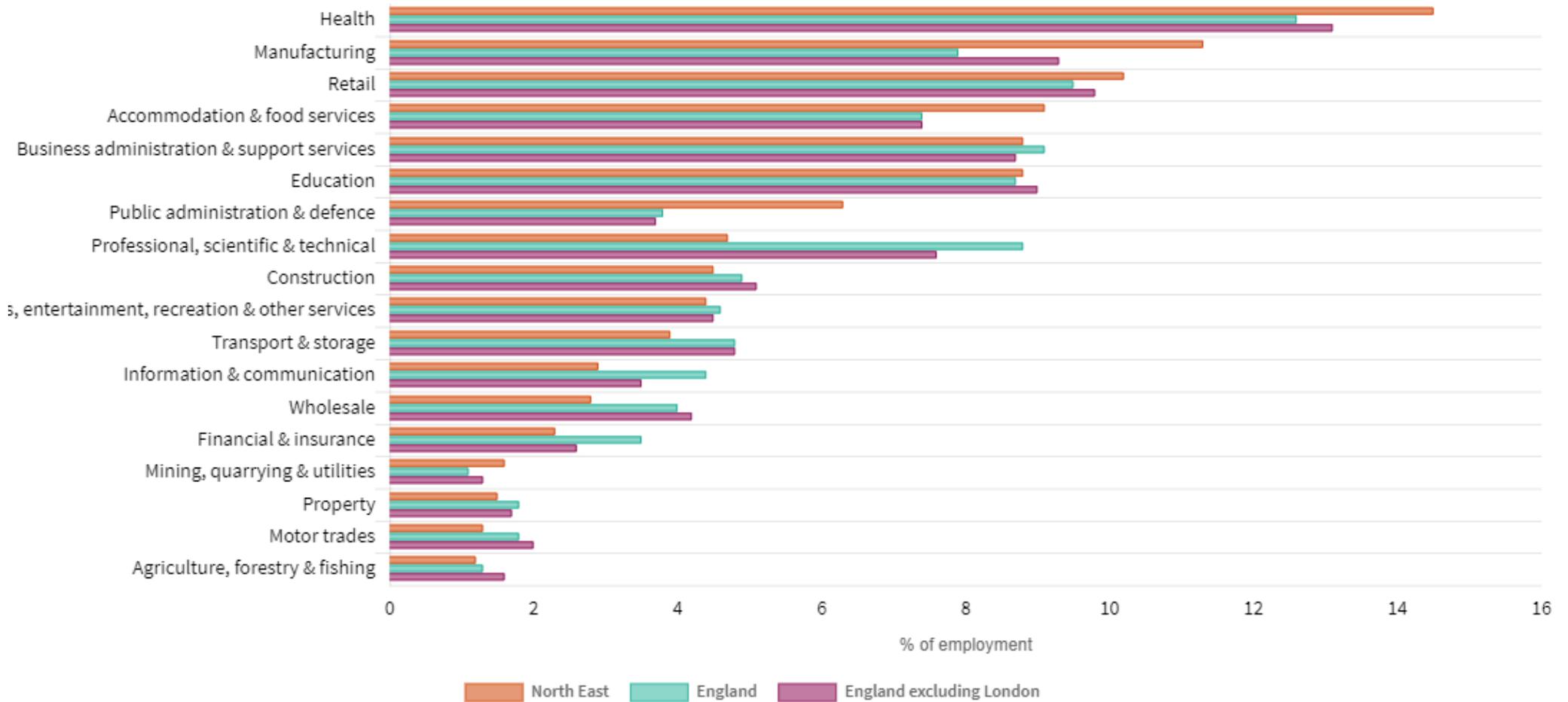
2.110 School attainment in the region amongst 16-year olds is around the England average, however there is a relatively large fall in further education participants and apprenticeship starts compared to the England average. There appears to be significant difficulties in attracting employees and graduates from other UK regions, resulting in relying primarily on homegrown graduates. This is shown by the low proportion of graduates employed in the North East who did not either grow up or study here. Ultimately qualification levels need to improve to allow people across the region to share in the opportunities created by economic growth.

2.111 As illustrated in **Figure 16** employment statistics demonstrate that 82% of the region's workforce are employed in the service industry this includes sectors such as health, public administration and defence, accommodation and food services³⁶. Between 2014 and 2018 employment in professional occupations in the North East LEP area has increased by 33,600³⁷. In the private sector there are fewer businesses per head than other areas with 318 per 10,000 residents in the North East, which is a third lower than the equivalent number across England excluding London.

³⁶ JOBS05: Workforce jobs by region and industry (Dec 18), <https://www.ons.gov.uk/employmentand-labourmarket/peopleinwork/employmentandemployeetypes/datasets/workforcejobsbyregionandindustry-jobs05>

³⁷ North East LEP, (2019), Our Economy, <https://www.nelep.co.uk/wp-content/uploads/2019/06/nel605b-our-economy-web-v13.pdf>

Figure 16 Workforce by industry, North East



2.112 In 2018, there were 64,800 people registered as having achieved a trade apprenticeship in the North East (including Tees Valley)³⁸. Whilst the region is host to a high number of apprenticeship providers and training institutions across the North East, the number of workplaces offering apprenticeships is slightly smaller in proportion to the rate of apprenticeship participation than is the case for England as a whole. This suggests that opportunities to offer apprenticeships are not being taken up as widely as could be the case, despite high overall rates of participation in apprenticeships³⁹. Our North East LEP undertakes a significant amount of work in the field of skills, employment, inclusion and progression, promoting higher level apprenticeships to support the target of more and better jobs with opportunities promoted by the North East Growth Hub.

2.113 This SOBC recognises the role of the transport network as a direct provider of apprenticeship opportunities and its role in connecting people to a wider range of apprenticeship opportunities. Recent research finds a clear impact of poor transport on access, persistence and achievement in post-compulsory education and training in developed countries such as the UK⁴⁰. There is more detail available in our Strategic Economic Narrative, available in Appendix B.

³⁸ ONS, Annual Population Survey, 2018

³⁹ DfE (2019), IPPR North calculations; data for 2018/19 are as reported at April 2019 – from IPPR North Strategic Economic Narrative

⁴⁰ Wellman G (2019), Transportation exploitation, mobility and social justice: a critical analysis, in Cook N and Butz D (eds), *Mobilities, mobility justice and social justice*, Routledge; Hillman N (2016), Geography of college opportunity: the case of education deserts, *American Educational Research Journal* 53(4): 987-1021

Infrastructure

2.114 Infrastructure is a fundamental enabler of economic productivity by facilitating trade and investment, the movement of goods and services and connecting people to labour. The term infrastructure covers a wide variety of different functional assets capabilities that underpin the economy.

2.115 This SOBC dovetails with our wider plans to improve inter-regional transport connectivity, to provide access to national and international product markets, supply chains, and collaboration and investment opportunities. Critically this is to improve the attractiveness of the region as a place for people to both visit and migrate to.

2.116 . A lack of investment in infrastructure, including transport, has been cited as one of the factors that underlies relatively poor economic performance in the North East over several decades. Analysis suggests that per capita transport investment in the North East has lagged behind the UK average⁴¹.

Place - Polycentricity

2.117 The North East is a region like no other. Its geography is highly complex and polycentric: its economic assets are significant but dispersed across the region, rather than concentrated in its centre. The region's diversity is clearly its strength – these different places and assets are part of our unique offer to investors, businesses and workers however it can equally be challenging to effectively serve communities and connectivity remains a challenge to more remote rural areas or deprived urban periphery areas.

⁴¹ IPPR (2019), Investment in the Northern Powerhouse, IPPR, last viewed on 15 October 2019 <https://www.ippr.org/files/2019-08/transport-investment-in-the-northern-powerhouse-august19.pdf>

Place – Location of Enterprise

2.118 Many important sites are distributed across the North East's economy, as illustrated by the map in **Figure 6**. These sites account for a significant share of the region's economic growth and employment and pose a challenge for our transport network. An effective sustainable transport system must link workers to employment sites and developments identified as crucial for long-term prosperity, including innovation, business start-up and development, and sectors of growth identified in the SEP and LIS (digital, advanced manufacturing, health and life sciences, and energy). Increasingly growth is being concentrated into select economic centres which provides an opportunity for development of transport links.

Changing work patterns

2.119 The increasingly prevalent 'gig-economy' is characterized by short term contracts, flexible working, freelance work and payment by task via a digital platform, as opposed to permanent contract with traditional working hours. Around 4.4 per cent of the population in Great Britain have worked in the gig economy in 2016-17, in the North East it was 3%. If this economy grows, this is likely to have a major impact on demand for transport. We may begin to see less of an emphasis on 'peak time' travel, which is based on traditional commuting times, as workers on flexible hours increasingly need to travel at different times throughout the day.

2.120 The proposed schemes in our programme are designed to address congestion at current peak times, however the infrastructure would be as effective throughout the working day. For example, Metro frequency would increase across the daytime period, bus lanes would be available at all times of day and walking and cycling routes will adhere to agreed design principles with an emphasis on safety and security covering measures such as lighting and CCTV, encouraging commuters to use them at all times of day or night particularly in winter.

Ageing population

2.121 Across the UK, life expectancy is increasing, and the population is getting older on average; this is also true of the North East (see **Table 2**) and this places new and different pressures on our transport network. A convenient, accessible and safe transport system is vital to enable older people to access the services they need, reduce isolation, and accommodate people travelling to work until later in life.

2.122 Our programme will enhance the convenience of our public transport network and increase capacity for commuters, improving access to work for people of all ages. Accessibility is a consideration in designing schemes to ensure that the benefits are felt by people of all ages and abilities, making our transport network ready to accommodate an increasing age profile.

Summary Box: Economic Challenges

Regional productivity levels remain lower than the national average

Connecting our economic assets and future jobs growth locations in a polycentric economy will improve skills levels and develop our business environment

There are potential new challenges such as a rise in off-peak travel caused by changing work patterns, the gig economy and an ageing population

The region has significant untapped potential which we can build on through enhanced connectivity by public and sustainable modes to our economic assets and from our major centres of population

Our Transport Challenges

In this section we

Review the transport challenges faced by our network

Examine movement trends and consequences

Summarise the opportunities for change

2.123 Building on our description of the transport network context earlier in this chapter, we look at some of the underlying challenges facing the network, covering reliability, resilience, reach and capacity.

Buses

2.124 Buses are our most used form of public transport and serve significant parts of the population. Usage has however declined by 8% from 169.8 million journeys in 2006/07 to 156.3 million journeys in 2017/18⁴².

2.125 The bus network experiences congestion at certain locations, including our busy urban areas, and this is considered part of the reason for declining use. There has been considerable investment in bus priority over the last 30 years and new vehicle technology by our operators, but the pace of investment in infrastructure has slowed due to budget reductions and has not kept pace with the growing number of locations where new priority measures are required. The passenger demands a reliable service and bus operations are limited by infrastructure provision, which has led the region to explore reasons for congestion, working with the operators to address network performance. This has resulted in a significant programme of bus measures in our TCF programme.

⁴² DfT (2019), Local Bus Journeys Originating in the Area (Table BUS0109b [local authority data]). DfT, viewed on 15 October 2019, <https://www.gov.uk/government/statistical-data-sets/bus01-local-bus-passenger-journeys>

2.126 Automated vehicle tracking information has unpicked some of the congestion hotspots on 18 bus corridors around the region. **Figure 17** and **Figure 18** provide a high level regional heatmap view on the location of bus congestion hotspots on our main bus corridors. This research provides analysis of the delays experienced on the network and both supports the identification of measures in our submission as well as the development of a future pipeline of bus measures for the region.

2.127 Our immediate priority is to stabilise bus patronage decline and target growth in future years as the economy develops and grows. This SOBC puts technology and infrastructure at the heart of the bid, future-proofing highway transport networks and the enabling highway engineers to quickly react to changes in policy, development and subsequent travel demands as they arise.

Congestion on the region's highway network impacts on buses



Figure 17 Change in bus service (mph) Monday - Friday morning peak

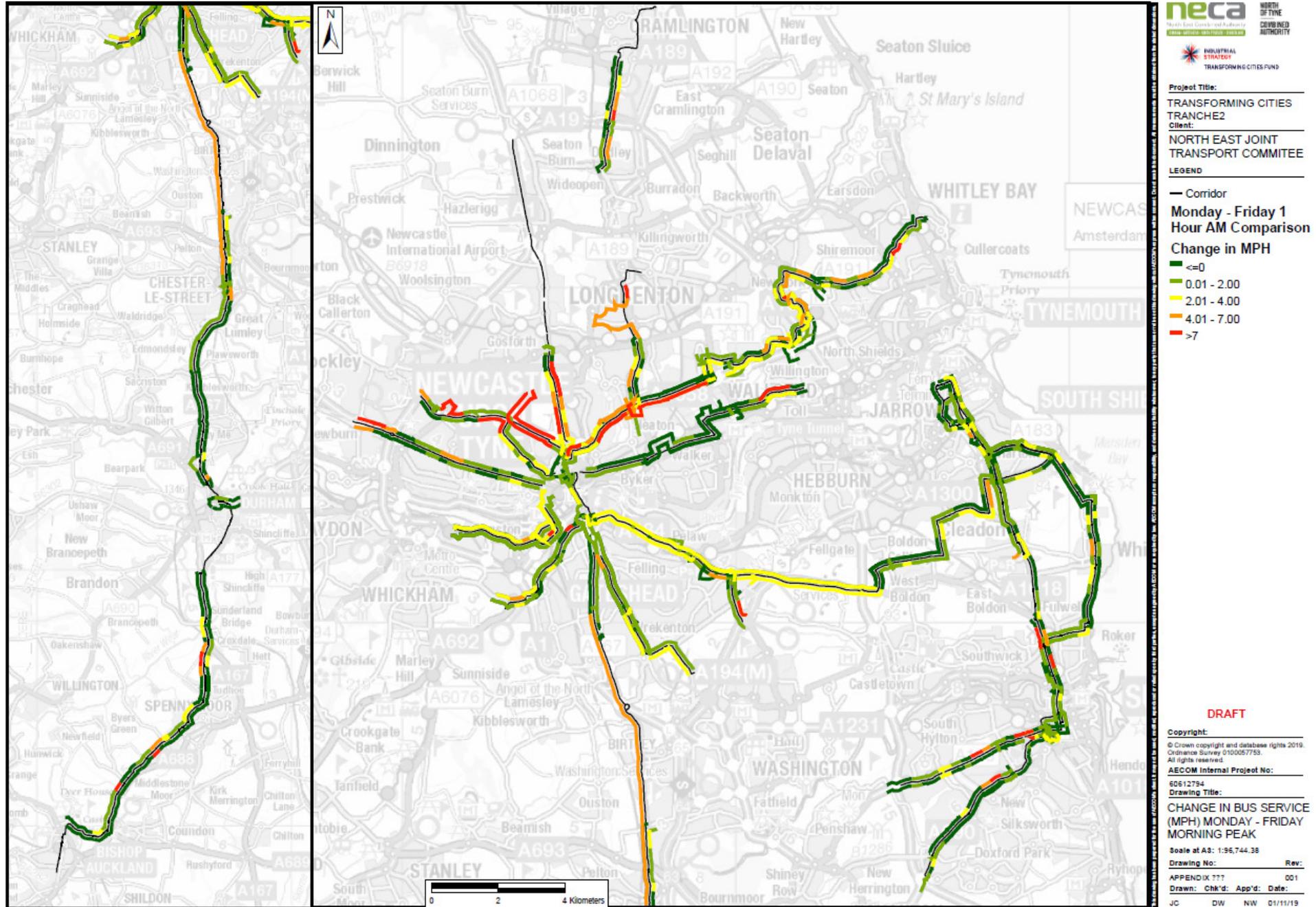
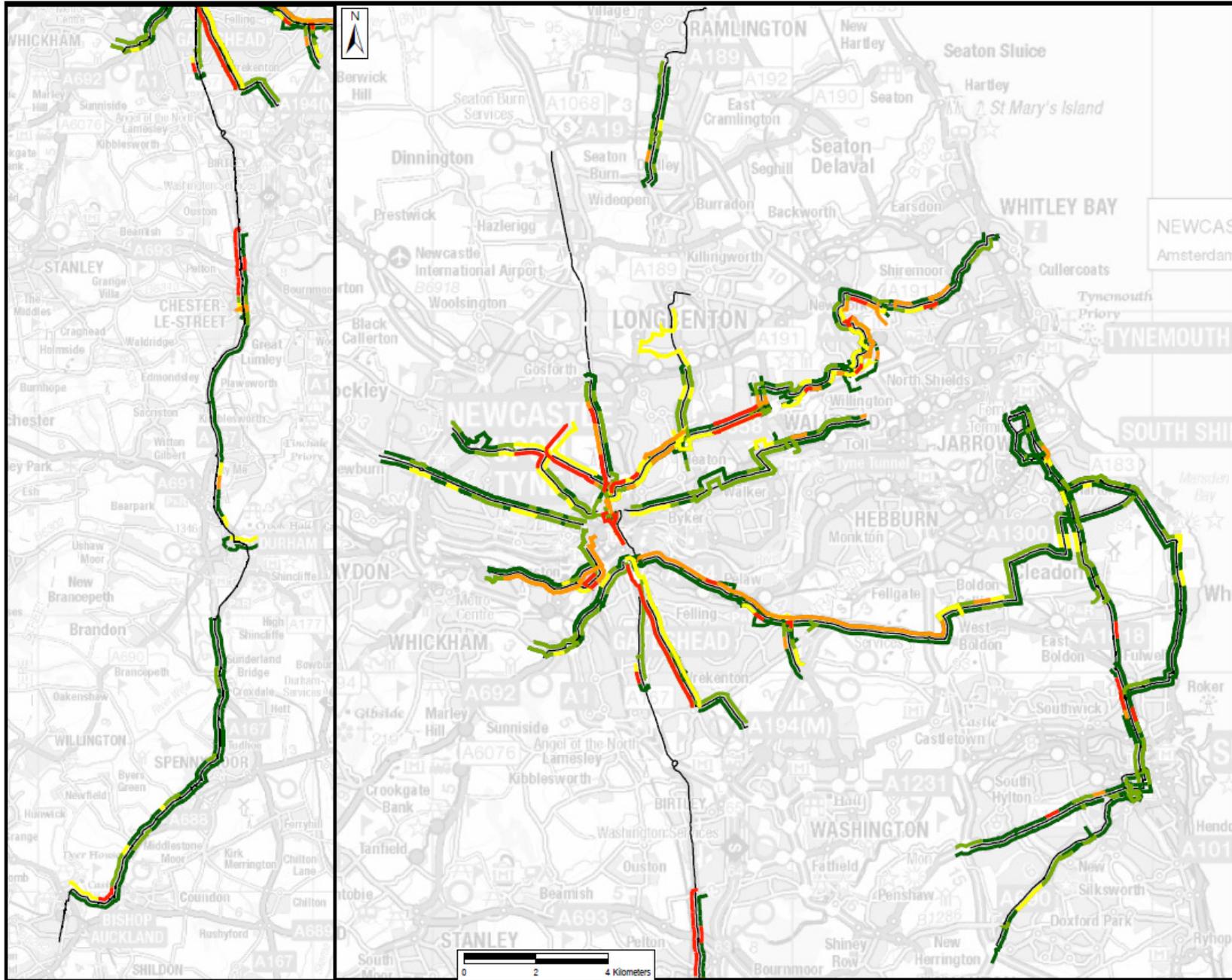


Figure 18 Change in bus service (mph) Monday - Friday afternoon peak



neca NORTH OF TYNE COAST GUARD AUTHORITY
 North East Combined Authority
 New Metro District Council

INDUSTRIAL STRATEGY
 TRANSFORMING CITIES FUND

Project Title:
 TRANSFORMING CITIES
 TRANCHE2
 Client:
 NORTH EAST JOINT
 TRANSPORT COMMITTEE

LEGEND

— Corridor

Monday - Friday 1
 Hour PM Comparison

Change in MPH

- ≤0
- 0.01 - 2.00
- 2.01 - 4.00
- 4.01 - 7.00
- >7

DRAFT

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 AECOM Internal Project No:
 60512794
 Drawing Title:
 CHANGE IN BUS SERVICE
 (MPH) MONDAY - FRIDAY
 AFTERNOON PEAK

Scale at A3: 1:95,744.38

Drawing No: Rev:
 APPENDIX ??? 001
 Drawn: Onk'd: App'd: Date:
 JC DW NW 01/11/19

Metro and Local Rail

2.128 The Metro has experienced reliability and resilience problems in recent years due to ageing infrastructure and fleet. Metro punctuality for Periods 3 & 4 or 2019/20 has improved to 85.9% from the average of 80.9% achieved over the previously two periods, but is still below the target of 90%⁴³. This is to some extent being mitigated by the current Asset Renewal Programme and the planned fleet replacement, however its full potential is limited by infrastructure challenges including pinch points.

2.129 Capacity constraints also limit the ability for new stations to be added to the Metro network, which could support housing proposals across the region. The challenges facing Metro are available in the accompanying Outline Business Case for Metro Flow.

2.130 The most significant problem preventing more frequent services from operating across the Metro network is that of limited network capacity caused by single-track sections. This impacts on the reliability and resilience across the whole network. Local rail use is increasing, resulting in capacity issues at peak times⁴⁴. Services however fall below the minimum standards of the TfN Long Term Rail Strategy⁴⁵, regarding slow journey times and geographical constraints in services.

2.131 Local Rail does not extend to all parts of the region and there are significant opportunities to expand the reach and the function of the network, as identified in our Metro and Local Rail Strategy. There are further opportunities to improving frequency and capacity on the Metro and Local Rail network, so it can continue to play a significant role in the economy of the region, because every additional passenger journey Metro and Local Rail contributes £8.50 to the regional economy. This represents a sizeable increased for the area to pursue as part of its ambitious economic aspirations.

⁴³ North East Joint Transport Committee, Tyne and Wear Sub-Committee (September 2019), available online at, <https://northeastca.gov.uk/wp-content/uploads/2019/09/Joint-Transport-Committee-Tyne-and-Wear-Sub-Committee-Public-Agenda-19.09.19.pdf> (Accessed on 30/10/2019)

⁴⁴ Office of Rail and Road (2019), Regional Rail Journeys : Figures within the North East including Tees Valley, viewed 14 October 2019, <http://dataportal.orr.gov.uk/displayreport/report/html/8e9af9cb-e146-4dc4-8e1f-20258d577ef3>

⁴⁵ NECA (2019) Transport North East Committee: 11 October 2018 Agenda Pack, viewed on 14 October 2019, <https://northeastca.gov.uk/wp-content/uploads/2018/10/Transport-North-East-Committee-11-October-2018-Agenda-Pack.pdf>

Walking and Cycling

2.132 The region has a well-established walking and cycling network, however usage is limited to select geographical areas.

2.133 Walking and cycling is also an important form of affordable transport for people from lower income groups, including students and people in lower supervisory and technical occupations.

2.134 There is great potential to increase the reach of signed cycling and walking routes which traverse boundaries and to agree common standards for the design of infrastructure across the region to deliver a seamless experience.

Park & Ride

2.135 Park & Ride plays a significant role in improving the efficiency of our transport network in the North East through relieving congestion in the urban areas and delivering improvements in air quality. Often, however these sites aren't used to their maximum potential and there are opportunities to improve our offer, in terms of locations, coverage, ticketing and interchange.

2.136 As Parkhurst, G. and Meek, S (2014)⁴⁶ suggest, Park & Ride schemes can have economic benefits for a city, being at their most effective where there is a clear plan in terms of locational advantage, intercepting traffic, strong bus or rail links and seamless interchange including ticketing arrangements where it is economically advantageous to use the system.

Travel to Work

2.137 The travel to work journeys between authorities in the region are set out below the region's economy is relatively self-contained with 95% of people living and working within the seven authority districts. Travel patterns are however complex and applying a modal analysis shows that commuting is dominated by car use (58%), although travel on foot (10%) over short distances, bus (10%) and Metro (3%) are

⁴⁶ Parkhurst, G., Meek, S. (2014). The Effectiveness of Park-and-Ride as a Policy Measure for more Sustainable Mobility, Ison, S. & Mulley, C. (Eds) Parking Issues and Policies. Emerald, p185-211.

important contributors. We must remember that this only represents trips taken for work purposes, which are around 1/6th or 15% of all trips and 20% of distance travelled. The travel to work journeys between authorities in the region are set out in **Table 4**.

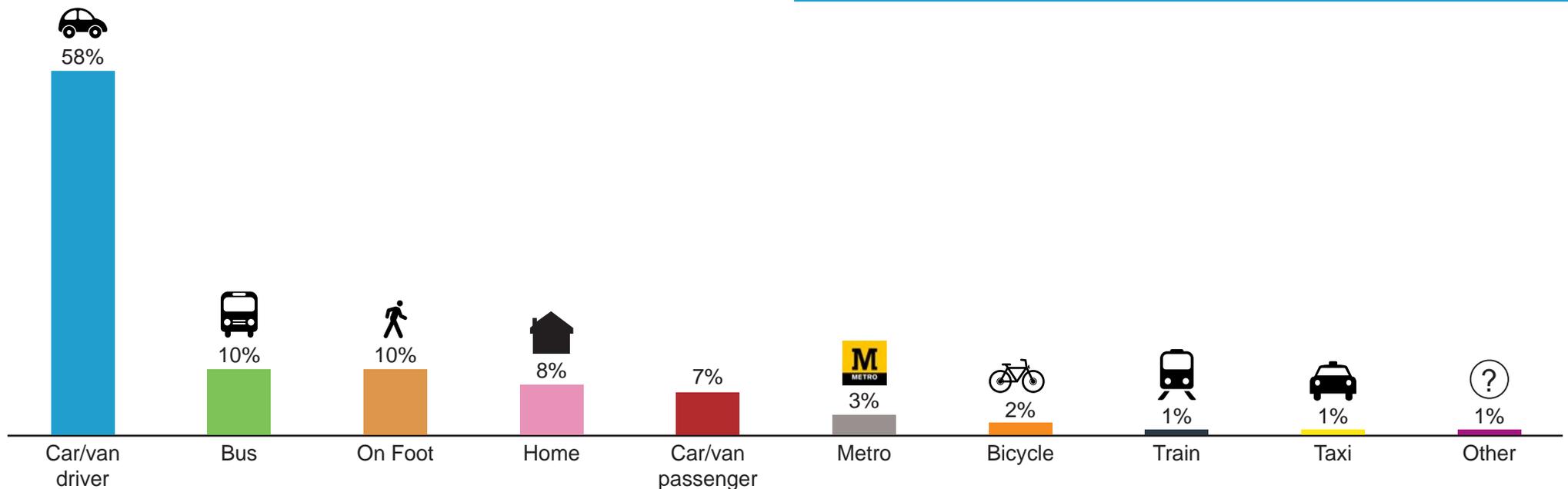
Table 4 Travel to work journeys between North East Authorities (%) (Source: Census 2011)

Place of work	Place of residence						
	County Durham	Gateshead	Newcastle upon Tyne	North Tyneside	Northumberland	South Tyneside	Sunderland
County Durham	66.2	5.4	2.3	1.4	1.4	3.1	8.9
Gateshead	5.3	46.8	9.7	5.0	3.9	9.0	6.8
Newcastle upon Tyne	4.5	24.9	62.3	30.2	16.2	11.7	5.8
North Tyneside	0.9	4.5	10.6	47.4	8.8	3.9	1.6
Northumberland	1.2	4.5	6.1	7.6	62.5	1.5	1.0
South Tyneside	1.0	3.1	1.5	2.2	0.7	50.4	4.7
Sunderland	8.1	7.3	3.1	2.7	1.4	15.8	66.6
North East	87.2	96.4	95.5	96.4	95.0	95.5	95.3
Tyne & Wear	19.8	86.6	87.2	87.4	31.1	90.8	85.4
Tees Valley	9.2	0.9	0.9	0.5	0.4	1.1	1.7

2.138 On average, people travel shorter distances for work in the North East area than elsewhere. The average distance travelled in the region is 16.7km, reducing substantially in the urban areas. With 56% of trips under 10km and 36% under 5km there is a significant opportunity to encourage modal shift to active modes / public transport across the region, particularly in urban areas⁴⁷.

2.139 Commuting data indicates that rural residents are, unsurprisingly, more dependent on a car than their urban counterparts and make less use of buses largely as a result of service provision and levels of density. In summary, **Figure 19** illustrates that the dominant mode of travel to work is by car, with a healthy proportion of trips by bus and a small but not insignificant number by rail and Metro. This dominance of the private car for commuting trips is a significant challenge for the region that the TCF programme is aimed at addressing.

Figure 19 Method of travel to work (all modes) (Source: Census 2011)



Summary Box: Our Public and Sustainable Transport Challenges

- Metro and bus patronage has fallen over recent years;
- Congestion is affecting the attractiveness of bus services;
- Established Park & Ride infrastructure is not achieving its full potential;
- Cycle levels remain low in proportion to other modes;
- Walking commutes are 10%, low in comparison to other modes;
- Commuters by vehicle are dominant at 58%;
- There is significant potential to develop the network, to meet future economic and population demand; and
- Commuting distance are low in this region with potential for switchable trips.

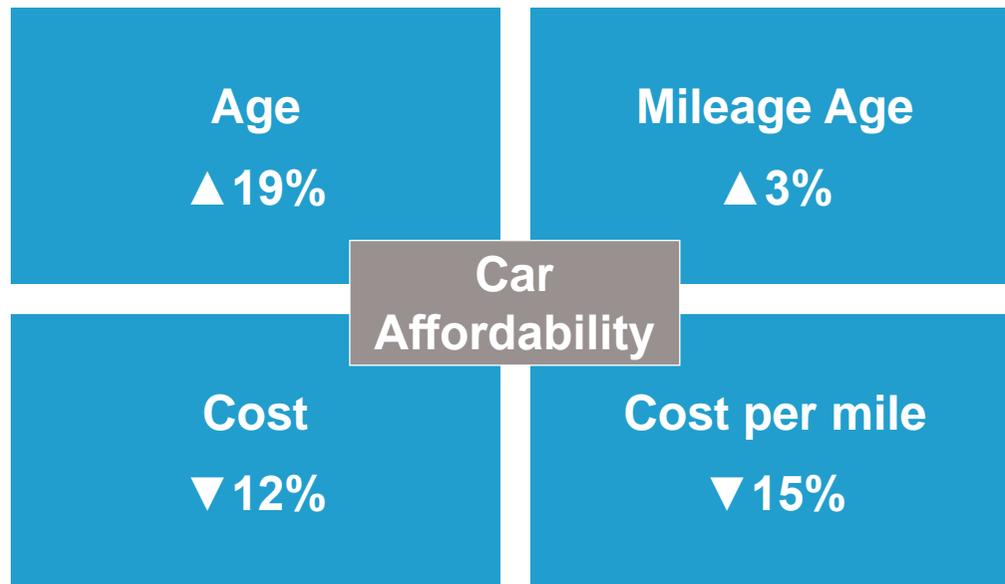
47 National Travel Survey (2018), <https://www.gov.uk/government/statistics/national-travel-survey-2018>

Congestion

2.140 The high proportion of car and van use in the region results in road corridors into the centres of Durham, Newcastle, Gateshead and Sunderland being regularly congested, especially at peak times. Data from TomTom shows journeys take on average an extra 15min in the peak period⁴⁸. This results in lost time to the economy and has negative road safety and sustainability implications including poor air quality.

2.141 While the cost of new cars has increased, the CPI index for second hand vehicles has fallen by 18% since 2005. Coupled with wage growth, second hand cars which are getting older in the region⁴⁹ have never been as affordable⁵⁰. This is summarised in **Figure 20** below. This contributes significantly to congestion and falling public transport patronage.

Figure 20 Car affordability in the region (Source: Nexus 2019)



48 Tom Tom (2019), Traffic Index, Tom Tom, viewed 3 June 2019, https://www.tomtom.com/en_gb/traffic-index/newcastle-sunderland-traffic

49 DfT (2019), Age of car from DfT Table VEH0207 Mileage travelled from NTS Table NTS0901, last accessed on 31st October 2019.

50 CPI Annual Rate for Second Hand Cars, <https://www.ons.gov.uk/economy/inflationandpriceindices/timeseries/d7il/mm23> last accessed on 31st October 2019

2.142 Congestion is compounded by the fact that the River Tyne, which separates Newcastle and North Tyneside from Gateshead and South Tyneside, has few river crossings. This constrains movement patterns. There are only six vehicle crossings between western Gateshead and the coast – plus a one-way bus-only bridge – of which one is the A19 Tyne Tunnel. With only a single river crossing spanning the Tyne east of Newcastle, some communities are spatially close to employment and other opportunities but cannot easily reach them. This can result in deprived communities becoming isolated from nearby jobs and training. In Durham East-West linkages within the authority area, often involve vehicles routing through the city and the geography of coastal communities such as Sunderland, South and North Tyneside and South East Northumberland involves significant movement to and from those centres affecting junctions on the strategic road network and major road network.

2.143 Unconnected signals also impact on the ability to manage the network, to give advantage to bus operations when incidents happen on the network.

Congestion in Durham City Centre

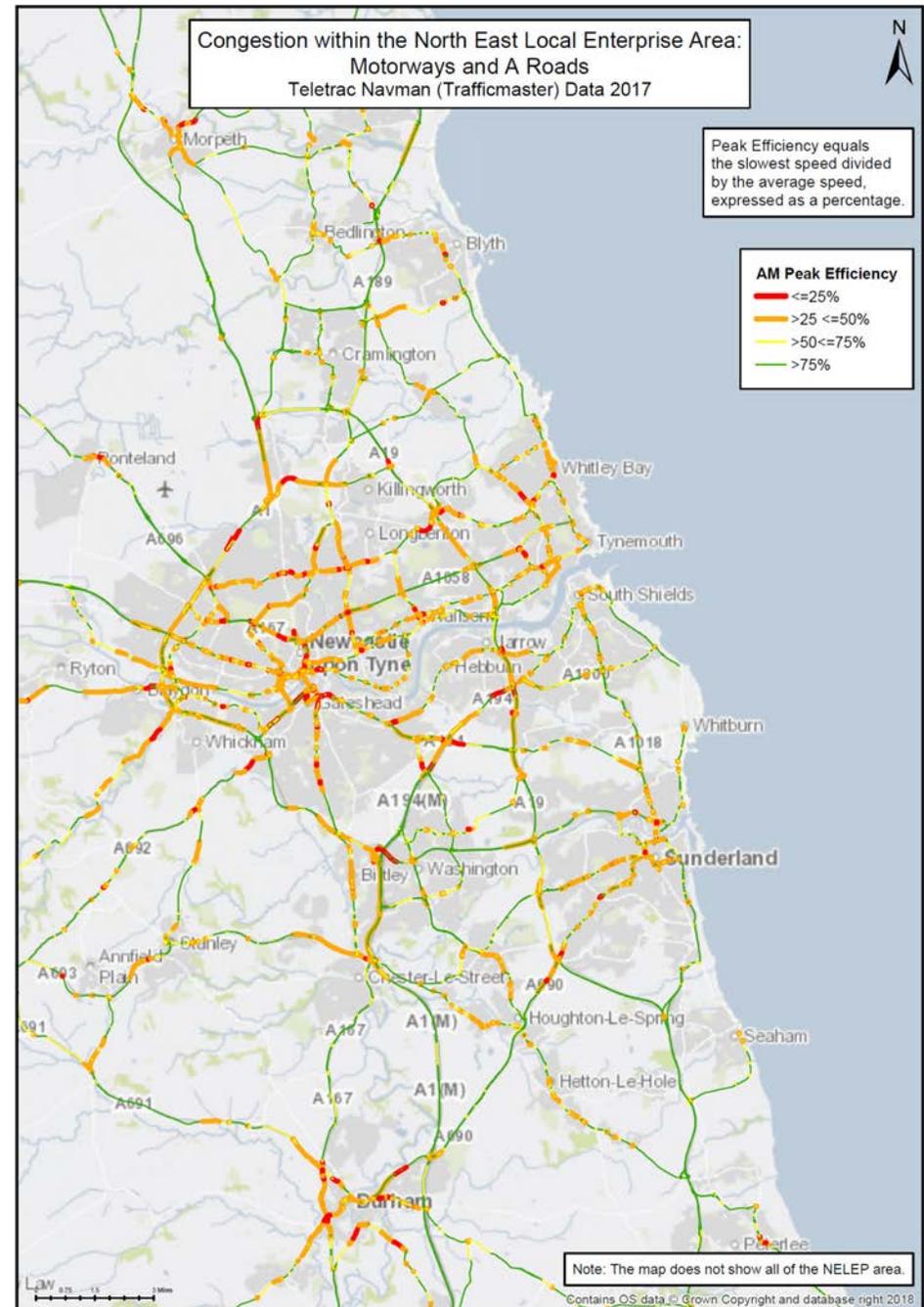


Car ownership and use

2.144 Whilst 29% of households in the NE region do not own a car – the highest proportion outside of London – this has shrunk from 37% in 2002/3. The proportion of households owning two or more cars has increased from 20% to 28% over the same period⁵¹. Latent demand for higher levels of ownership in the future suggests increased future traffic congestion if alternative provision is not made.

2.145 Actual traffic speeds are relatively static across the region. Speeds have increased by 0.4% in Tyne and Wear, and slightly reduced in Northumberland and County Durham between 2017 and 2018⁵², as shown in **Table 5**. Decreases were greatest in local authorities on either side of the River Tyne. A congestion map for the region utilising Trafficmaster data is available below as **Figure 21**.

Figure 21 Trafficmaster data congestion map of North East Region



51 DfT (2018) Household Car Ownership by Region and Rural - Urban Classification, 2002/03 – 2016/17 (NTS9902). DfT

52 DfT (2018) Average Speeds on Local A Roads by Local Authority Area in England: Annual from 2015. Table CGN0501b. DfT, viewed on 14 October 2019, <https://www.gov.uk/government/statistical-data-sets/average-speed-delay-and-reliability-of-travel-times-cgn>

2.146 Slower traffic is linked to higher levels of congestion and poorer air quality and is also linked to slower bus journeys except on the few corridors with comprehensive bus priority measures. A less efficient local road network also increases delays to goods vehicles and diminishes the efficiency of an economy increasingly reliant on the practice of just-in-time logistics and supply chains.

Table 5 Average speeds in North East Region

Local Authority	Average Speed (mph)		
	2017	2018	Percentage Increase (+) or Decrease (-) 2017-2018
Gateshead	24.6	23.9	-2.9%
Newcastle upon Tyne	19.4	19.3	-0.9%
North Tyneside	23.9	24.4	1.9%
South Tyneside	23.7	24.2	2.2%
Sunderland	29.6	29.9	1.1%
Tyne and Wear average	24.2	24.3	0.4%
County Durham	34.1	33.9	-0.6%
Northumberland	36.1	35.7	-1.0%

Summary Box: Car Ownership and Use Challenges

Congestion has increased in urban areas with pronounced levels at some of our river crossings, the approaches to those crossings and our city centres. This is largely as a result of high levels of commuting by private vehicle

Traffic speeds as a result have slightly increased in Tyne and Wear with slight decreases in County Durham and Northumberland but have seen the largest decreases in central Tyneside.

Both have implications for our bus network, causing longer journey times, delays and unreliable services

With short commuting distances there is potential to encourage modal shift through improvements in the quality, reliability and frequency of the transport network including targeted park and ride facilities around the region.

Our Air Quality and Low Carbon Challenges

In this section we

Review the current air quality challenge facing the region and transports contribution towards it;

Look to identify the planned path towards a low carbon future and challenges facing the network to deliver this; and

Opportunities to integrate this bid, to deliver a cleaner, more efficient transport network

Air Quality

2.147 There is no safe level of exposure to air pollution. To compound this issue locally, people in the North East of England live shorter lives and have shorter healthy life expectancy. It is estimated that poor air quality is responsible for around 360 deaths each year in Central Tyneside alone⁵³.

2.148 In the UK, poor air quality is estimated to contribute to 40,000 early deaths per year⁵⁴. The total cumulative cost to the NHS and social care of Nitrogen Dioxide is estimated to reach £5.37bn by 2035, rising to £18.57bn if including the costs for diseases for which there is less robust evidence⁵⁵. Problems caused by all forms of air pollution impose many other costs on society including an added burden on the health service which has been estimated by Defra at an annual cost of £15bn.

2.149 As a region with a world-leading natural and historical environment it is our duty to protect it for future generations against harmful pollution levels. Making better decisions about transport provision can lead to a more sustainable (and therefore healthier) way of life in the North East for our residents, commuters, and visitors. The four North East Air Quality Management Areas (AQMAs) relating to Nitrogen Dioxide (NO₂) levels and associated Local Air Quality Action Plans (AQAPs) are summarised in **Table 6**.

Table 6 AQMA locations

Authority	Location(s)
Durham	Durham City Chester Le Street
Gateshead	Town Centre
Newcastle City Council	City Centre Gosforth
South Tyneside Council	Boldon Lane/Stanhope Road Leam Lane/Lindisfarne Roundabout

⁵³ Breathe Clean Air (2019); Why we need to act, Breathe, viewed on 15 October 2019, <https://www.breathe-cleanair.com/why-we-need-to-act>

⁵⁴ Breathe Clean Air (2019); Why we need to act, Breathe, viewed on 15 October 2019, <https://www.breathe-cleanair.com/why-we-need-to-act>

⁵⁵ Pimpin L, Retat L, Fecht D, de Preux L, Sassi F, Gulliver J, et al. (2018) Estimating the Costs of Air Pollution to the National Health Service and Social Care: An Assessment and Forecast Up to 2035. PLOS Med 15(7): e1002602. Viewed on 14 October 2019, <https://doi.org/10.1371/journal.pmed.1002602>

2.150 Some of the measures we have included in our AQAPs are:

- Reducing the volume of traffic entering the AQMA;
- Working with bus operators on emission standards for buses and to encourage the use of cleaner vehicles; and
- Encouraging cycling and walking.

2.151 The measure of success for AQMAs is to return air quality to national objective levels for a continued period. If this could be achieved, then the AQMA in question could be revoked on the grounds that air quality has improved sufficiently that it is no longer a concern.

2.152 Councils in Newcastle, Gateshead and North Tyneside have been working together to develop proposals for improving air quality. This is as a result of the councils being given a legal order by the government to identify measures for improving air quality in the shortest possible time, as well as their duties to address AQMAs.

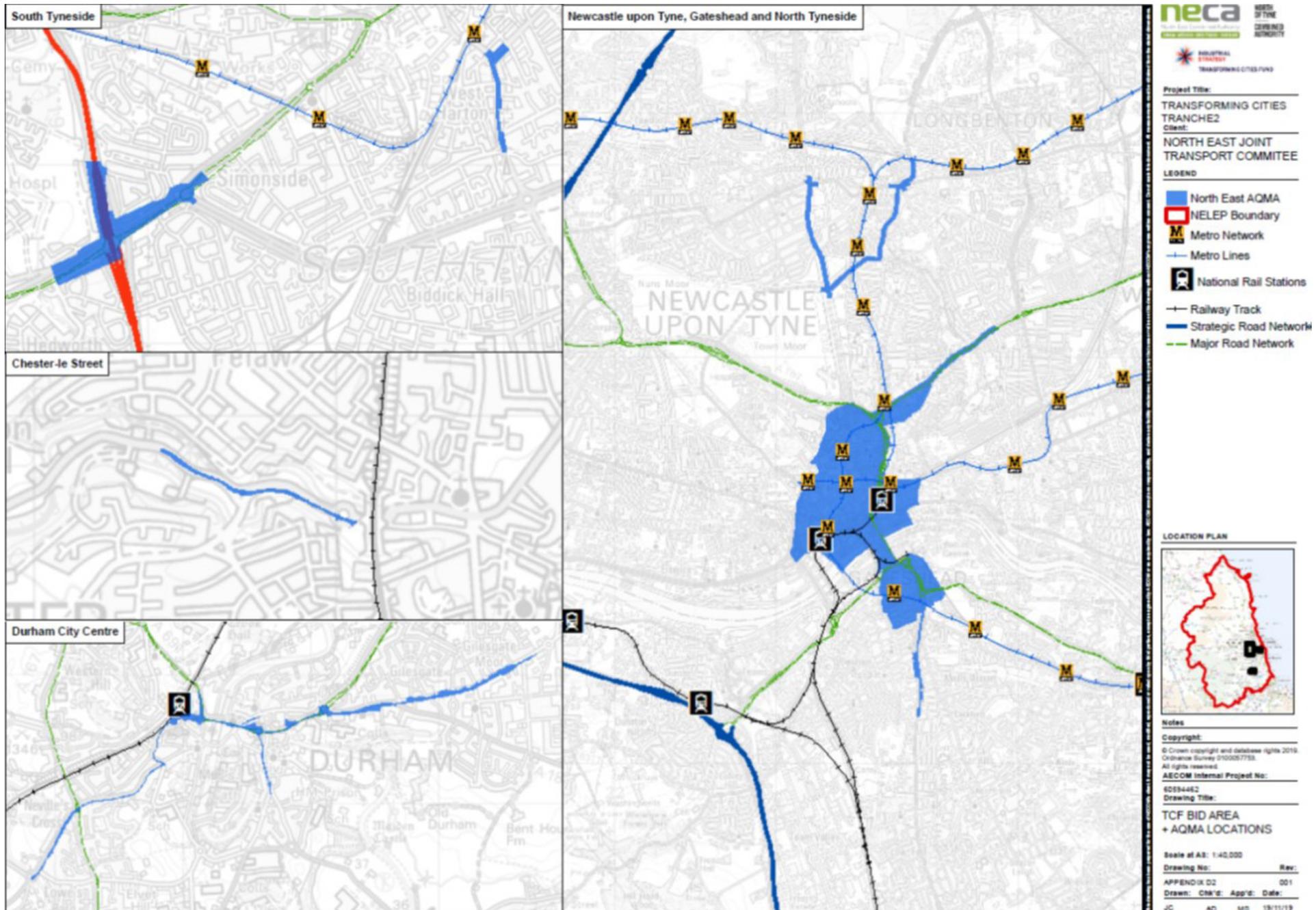
2.153 Government issued the order after their modelling showed that levels of pollution on parts of the A167 Central Motorway and Tyne Bridge and a section of the A1058 Coast Road will remain above legal limits unless further action is taken. During early-2019, a public consultation took place to seek feedback on options that included a charging clean air zone, a low-emission zone with tolls and bans on HGVs and LGVs at peak periods. The consultation attracted 20,000 responses, showing the strength of interest around the region. In considering different measures the consultation has sought to consider the impact they might have on people and places, while also recognising that the worst pollution is in the urban centres and on commuter routes.

2.154 A further six-week consultation launched on the 14th October 2019 and closed on the 25th November 2019. This will inform the final response that will be issued to Government in 2020. The revised proposals are a “Category C” charging Clean Air Zone covering Newcastle city centre affecting non-compliant buses, coaches, taxis (both Hackney Carriages and private hire vehicles), heavy goods vehicles and vans, to be enforced from 2021. The proposal also includes grants for individuals and businesses affected to upgrade vehicles, highway layout changes and integration with this TCF submission.

2.155 The schemes that we seek to promote in the region, must clearly seek to play their part in improving the region’s air quality and there is a significant opportunity through this bid to achieve that. In addition, any modal shift because of any mechanisms that may be implemented by the air quality directions have been tested within our economic case with reasonable assumptions being made.

2.156 The air quality exceedance areas can be found in **Figure 22** below.

Figure 22 Air Quality Management Areas



Our Low Carbon Future

2.157 With successes in offshore wind technologies and electric vehicles, the North East has been at the forefront of the move towards low carbon economic growth. This SOBC supports the efforts to grow the low carbon sectors through opportunities for modal shift, supporting the development of innovation in vehicle technology and delivering a sustainable pattern of growth. The region has a draft Low Carbon strategy⁵⁶, to address these challenges.

2.158 Road transport contributes the most out of any sector to carbon emissions (37% across the NE area) as shown in **Figure 23**. In accelerating the shift to low emission road transport, electric vehicles and supporting charging infrastructure is a focus for national policy, as set out in the Road to Zero strategy⁵⁷. It is also acknowledged that other technologies will be important to provide a range of solutions which meet different needs. The North East has a very successful 'Go Ultra Low programme', which has made progress in delivering a high-quality electric vehicle charging network for the region⁵⁸. Plans are also being developed by regional public authorities to further develop this network, this supports continued growth in the number of plug-in vehicles licensed in each Local Authority area.

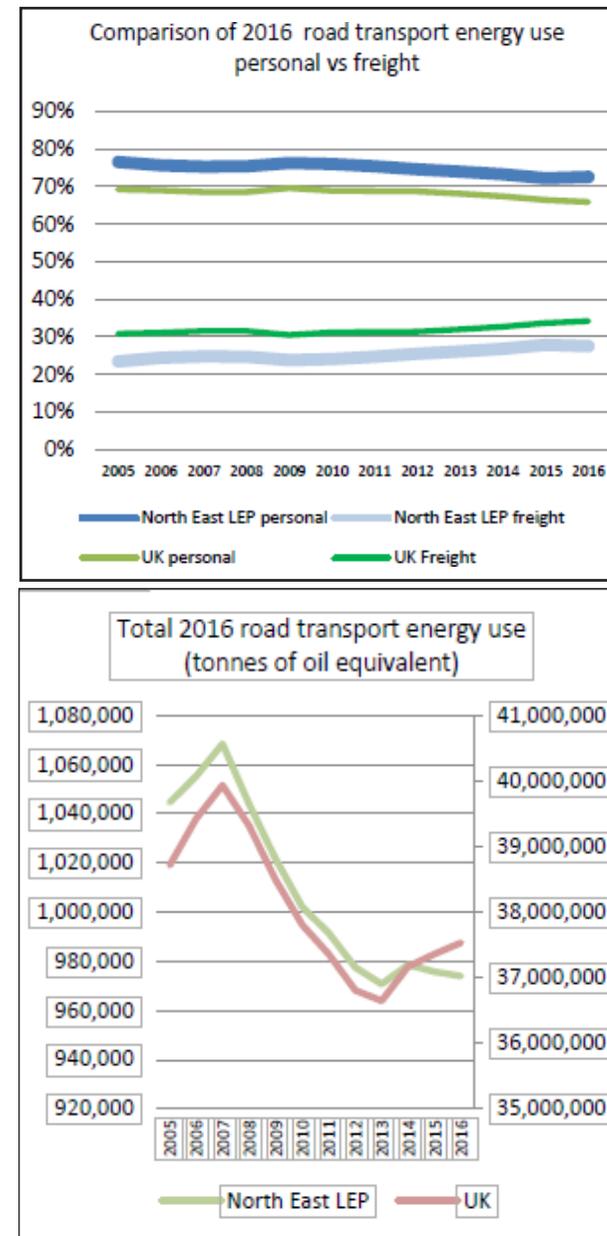
2.159 The North East is home to wider low emission transport expertise that is engaging nationally with this agenda. The North East Automotive Alliance is an internationally significant automotive cluster that brings together regional organisations on workstreams including advanced propulsion. The region has examples which are being actively deployed by fleet operators in reducing emissions from buses and freight vehicles, including the successful deployment of biomethane operated buses in Sunderland by Stagecoach and the roll out of nine electric buses for Go North East, successfully funded through the Government's Ultra Low Emission Bus Fund. Our new Metro fleet will be 32% more energy efficient saving tonnes of carbon.

⁵⁶ North East Combined Authority (2019), Low Carbon Strategy, Available on request.

⁵⁷ HM Government (2018), The Road to Zero, available at, https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/739460/road-to-zero.pdf Last accessed on 1st November 2019.

⁵⁸ Go Electric (2019), Work, available at, <http://www.gosmarter.co.uk/go-electric>, last accessed on 30th October 2019.

Figure 23 Total road transport energy use and a comparison of freight and personal transport



2.160 The region is extremely well placed to explore the connections between low emission transport, advanced propulsion and energy systems, combining this automotive expertise with nationally important assets related to energy flexibility.

2.161 Car use is however continuing to rise and remains the most common mode of transport for commuting, whilst a cleaner vehicle fleet results in potentially improved air quality and a more efficient energy sector, it would not address health impacts together with efficient use of road space. This SOBC therefore recognises the low carbon challenge and seeks to complement the call to reduce carbon emissions and address congestion through a switch to public and sustainable transport.

Summary Box, Air Quality and a Low Carbon Challenges

The region experiences air quality hotspots in our town and city centres

Transport contributes a significant proportion of carbon emissions

The region has strong plans in place to address air quality and carbon emissions

The region has an established low carbon sector which is providing solutions towards a low carbon future with infrastructure being delivered

The Region has expertise in developing low carbon solutions for our transport network - our new Electric Vehicle Filling station in Sunderland



Housing and Employment Challenges

Through this section we

Identify housing and employment targets and identify challenges in delivering sustainable connectivity to target areas; and

Review how this bid can support the region in achieving the aims and objectives of growth through integrated infrastructure planning.

Housing and Employment Targets

2.162 The North East city region has ambitious plans to provide new housing and commercial development in order to address demographic trends and drive economic growth. Some of our significant employment sites, including out of town business parks, are successful but have relatively limited public transport connectivity. To support their onward vitality and growth there is an opportunity to address the connectivity that is available and the quality of those connections.

2.163 Changes in the age structure of the population, housing stock and the number and size of households will impact on transport in a variety of ways. The location of new developments and the take up by household type is also important. It is vital that these developments are served by public transport, planned around the existing public transport network and linked to appropriate pedestrian and cycling and walking routes. Equally, a first-class transport network, encouraging sustainable modes of transport, will enable the growth in housing that is needed to provide enough high-quality homes and jobs for our existing population and future needs.

2.164 An analysis of Local Plans and their constituent targets shows high levels of growth in homes and jobs that is planned across the region, this is shown in **Table 7**. These are significant numbers of new homes and jobs that will create significant transport demands and a need for additional transport infrastructure and services. The national and regional policy context makes it clear that these additional requirements should be served by sustainable transport modes wherever possible.

Table 7 Housing and employment growth targets (*denotes draft Local Plans)

Local authority	% of NE employees, 2016	Residential target – Number of dwellings	Employment – new jobs	Planning timescales
Sunderland*	15.1%	13,410	7,200	2015-2033
Newcastle upon Tyne	22.8%	19,000	14,000	2010-2030
North Tyneside	10.3%	16,593	12,730	2014-2030
South Tyneside*	5.4%	7,000	12,338	2016-2036
County Durham*	21.4%	24,852	11,640	2016-2033
Northumberland*	12.9%	17,700	15,000	2016-2036
Gateshead	12.1%	11,000	8,000	2010-2030
Total	100.0%	109,555	80,908	

Integrated Infrastructure Planning

2.165 Our local plans set out the need for supporting infrastructure to unlock planned homes and jobs, including through their Infrastructure Delivery Plans. It is therefore of increased importance that we align local plans with transport plans and strategies to maximise the effect. The region is exploring advancing this concept through an infrastructure toolkit which will combine datasets to allow exploration of the links between the location of these growth sites, the existing transport network in the vicinity and opportunities to enhance sustainable and public transport infrastructure that will encourage a more sustainable pattern of development and movement.

2.166 In the interim the region will assess the development that can be delivered or supported by investment in this package. More details of the methodology and findings are available in Appendix C.

Summary Box, Housing and Employment Challenges

The transport network may not be capable of accommodating significant local plan targets for the delivery of 109,555 homes up to 2036 in the region with land and capacity for 80,908 new jobs

We must ensure the locations of new development is connected with high quality public and sustainable transport infrastructure where required

There is an opportunity to target investment, so it influences future occupiers and workers

Inequality Challenges

Through this section we review

Challenges associated with public health, deprivation levels, pockets of deprivation and social mobility;

Opportunities to deliver enhanced mobility across the region.

Public Health Challenges

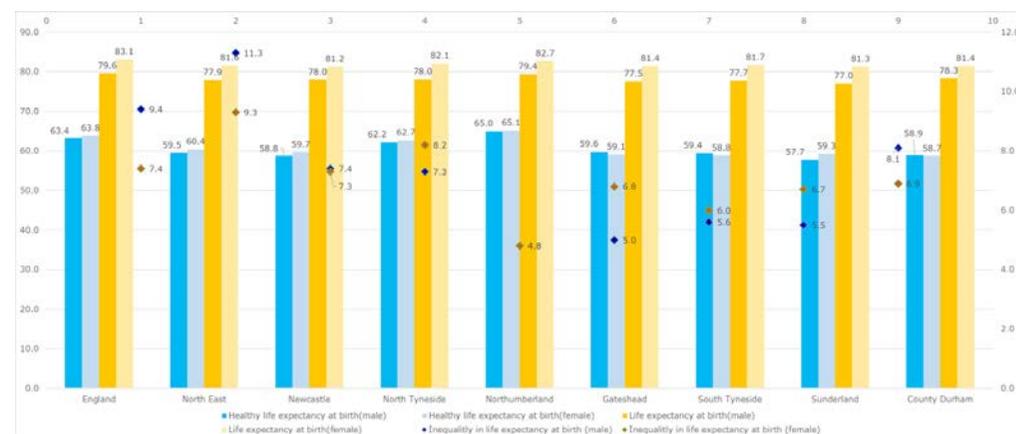
2.167 Typically, levels of inactivity and the health problems they cause are higher in our area than elsewhere in the UK⁵⁹. Poor public health can have direct consequences on the productivity of the region. The 2018 Health for Wealth Report from the Northern Health Science Alliance⁶⁰ considers that poor health and productivity are interlinked, as examples long term health conditions can lead to increased spells of economic inactivity and reduce the chance of securing new positions when returning to work. Linked to the £4 productivity gap per person per hour between the North and the rest of England⁶¹, 30% of this gap is down to ill health. The report concludes that addressing public health challenges could boost GVA output by £13.2bn.

2.168 The North East has experienced an increase in life expectancy but the health and wellbeing gap with the rest of the UK and health inequalities within the region remain stubbornly high⁶², with behavioural factors and deprivation levels impacting on health and wellbeing.

2.169 Poor health leads to significant pressures on primary healthcare and social care, resulting in a system over-focused on the treatment of ill health instead of preventing it. It also reduces productivity and hampers economic growth, entrenching the income inequalities which contribute to poor health.

2.170 **Figure 24** shows that life expectancy at birth for both men and women is about one year lower in the region compared with England; similarly, healthy life expectancy is about four years lower⁶³. There are also very significant differences between parts of the North East.

Figure 24 Life expectancy and healthy life expectancy at birth, and inequality in life expectancy and healthy life expectancy at birth, England, the North East and the North East city region



2.171 Whilst life expectancy for both males and females in the area has increased in recent years, healthy life expectancy has decreased. This follows the national pattern.

59 PHE (2019), Summary Health Report for the North East Combined Authority, PHE, viewed on 1/06/2019, Available on request,

60 Northern Health Science Alliance, Health for Wealth, viewed on the 24/10/2019, available online at, <http://www.thenhsa.co.uk/2018/11/major-new-report-connects-northern-poor-health-with-poor-productivity/>

61 Northern Powerhouse Independent Economic Review (2016), available online at, <https://www.transportforthenorth.com/wp-content/uploads/Northern-Powerhouse-Independent-Economic-Review-Executive-Summary.pdf#page=3&zoom=100,0,97>, last accessed on 1st November 2019.

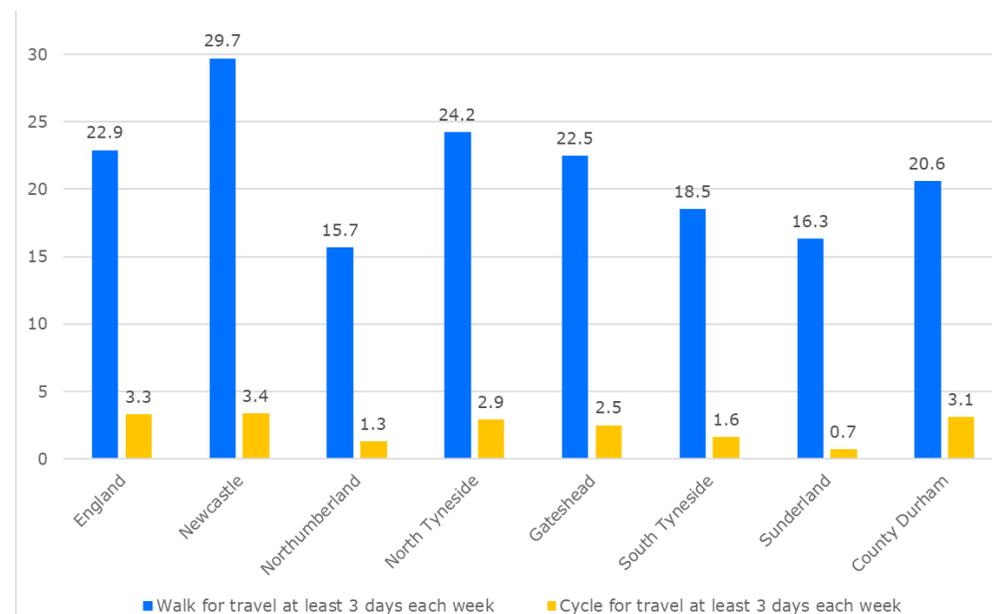
62 North East CA, Health and Wealth - Closing the Gap in the North East, viewed on the 24/10/2019, available online at <https://northeastca.gov.uk/wp-content/uploads/2018/04/Health-and-Wealth-Closing-the-Gap-in-the-North-East-Full-Report.pdf>

63 Public Health England (2019), Public Health Outcomes Framework : NE Health Profile, PHE, viewed on 14 October 2019, <https://fingertips.phe.org.uk/profile/public-health-outcomes-framework/data#page/0/gid/1000049/pat/6/par/E12000001/ati/102/are/E06000047/iid/92901/age/1/sex/1>

2.172 Compared with England a larger proportion of our population (aged 16 and over) have a long-term health problem or disability that “limits day to day activities a lot” (North East: 13%, England: 10%). Relative to the UK, a high percentage of economically inactive people in the region are long-term sick (North East: 28.5%, UK: 22.1%) and a high percentage of 16-64-year olds are Equality Act Core or Work-limiting Disabled (North East: 23.3%, UK: 19.5%).

2.173 Active travel, walking and cycling and use of public transport are of paramount importance in establishing healthy lifestyles and improving the health of our region. Physical inactivity is widespread in the North East of England and across the North East city region as shown in **Figure 25**. At present, the number of people across the North East who walk or cycle for travel on at least three days in each week is below the average for England⁶⁴. Rates are however uneven, being above or close to the average in Newcastle and North Tyneside and below in all other authorities. Walking and cycling improvement schemes in these areas could have an important impact in making walking or using a bicycle safer and more practical for residents.

Figure 25 Percentage of adults who walk or cycle for travel at least three days a week, England and North East. Data from Public Health England



2.174 Across the UK air pollution has a dramatic negative impact on health. Around 2.5 million cases of disease attributable to air pollution are forecast by 2035 if air pollution levels are not reduced. This results in a significant impact to the workforce through lost productivity due to health-related absence from work, and from work performed at reduced capacity because of ill-health. The total cumulative cost to the NHS and social care of air pollution is estimated to reach £5.37bn by 2035⁶⁵.

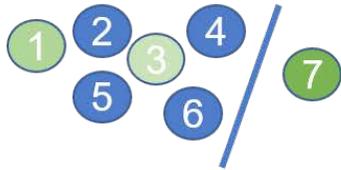
⁶⁴ Public Health England (2019) Public Health Outcomes Framework : NE Health Profile, PHE, viewed on 15 October 2019, <https://fingertips.phe.org.uk/profile/wider-determinants/data#page/0/gid/1938133043/pat/6/par/E12000001/ati/102/are/E06000047>

⁶⁵ Pimpin, L., Retat, L., Fecht, D., de Preux, L., Sassi F., Belloni, A., Ferguson, B., Courbould, E., Jaccard, A. & Webber, L. (2018) Estimating the costs of air pollution to the National Health Service and social care: An assessment and forecast up to 2035. *PLoS Med* 10;15 (7), e1002602. doi: 10.1371/journal.pmed.1002602

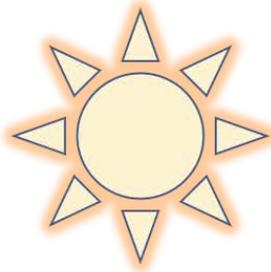
2.175 A summary of the Health Dynamics of the region is available at **Figure 26.**

Figure 26 Health in the North East LEP area

Health in NELEP area



NELEP Authorities have a higher proportion dementia comparative to England (2017/2018)



Of all the lifestyle changes that have been studied, taking regular physical exercise appears to be one of the best things that you can do to reduce your risk of getting dementia
(<https://www.alzheimers.org.uk>)

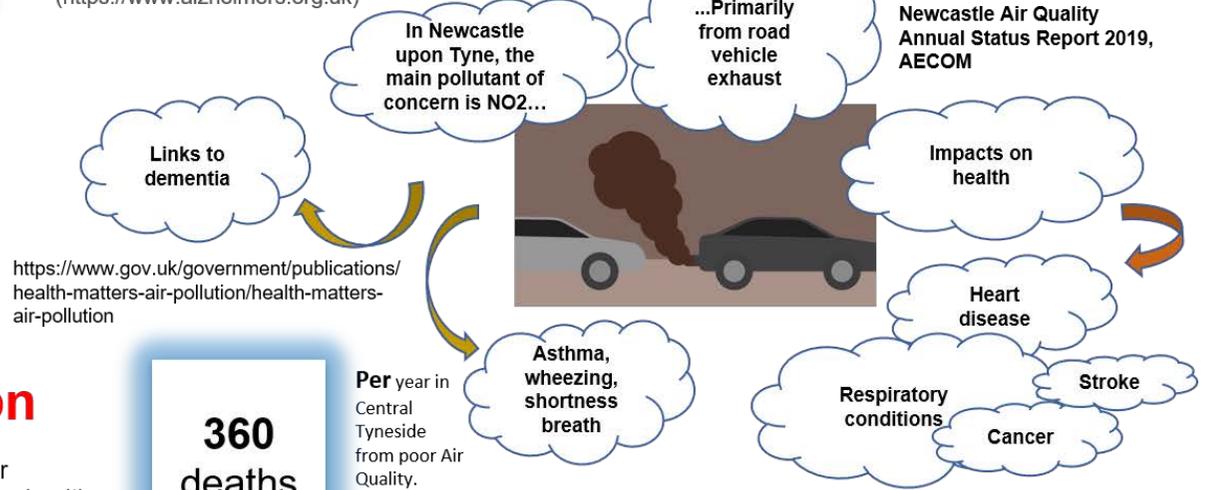
<p>a baby boy born in the NECA area can expect to live</p> <p>11.3 fewer years</p> <p>in good health than a baby boy born in Richmond on Thames</p>	<p>a baby girl born in the NECA area can expect to live</p> <p>11.6 fewer years</p> <p>in good health than a baby girl born in Wokingham</p>
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£537bn

The cost of air pollution on the health and social care system in 2035 with no action (Breathe Clean Air)

360
deaths

Per year in Central Tyneside from poor Air Quality.

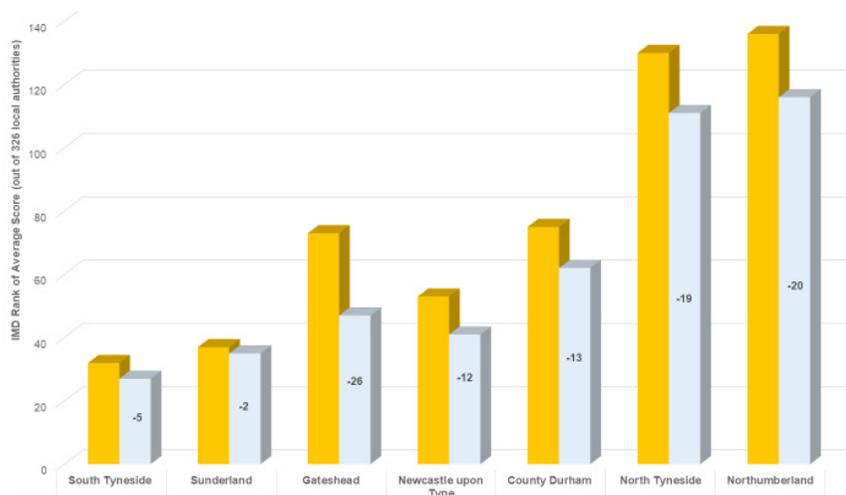


Deprivation Challenges

2.176 Spatially, deprivation in the North East is largely concentrated in urban areas. This highlights fundamental challenges relating to economic inactivity and worklessness, largely stemming from a legacy of industrial change which has led to high levels of structural unemployment.

2.177 The 2019 Index of Multiple Deprivation (IMD) present in **Figure 27** shows that all areas of Tyne and Wear have above average levels of multiple deprivation. The index of multiple deprivation gives further information on the social portrait of an area and can be used to rank all local authorities in England. Authorities are ranked based on the average super output areas measure (which is the population weighted average of the combined scores for the SOAs in a district). The IMD also ranks every small area (LSOA) in England from 1 (most deprived area) to 32,844 (least deprived area). SOAs are measured on seven different categories and an overall score calculated, these categories are income, employment, health deprivation, education, barriers, crime and the living environment. For the purposes of this assessment we have used rank of average score at a district level to understand the social portrait.

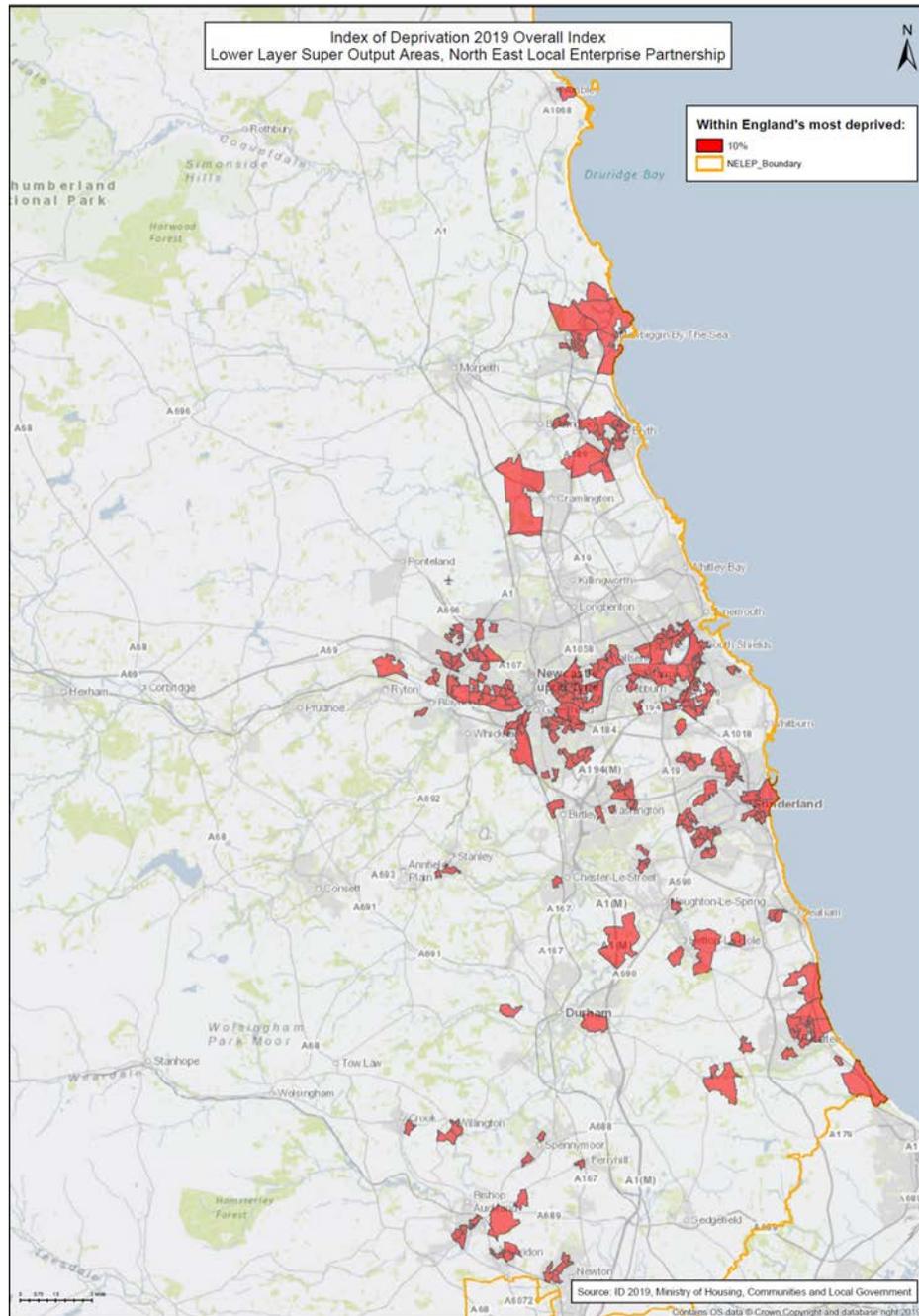
Figure 27 Indices of Multiple Deprivation rank in the North East (2015 - 2019)



2.178 The North East ranks 6th out of 38 areas with challenges around employment levels and skills.

2.179 **Figure 28** shows the concentrations of deprivation around the North East including the change from 2015-2019 levels. The map in **Figure 28** shows that as well as the urban areas of Tyne and Wear, South East Northumberland and East Durham perform poorly against some of the social indicators in IMD, particularly when comparing these to the national figures. The indicators from 2015 indicate that all areas have seen increasing levels of deprivation.

Figure 28 Map of deprivation across the North East



2.180 Accessible public transport which allows people to reach employment, education and training opportunities outside of their immediate area can help to reduce these disparities. Our TCF programme focuses on strengthening and broadening connectivity to these areas. Inequitable access to public and sustainable transport disproportionately affects deprived communities, with 'socially excluded people able to access fewer facilities than others but suffering more from the externalities (such as traffic casualties and vehicle emissions⁶⁶)'.

⁶⁶ Stevenson M et al (2016), Land-use, Transport and Population Health: Estimating the Health Benefits of Compact Cities, *Lancet*. 2016 Dec 10; 388(10062): 2925–2935, PMC, viewed on 15 October 2019, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5349496/>,

Social Mobility Challenges

2.181 Transport can help to reduce inequalities by enabling people to access a multitude of services quickly and easily. Good transport links also play a role in reducing deprivation by enabling people to access job opportunities which in turn can improve quality of life and reduce inequality.

2.182 As the Social Mobility Commission's report in 2017⁶⁷ concluded, a stark social mobility postcode lottery exists in Britain today, where the chances of being successful if you come from a disadvantaged background are linked to where you live. Translating this into a North East context the challenge is a polarisation in social mobility for the region, with worst performance seen in the impact of youth isolation and working lives. This surrounds educational attainment at and beyond GCSE and indicators around pay and employment levels.

2.183 Transport and the lack of affordable access is cited as one of the main reasons for poor levels of social mobility performance. This is particularly evident where we have isolated communities. Infrastructure investment and improved transport connectivity is recommended through the Social Mobility Commission's 2017 report. This concept has been reinforced by the National Centre for Social Research (2019), noting that transport in terms of policy, provision, affordability and access can be integral to improving access⁶⁸. In the region we also have an ageing society and we need to effectively address their needs through public and sustainable transport services which connect to the services they need, reducing isolation.

2.184 The UK 2070 Commission⁶⁹ recently reported, that the UK's richest region (London) has a 50% higher level of productivity than any other nation or region in the UK. This gap can be expected to grow with over 50% of future jobs growth going to London and the wider south east, if we do nothing. The productivity gap in the English regions is estimated to cost the economy around £40 billion.

2.185 The region has an accessibility model which has been used to assess the location of jobs, educational facilities, social facilities, healthcare facilities and homes and the travel time to access these opportunities by public transport. The baseline assessment has been modelled on a maximum acceptable journey time of one hour. For the purpose of this assessment we have focused on all jobs and the location of the prime and enabling capabilities as identified in the Northern Powerhouse Independent Economic Review (NPIER). These are known as 'TfN jobs' for the purpose of the assessment below.

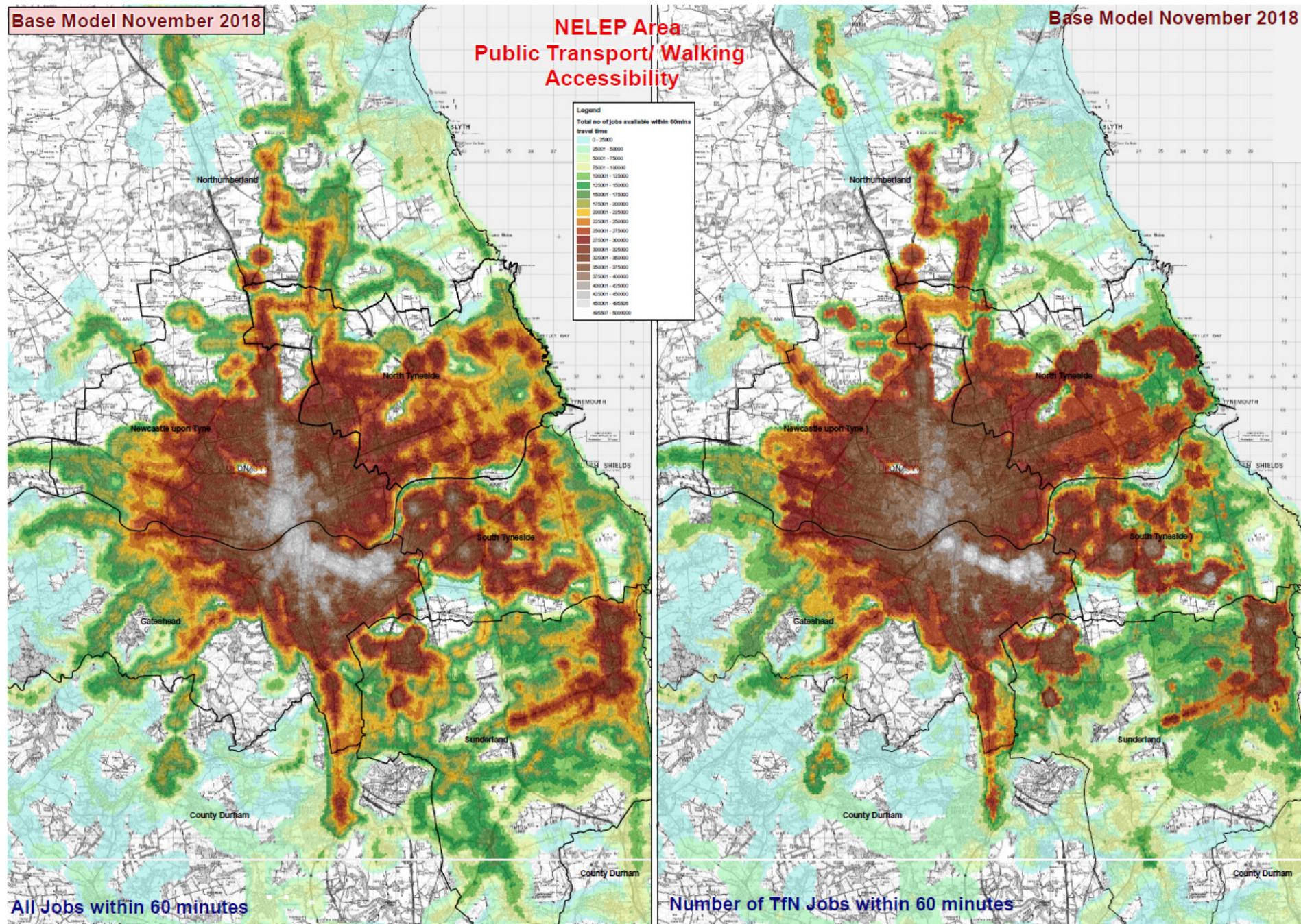
2.186 The baseline assessment is available in **Figure 29** and indicates that across the region, 171,712 jobs are available per household within an hour's travel time. A focus for this submission is to increase connectivity by sustainable modes to education, employment and social opportunities. We model the scenario with schemes to establish the impact associated with the schemes.

67 Social Mobility Commission (2017), State of the Nation 2017: Social Mobility in Great Britain, SMC, Viewed 3 June 2019, https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/662744/State_of_the_Nation_2017_-_Social_Mobility_in_Great_Britain.pdf

68 NatCen Social Research | Transport and inequality: An evidence review for the Department for Transport, available at, https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/837099/Transport_and_inequality_report.pdf, last accessed on the 31st October 2019.

69 UK 2070 Commission, Executive Summary (2019): The First Report of the UK2070 Commission: Fairer and Stronger – Rebalancing the UK Economy, viewed on 3 June 2019, <http://uk2070.org.uk/publications>

Figure 29 Baseline accessibility to jobs by public transport



2.187 It's important to consider the wider functionality of the transport network away from access to employment, this includes social connectivity, reducing isolation and improving quality of life. Sim et al, (2015) considered that a well-functioning city is one that connects human interactions, normalising the ability to travel⁷⁰.

2.188 A lack of affordable transport is often cited as a barrier to progress and whilst not a capital ask, affordable transport is a driver for delivering change in use. This is particularly the case for those on limited incomes. First steps in being able to access transport is as important as switching travel behaviour for those already making the journey. Normalising the behaviour of using public and sustainable transport, through ensuring the quality and reach of the network is an important tenet and can go some way to addressing entrenched deprivation levels and poor levels of skills.

2.189 Poor connectivity with unreliable or infrequent services can also be an influential barrier to getting or remaining in work⁷¹. The region already offers products in which a traveller is not penalised if they do not travel every day and enhancements to the statutory concessionary bus pass scheme for older and disabled people.

2.190 Other initiatives that operate in the region include concessionary taxi schemes and “buddy” schemes whereby disabled people are encouraged to use public transport by having someone travel with them for a few trips. Furthermore, we have a strong offer for children and students to help with the costs of travel. Nevertheless, we know that perceptions of poor value for money influence the way people choose to travel, and budgetary pressures could impact on the future of these products.

70 Sim A, Yaliraki S, Barahona M and Stumpf M, Great Cities Look Small, Royal Society Interface, vol 12, issue 109, viewed on 24/10/2019, available at, <https://royalsocietypublishing.org/doi/full/10.1098/rsif.2015.0315#d1835694e1>

71 Crisp R, Gore T, McCarthy L (2019), Addressing Transport Barriers to Work in Low Income Neighbourhoods: A Review of Evidence and Practice, SHU, viewed on 3 June 2019, <http://shura.shu.ac.uk/16162/1/jrf-addressing-transport-barriers.pdf>

– Summary Box – Inequality Challenges

- Health and income-based inequalities are prevalent around the region
- Lower levels of life expectancy
- Significant public health challenges
- Deprivation is focused in urban areas with concentrations around areas of previous heavy industry
- There are transport inequalities due to the range of available and affordable transport modes
- We can deliver increased availability and choice to access new opportunities, increasing the labour market and the skills base.
- We can improve levels of physical activity during travel and drive improvements in wider public health challenges.

Summary of our Challenges

In this section we

Summarise our key challenges; and

Review the opportunities to change to introduce a case for change.

2.191 Our businesses and communities rely on a well-functioning transport network to thrive, yet we face many challenges in achieving this. There are strong aspects to the region’s transport network, however we must continue to make significant improvements to that

network in order to drive forward the economy, improve health and wellbeing and improve the environment. This will support the ambition of the region as established by the NELEP in our Strategic Economic Plan and emerging Local Industrial Strategy.

2.192 The Transforming Cities Fund is a significant opportunity to influence how people access public and sustainable transport across the region with better quality links to enhance our existing public and sustainable transport network.

2.193 A summary of the challenges and opportunities we face in the region is provided in **Table 8**.

Table 8 Summary of challenges and opportunities

Challenges	Opportunities
GVA output rising but challenged by external pressures with a persistent productivity gap	Need to target transport investment so it maximises access to labour markets and national and international gateways for trade and investment.
We have a growing population but a one that is ageing over time	Accommodating people in work for longer periods of time and influencing the future generation of workers to travel sustainably.
Public transport use is falling, commuter car use is high	We can improve the capacity and frequency of services by addressing challenges such as congestion pinch points and encouraging new forms of mobility away from single occupant car use.
Air quality hotspots are present in the region, Transport contributes a significant proportion of carbon emissions	This investment can support modal shift with improvements to public and sustainable transport and embrace opportunities to deliver in a clean and sustainable way, assisting the delivery of action plans in place to address emissions and effective carbon reduction.
Health and income- based inequalities are present	Transport can play a significant role in broadening the reach of the network to access new opportunities thereby increasing the labour market and the skills base through sustainable means, encouraging more daily activity, improving public health.
Plans for substantial housing growth - these need to be delivered with Public and Sustainable transport connections	Part of the dynamic is around the relationship between transport and planning, both in the location decisions for new development, the design and delivery of schemes and the integration of infrastructure to set behaviours. This bid sets out how we achieve this.

Drivers for Change

2.194 Building on the strategic context, we emphasise that internal and external challenges and factors are creating a need for change in the region’s transport network. Existing services are not always in the right location to connect areas of deprivation and centres of employment and economic growth. In many cases those existing services are subject to delays and persistent reliability issues. Transformational change is required in order to tackle our broad economic and environmental challenges, through interventions that

are interconnected with the existing network in order to maximise the potential of existing and future services. Our programme of investment in this SOBC is founded on delivering those interconnections, as illustrated by the maps in **Appendix D**.

2.195 The significant internal (regional) and external drivers for change are summarised below. Merging coverage of the challenges and opportunities this analysis presents a review of the drivers for changing through investment. It identifies what will drive the decisions of the right type of investment to encourage a transformation in the way we access public and sustainable transport.

Figure 30 Internal drivers for change

Internal

<p>P Political</p>	<p>E Economics</p>	<p>S Social</p>	<p>T Technological</p>	<p>L Legal</p>	<p>E Environment</p>
<ul style="list-style-type: none"> – Willingness to deliver schemes that make a significant difference – Mechanism in place to make decisions and to allocate funding – Two combined authorities with an Elected Mayor for North of Tyne with policies around sustainable travel – Shared understanding of the value of transport investment 	<ul style="list-style-type: none"> – Growing economy but one that faces several threats and its potential is limited by poor connectivity – Strong economic plan which exemplifies the level of ambition and potential that investment in connectivity would support – Relatively self contained economy with the opportunity to be the testbed of new ideas 	<ul style="list-style-type: none"> – Increasing awareness of environmental issues and the role of transport – Tested opinions on the quality and offer of the public and sustainable transport network and the opportunities to improve – Population growth and ageing in place placing different demands on the network 	<ul style="list-style-type: none"> – Increased automation in the transport industry, identifying future transport scenarios – Payment and access technologies becoming more widespread and demanding new access tools – Levels of innovation in the region driving ambition and change 	<ul style="list-style-type: none"> – Legal challenges around air quality driving the need to encourage modal shift – Requirement to plan for investment in transport through the production of an effective transport plan – Regulatory and legal process around plans for investment 	<ul style="list-style-type: none"> – Decarbonisation / climate change with ‘climate emergencies’ driving the need to reduce transport’s contribution to climate change – Need to address congestion and increase public health – Dovetailing capital investment in cleaner greener fleets – Promoting a healthier lifestyle through active travel

Figure 31 External drivers for change

External

P Political	E Economics	S Social	T Technological	L Legal	E Environment
<ul style="list-style-type: none"> – Focus on infrastructure investment through DfT spending rounds – Looking at effective placed based funding through development of the Transforming Cities Fund – Focus on transport investment supporting economic growth, housing delivery and wider policies 	<ul style="list-style-type: none"> – External and macro economic pressures on the growth of the economy – Productivity challenges, inequalities across the country – UK's Industrial Strategy looking at investment in infrastructure to support a boost in productivity – Increased focus on pan Northern investments through bodies such as TfN – Decentralisation, the role of regions in contributing to the future success of the UK 	<ul style="list-style-type: none"> – Increasing awareness of environmental issues and the role of transport – Inequalities remain deprivation results showing significant polarisation with work from bodies such as UK 2070 	<ul style="list-style-type: none"> – Increased automation in the transport industry – Future of Mobility strategy being one of the grand challenges unpinning innovation in the sector and future scenarios – Greater prevalence of technology in delivering personalised travel experiences for all 	<ul style="list-style-type: none"> – Legal challenges around air quality driving the need to encourage modal shift – Requirement to plan for investment in transport on local and national networks – Regulatory and legal process around plans for investment 	<ul style="list-style-type: none"> – Decarbonisation / climate change driving the need to reduce transport's contribution to environmental issues – Supporting Public Health England objectives in active lifestyles – Delivering a low carbon future and a cleaner healthier environment for UK in line with the 25 year Environmental Plan

Significant drivers for change

2.196 Politically there is significant appetite to invest in transport infrastructure to deliver growth opportunities and the structures in which to do so. There is a shared understanding of the value of investment which provides a strong footing for delivery. Much work has been advanced locally in relation to ambitions for growth.

2.197 The region has an elected Mayor for the North of Tyne, who we have engaged with as part of developing this TCF programme. Although strategic transport powers are orchestrated through the Joint Transport Committee, transport can impact upon a broad range of thematic areas and it is important to understand the synergies between the TCF investments and wider policies of the Mayor. Importantly there is a drive from the North of Tyne Mayor for decarbonisation of the transport network, delivery of growth in the level of new jobs and a vision for an inclusive economy. Part of that vision is delivering access to opportunities whether that be for employment or skills.

2.198 The North East Combined Authority is equally focused on decarbonisation, recently declaring a climate emergency and has bold plans for economic growth across the region through established programmes of inward investment. Much of this investment is underpinned by a successful well-functioning transport network.

2.199 Our TCF programme matches this vision and makes a contribution to deliver improved levels of accessibility right across the region.

2.200 Economically, there are issues that underpin our low level of GVA per head, principally lower employment levels and lower levels of productivity. There are wider economic pressures identified in this SOBC and the LIS, and funding for local transport interventions that are deliberately focused on maximising economic output is the best way to deliver resilience to the region's economy. TCF can form part of an important economic stimulus package to build confidence and retain capacity within the economy and create good conditions for greater growth and delivery of improved productivity levels.

2.201 Much work has been done around devolution of funding and the value of place-based investments. The Northern Powerhouse is a component piece of a wider North of England economic geography. The region is a partner of Transport for the North.

2.202 The North of England has long underperformed relative to the UK in terms of its productivity, with a persistent gap necessitating a radical change in the economy of the North. The Northern Powerhouse Independent Economic Review (NPIER), published in 2016, identified that the main factors driving the productivity gap in the North of England are linked to the UK's five foundations of productivity, namely:

- insufficient high-skilled workers;
- lower levels of innovation and enterprise activity, lower investments and
- sub-optimal transport links.

2.203 NPIER also identified the productivity issue to be cross-sectoral. It concludes the way to address these weaknesses was to grow the private sector economy with 58,000-72,000 private sector jobs, many of which are higher skilled jobs “missing” from the North East economy. Investment in our transport network to address sub optimal links can help to make these jobs happen, by creating a more connected, more investable region with better access to city centres and large employment sites where these jobs would be located. Our work concurs with the recommendations of NPIER, aligns to the policies of TfN through the Strategic Transport Plan and is consistent with the National Infrastructure Commission's recommendations in the National Infrastructure Assessment of devolved placed based funding.

2.204 The Strategic Economic Narrative that accompanies this SOBC (see **Appendix B**) was produced after engagement with local and regional stakeholders, it finds that historically the North East has received relatively low levels of infrastructure funding. The report concludes that the region is successfully creating high quality job opportunities, bringing about a need to connect people to these opportunities using low carbon, sustainable modes.

Schemes will support the aims of the Northern Powerhouse



2.205 Socially, we have experienced a worsening in the overall deprivation levels across the region, with significant pockets of concern around banks of the Tyne and into South East Northumberland. Components of this overall deprivation results include lower levels of educational attainment and skills, levels of income deprivation, health including long term illnesses and levels of crime. This impacts on levels of social mobility and is a focus for this submission.

2.206 Our population changes place different demands on the transport network, we want to invest to continue to retain and attract the best talent to the region as well as delivering active and sustainable forms of mobility to provide choice and to embed behavioural change.

2.207 Technologically as we see and increased pace in the development of innovation in mobility this provides vast opportunities and solutions as to how we plan for transport. Through this submission we look to future transport scenarios as well as utilising some of the known technology to our benefit to deliver smoother more efficient journeys by public and sustainable means.

2.208 Legally we have the frameworks in place to deliver investment in the network, important drivers include the need to invest from an air quality directive perspective as well as important stewardship of the public and sustainable transport network through clear and decisive transport plans.

2.209 Environmental issues have gained significant prominence over recent months and our region has an increased awareness of environmental issues, and a stronger appetite to address those issues urgently. All our authorities have declared climate emergencies and

delivering solutions towards addressing some of these environmental challenges. We have tested the attitudes of stakeholders in the region towards the right investments that will make a discernible difference in patterns of more sustainable movement across the region. Investments through this programme can be an effective way to deliver infrastructure that enables continued and greater use of the public and sustainable transport network to improve their aim of encouraging modal shift.

Testing Stakeholder Views on Change

2.210 We have rich knowledge through attitudinal surveys in the region, perspectives on sustainable travel and associated investments. This is driven by the structures we have in place to assimilate and analyse data.

2.211 Over 19,000 responses were received to the recent air quality consultation, undertaken by Newcastle City, Gateshead and North Tyneside councils.

Air quality public consultation 2019, Newcastle, Gateshead and North Tyneside



2.212 There was strong consensus towards the need to solve air quality issues in the area, (61%, agree or strongly agree). 91% of respondents considered they already walk to address issues, 39% cycle and 78% for public transport. This highlights the value of these networks to existing users.

2.213 For potential users there were strong results for those prepared to change habits (10% walk, 39% cycle and 22% public transport).

2.214 When we focus on some of the interventions there was noticeable agreement towards the following, (Strongly Agree/Agree):

- Improve routes for clean buses: 74%;
- Making it easier to walk: 66%;
- Making Metro services more frequent reliable and convenient: 86%;
- New Park and Ride facilities to expand the reach of Metro, bus and local rail: 78%;
- Investment in the cycling network: 59%; and
- Investment in intelligence transport: 84%.

2.215 There were varied results from those who drove as to the barriers to switching to public transport the top five responses were:

- My journey is too far to walk or cycle: 52%;
- Car or van is more convenient: 47%;
- Car or van is quicker: 45%;
- Public transport doesn't reach me or my destination: 45%; and
- Public Transport is too expensive: 42%.

2.216 Nexus has an insight panel, which tracks user attitudes to public transport in Tyne and Wear. This provides a rich resource for policy development.

2.217 Nexus' Insight Panel members were asked to imagine they were creating a perfect public transport system for the area they live in. It would be 100% reliable and at a reasonable cost, but in addition they could choose three other features. From that list 'frequency', 'safety' and 'getting to where they need to go' were ranked the highest, while barriers to public transport use cited included the convenience of the car and speed of journey. Two main objections to public transport were 'reliability' and 'cost'.

2.218 This demonstrates clear awareness of the challenge of air quality and acceptance of the need for investment in the network to

encourage use. There is a clear appetite for positive change in our transport networks that the public support.

Towards our vision

2.219 Transport Connectivity is one of the established programmes of delivery of the SEP and is crucial for economic success. Our vision through the SEP is as follows:

“Our ambition is one of improved, greener and more sustainable transport options, including public transport, cycling and walking. New mobility solutions will make travel simple and affordable across our distinctive local economy. Quality infrastructure will make for reliable, fast journeys with 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.”

2.220 Through a lack of investment, the region is missing an important opportunity to make travel more sustainable, with benefits for carbon reduction, air quality, health and the potential offer to skilled workers who can help the region to build on its economic successes. Over-reliance on car travel damages the local and global environment and creates congestion, making public transport unattractive to potential users and damaging productivity through delays and unreliability.

2.221 In the subsequent sections, we consider these drivers for change and establish solutions to improve transport connectivity that can deliver profound change to the way in which the economy grows and develops.

Summary Box: Drivers for change

The political appetite and structures are in place to deliver infrastructure investment that makes a significant difference to the region's economy, environment and society;

Our Economy, measured by GVA levels, is performing below the national average and we have a smaller than average private sector economy. There are medium term capacity and resilience impacts facing the economy which can be mitigated;

Investment can be targeted so it maximises access to labour markets and national / international gateways for trade and investment;

We have a strong policy basis and effective implementation plans to support the region's economy and drive investment in the transport network;

Environmentally we face directions to improve air quality in parts of the region as soon as possible, as well as a general increased awareness of the significant role public and sustainable transport can play towards providing solutions;

The region faces continues to face health and social inequalities inhibiting access to future opportunities and there are drives in place to address skills shortages and attract inward investment; and

Transport users in the region have positive attitudes towards the public and sustainable transport network and the potential of investment to make a discernible difference in the way they travel.

Impact of Doing Nothing

In this section we

Establish a base case for a 'do nothing' scenario by examining recent trends, and;

Explore the adverse impact of not investing in our transport network on our ability to tackle key regional challenges.

2.222 A number of current and recent trends associated with how people currently travel and key external influences drawn from our analysis of context and challenges are shown in **Table 9**.

2.223 The following headings set out the core themes of a 'do nothing' scenario and the implications for our transport network, economy and wider society.

- Our economy will not grow to its full potential;
- 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.

Table 9 Indicators (*no data was available for Durham in this year)

Year	Population	Employment Levels	GVA Output	Metro Passenger Numbers PA	Rail passengers (within the region pa)	Bus Passenger Numbers PA	Annual Average daily vehicle flows	Life Expectancy at Birth, North East Region
'09	1,916,400	73.7%	£32.3bn	40,891,589	5,437,000	178m	26545	79.6
'10	1,926,100	73.5%	£32.6bn	39,926,437	5,750,000	151.1m*	26093	79.8
'11	1,933,400	72.7%	£33.5bn	37,477,511	5,848,000	173.2m	26206	
'12	1,938,400	74%	£34.5bn	36,968,557	5,807,000	172.6m	26145	
'13	1,944,900	73.5%	£35.2bn	35,703,164	5,948,000	168.6m	26332	80
'14	1,951,700	75%	£36.4bn	38,113,313	5,700,000	166.9m	26710	
'15	1,956,300	75.1%	£37.7bn	40,289,790	5,698,000	163.7m	26730	
'16	1,965,600	76.2%	£38.7bn	37,687,675	5,797,000	164.8m	26750	80.2
'17	1,972,200	75.9%	£40.1bn	36,363,649	5,801,000	156.3m	26946	

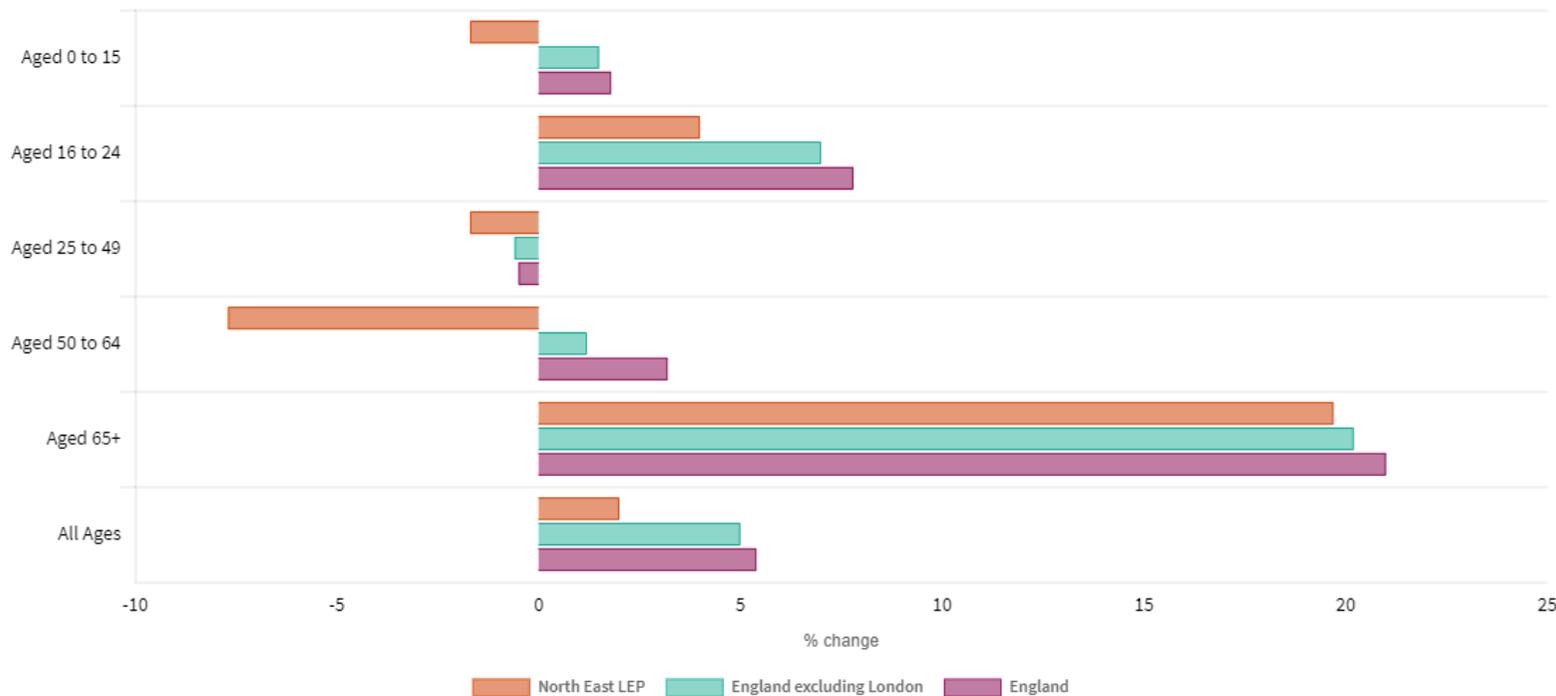
Our economy will not grow to its full potential

2.224 The population of the region has increased 2% as shown in **Table 9**, and the long term trend is that this will continue. The 2016 sub national population projections show an increase of 3% to 2036 in the North East. Applying this to the North East city region geography, the population is projected to grow by 2.0% over the 10-year period from 2018 to 2028. This is below the rate of growth projected for England excluding London (5.0%) and England (5.4%).

2.225 The population is projected to decline in the 0 to 15, 25 to 49 and 50 to 64 population age groups in the North East LEP area, as

Figure 32 The working age population is projected to decline

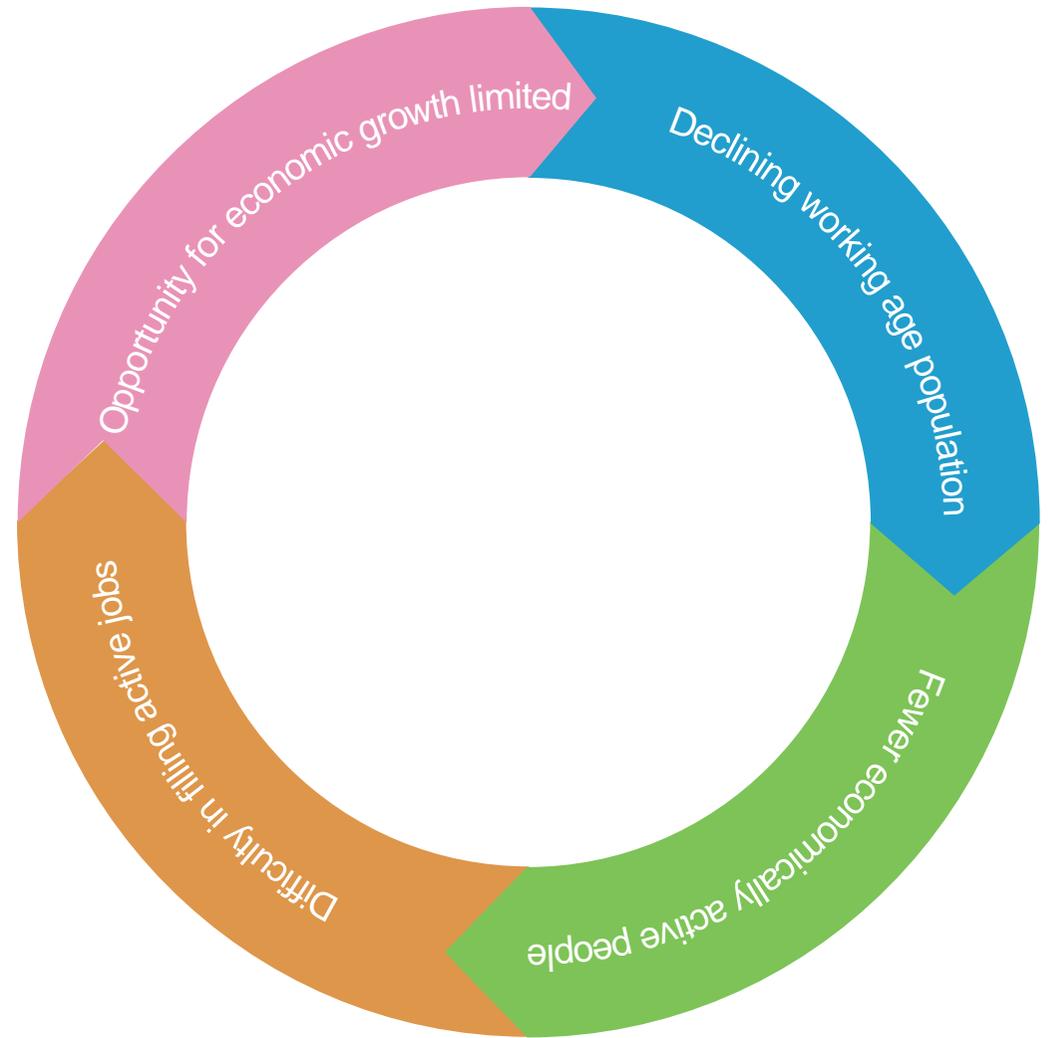
Projected population change by age band (%), 2018 to 2028



shown at **Figure 32**. In total, it is projected that there will be 32,000 fewer individuals of working age (16 to 64) in the North East LEP area in 2028 than in 2018. By 2028, 59.9% of the population in North East LEP area will be in this age group, below the English proportion (60.6%) with a 19.7% increase in those aged over 65. This exemplifies the need to attract and retain workers, or else this trend will have a profound impact on our economic growth. Improvements to the transport network would address these issues by allowing older people to stay in work for longer, providing accessible links to employment centres. This would also open up wider travel to work areas, helping to fulfil demand for workers in order to grow the economy.

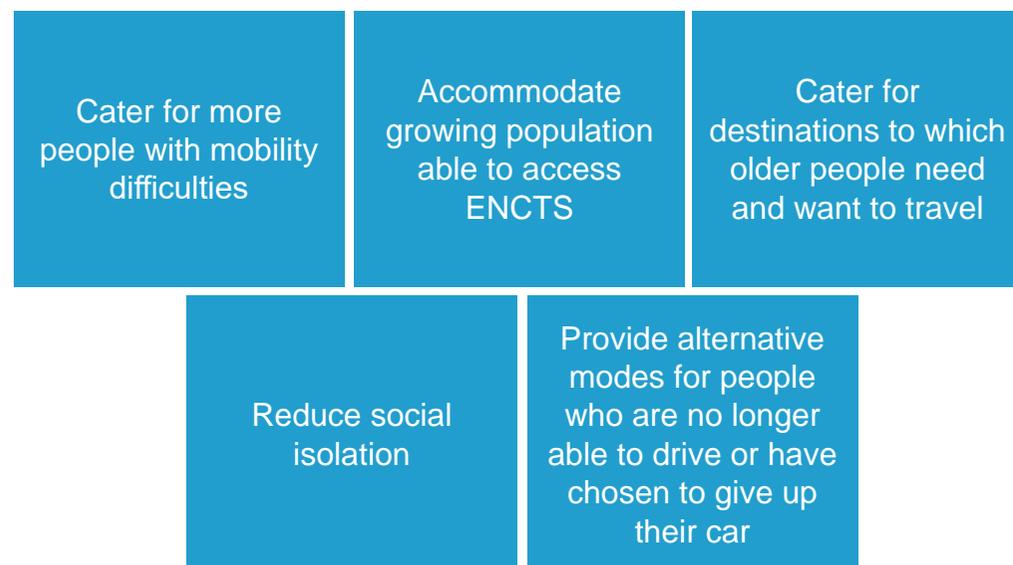
2.226 Using the Business Register and Employment Survey (BRES) employment measure, there were 665 jobs per 1,000 working age population in the North East in 2017 this compares to 739 for England excluding London. If we had the same employment there would be an additional 93,000 jobs in the region. In 2017, the GVA of North East LEP area was £40.1 billion, equivalent to 2.6% of English GVA, and over time, the GVA of the North East area has increased in absolute terms. However, crucially, the North East's GVA has been growing more slowly than England excluding London and England. Between 2007 and 2017, the North East's GVA increased by 25%, compared to 30% across England excluding London and 33% across England as a whole. We also have an ageing population and whilst life expectancy has remained largely static, across the region, the long-term trend is for an increasing age profile. This trend as demonstrated in **Figure 33** places different pressures on the transport network with implications not only for the economy but also for social mobility and public health.

Figure 33 A cycle of economic decline would occur without investment in our transport network



2.227 The ‘gig-economy’, encompassing short term contracts, flexible working, freelance work and payment by task, has increasingly developed in recent years and poses major issues for the traditional transport network, which to a large extent is built around ‘peak time’ travel. Fluctuating levels of demand throughout the day require our transport network to be flexible and robust against a range of futures both in terms of societal and technological changes. Without this, the network will soon become outdated, irrelevant and incompatible with modern lifestyles, perpetuating the serious decline in patronage already being experienced.

2.228 Considering the above trends, our transport network needs to:



2.229 Without investment, our transport network will struggle to adapt to the challenges posed by these economic trends, and the opportunity to increase our rate of economic growth, primarily through creating better links to employment, would be missed. Thus, the North East would fail to close the productivity gap with the rest of the country.

Summary Box – Our economy will not grow to its full potential

Working age population is expected to decline, increasing the need to attract and retain workers;

Populating is ageing with implications for the economy, health and people’s transport needs;

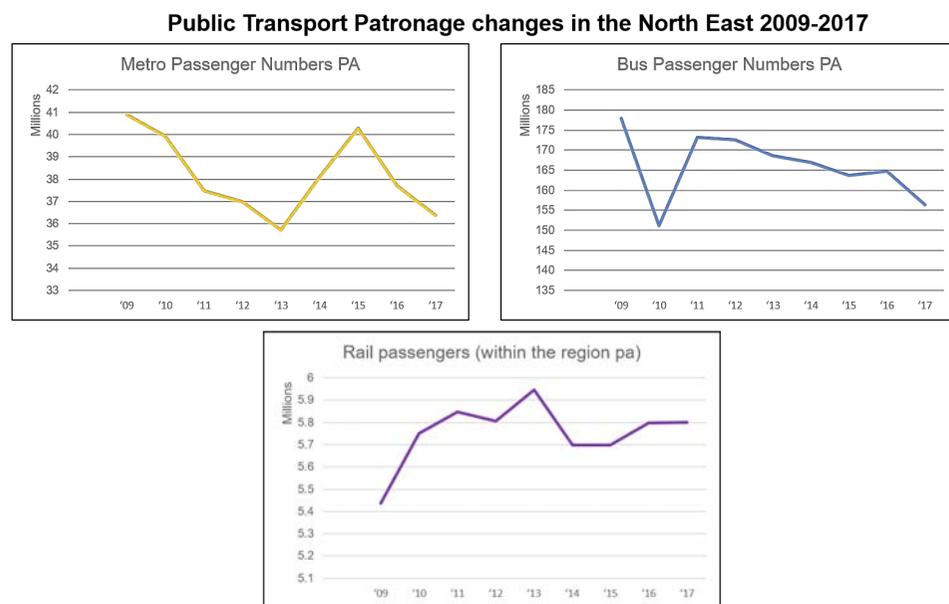
GVA of the North East has been growing but still lags behind the figures for England and England excluding London; and

Investment in our transport network will help us to adapt to our changing economy and society

Our sustainable and public transport network will underperform

2.230 Figure 34 provides information and trends about how people are travelling. The indicators for Metro and bus passenger numbers have both fallen over the period studied, this is common with many urban areas and can be attributed to several factors including macro-economics (economic consumer and business confidence which has been falling since 2015/16⁷²), a change in how people are currently working and, for buses, the impacts of traffic congestion on journey speeds and the attractiveness of services. Regarding local rail, data shows that the number of local rail journeys within the North East decreased between 2013/14 and 2014/15 to 5.7 million but that this was mainly a result of methodological changes; the levels have increased from 5.7 to 5.8 million of the period 2015-2017. At the same time annual average daily vehicle flows are combined with road lengths to calculate the number of vehicle miles travelled each year show a small increase in journey kilometres travelled.

Figure 34 Patronage on Metro and bus has fallen over this period



72 Business Confidence from CBI Business Optimism indicator Consumer Confidences from Gfk consumer confidence index. Both obtained via tradingeconomics.com. Last accessed on 31st October 2019.

2.231 The general trend is for increasing levels of car and van ownership in the region from 1.03 cars/vans per household in 2009 to 1.05 in 2016/17⁷³. People in the North East are both owning more vehicles and travelling more in those vehicles and travelling less by the main public transport modes (bus and Metro).

2.232 The attractiveness and efficiency of the Metro network will be severely compromised if the region does not continue to invest in the system. As an example, the existing infrastructure limits the frequency of the service and as a result impacts on the reliability and resilience of Metro. The current single track sections on the South Shields corridor constrain timetables and does not allow trains to recover easily from delays – these impacts are not just felt where the single track sections are present, they affect and constrain the entire network because delays in one part of the network have an effect across the whole network, in such a high frequency operation.

Metro on the single track section between Pelaw and Bede



73 DfT (2018), National Travel Survey (2018), DfT, visited on 15 October 2019, https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/823068/national-travel-survey-2018.pdf

2.233 Currently only 6% of delayed trains can recover from a delay on the South Shields corridor, this not only impacts on Metro infrastructure affecting the balanced frequency provided by Yellow and Green line services but also the wider National Rail network as a result of the shared track arrangements on the Durham Coast line. As an example, in 2018 a train which departed South Shields, 2mins and 20 seconds late resulted in that train running 11mins late through Central Newcastle and generating 84 Excess Headway Minutes (EHMs) under the Metro operational performance regime, around a fifth of all EHMs on a day of normal operational performance. Performance is also noted by passengers as noted in the Metro Flow business case around the attractiveness of Metro.

2.234 In addition, there is limited ability to grow the network and meet future demand from new housing sites and for population increases based on the current network. There has been recent investment in infrastructure and a new fleet for the Metro system: Nexus is well advanced in delivering a £352m asset renewals programme covering its network infrastructure and has secured £337m of central government funding towards the procurement of a new £362m fleet of Metro trains, the comprehensive refurbishment of the central fleet depot at Gosforth and the construction of a temporary satellite depot in the Howdon area of North Tyneside. However, this investment allows Nexus to operate existing services with reliable infrastructure and trains – it does not address constraints on enhancing the system and therefore will not tackle the broader related issues of air quality, housing growth and social mobility. More needs to be done to attract new users to choose sustainable transport options in order to make a real difference to the economy and environment, the full potential of existing investment can only be unlocked through significant modal shift onto Metro, taking vehicles off the roads.

2.235 Not investing in the rail network has the potential to stifle demand. Across the region the speed, frequency and quality of local rail services are already seriously limiting potential customer demand and perpetuating the use of private vehicles. Routes such as Middlesbrough to Newcastle suffer from journey times below the

minimum expectations set out in the TfN Long Term Rail Strategy, while other corridors have rail infrastructure present but have no passenger rail service at all. Well-connected transport infrastructure is essential to allow people to access employment and contribute to economic growth, as well as to create greater interaction between businesses and enable goods to move more efficiently. As a consequence, the coverage of the rail network in our region is limiting growth in rail use and growth in the economy. For example, the catchment area of the Northumberland Line has more than 90,000 people who experience high levels of social and economic exclusion. Not investing in this network risks not maximising the potential of the region to deliver growth and build on sectoral strengths across the region.

Summary Box – Our sustainable and public transport network will underperform

Passenger numbers on all modes of public transport except local rail are in decline;

Car/van ownership and usage in the region is increasing;

Existing investment in the network will not be exploited to its full potential without further impetus to attract new users and take private vehicles off the roads;

Latent demand could be unlocked by improving the speed, frequency and quality of the local rail network; and

With investment, public and sustainable transport will be able to perform to its full potential, with beneficial impacts on air quality, housing growth and public health

Traffic congestion will increase

2.236 Exploring the trends for travel described above, the base case suggests that economic growth in our region will pose a challenge to the transport network, as certain sites and opportunities may suffer from a lack of available capacity on public and sustainable transport modes.

2.237 Consequently, the private car becomes the only realistic option to access these opportunities. This has detrimental consequences for levels of congestion, which we have noted are already high in the peak periods at certain locations, health inequalities and air quality.

2.238 The city centres of Newcastle, Sunderland and Durham will continue to be hotspots for employment, retail and leisure, education opportunities and, increasingly, new homes, however currently all three centres suffer from peak hour congestion. A map illustrating the congestion hotspots across our region is shown in **Figure 21** above. This congestion can be expected to worsen as more people are attracted to our urban centres to access these opportunities, unless investment in our public and sustainable transport network can offer alternative, easily accessible and convenient travel options to rival the dominance of the private car.

2.239 High levels of congestion are likely to continue to impede the success of the bus network including our ability to stifle the decline in patronage and continue to grow and support the bus as an integral part of the region's transport network. This was exemplified by the House of Commons recent inquiry into the Health of the Bus Market, with congestion being considered a determinant of the attractiveness of buses.

2.240 Park & Ride is an established part of the region's transport network; however, it does not currently work to its full potential, and in the future, it would likely struggle to make a meaningful difference to car usage in our urban centres without investment to increase capacity and better meet the predicted increased demand. Nexus research⁷⁴ which underpins the OBC for Smart and Digital Car Parks, considers that underperformance is down to a lack of awareness, preference to drive and locational factors of car parks.

2.241 It is essential, therefore, that our Park & Ride offer is enhanced with new locations in the right places to capture demand, in order to take pressure off the radial routes into the urban centres, if we are to reduce congestion and improve our air quality.

Summary Box – Traffic congestion will increase

Congestion in our urban centres is likely to increase which would particularly affect employment sites currently not well served by sustainable transport;

Existing sustainable transport options are unlikely to cope with increased demand without investment to increase capacity and attractiveness;

Reducing congestion will enable the bus network to operate to its full potential;

Enhancements to sustainable transport, particularly Park & Ride, could take pressure off our busiest routes; and

A reduction in congestion would have related benefits to air quality and public health.

⁷⁴ Nexus (2019), 'Smart and Digital Car parks, OBC', Available on request.

We will fail to improve air quality in reasonable time

2.242 Poor air quality poses a fundamental threat to our region and we recognise that public transport needs to be a major component of the solution to this problem. There are areas of NO₂ exceedance in several urban locations, which if not addressed within the shortest possible time will continue to have a significant detrimental impact not only on the environment but on the health of the people living and working in our region. This bidding opportunity is the ideal platform to deliver integrated public transport and sustainable transport links that address air quality hotspots and support local authorities' current and future activity.

2.243 Cycling and walking levels of commuting across the region are low only increasing marginally from the 2001 to 2011 census (2 and 10% respectively). Leisure cycling is reported to be increasing; on several of our National Cycle Network links, weekend travel exceeds weekday levels of cycling. This increase in leisure cycling needs to be reflected in our levels of cycling to work if we are to reduce our carbon emissions in any significant way. Investment to improve cycling facilities and infrastructure across our region is essential to achieving modal shift on a meaningful scale.

2.244 There are several interdependencies which affect this base case, including the current Air Quality Directive consultation in Newcastle and Gateshead that will deliver measures on the highway network that seek to reduce vehicle volumes in polluted areas. However, discouraging people from using their cars in our urban centres will not in itself be enough to engender modal shift; it is likely that many will simply change their route or destination to avoid restrictions. Significant improvement to our sustainable transport network is essential to make low carbon travel a more attractive option to rival the private vehicle.

2.245 Despite our current Go Ultra Low North East project making significant progress in the delivery of a high-quality vehicle charging network for the region, as is the case with the modernisation of the bus fleet, this does not address the public transport and health inequalities that pervade our region. We need to address levels of congestion and maximise road space. Any interventions must be drawn up not only to contribute towards improved local air quality and deliver solutions for a low carbon future, but to reduce congestion and improve health and social outcomes for people living and working in the North East.

Summary Box – We will fail to improve air quality in reasonable time

Air quality poses a significant threat to the environment and public health in the North East, with numerous areas of exceedance across the region;

Cycling and walking still make up a small proportion of commutes;

Cycling and walking levels for commuting and leisure purposes are increasing and there is capacity to extend this to cycling to work;

Uptake of EVs will have a benefit in terms of air quality but does not address other important issues such as congestion, public health or social mobility;

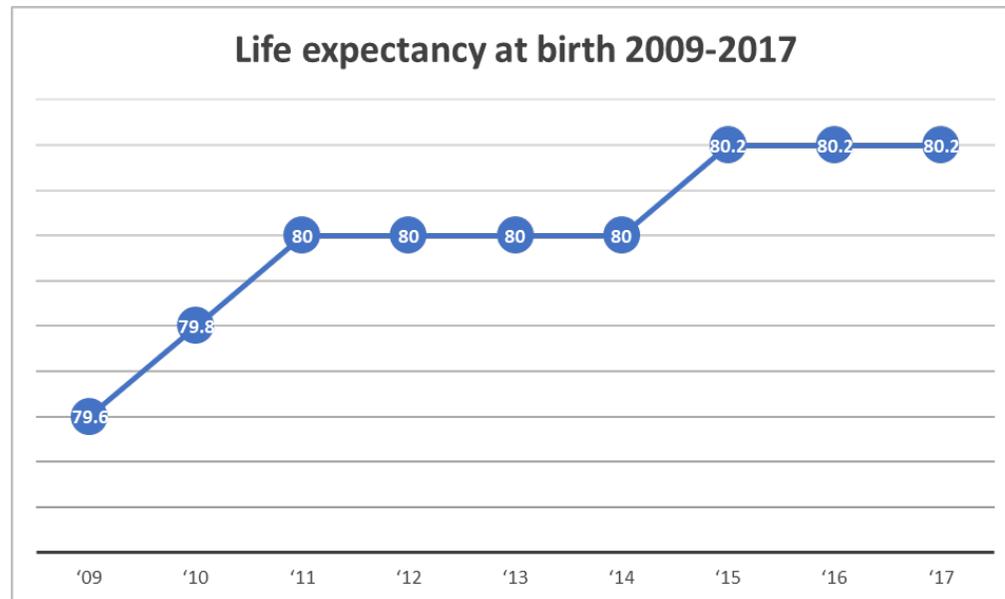
Several projects are already underway to improve air quality including a new Metro fleet, modernisation of the bus fleet and Go Ultra Low, which can be built upon going forward;

Potential outcomes from the air quality consultation could encourage modal shift to public and sustainable transport, but only in combination with a more attractive offer from low carbon modes.

Our progress in social mobility and public health will stagnate

2.246 There is a pressing need to encourage more mobility within isolated communities, to improve wellbeing and reduce the health and life expectancy inequalities present in our region; our transport network is an important enabler of this mobility by offering connections to rail, bus and Metro complemented by easy, safe and accessible walking and cycling links and by some future mobility services. Without this high-quality network, progress will stagnate, and our citizens will not have the ability to access the economic and educational opportunities that exist within our city centres and centres of employment.

Figure 35 Life expectancy in the North East has stagnated since 2015



2.247 The Transforming Cities Fund is a platform for demonstrating the link between housing, employment, education and social opportunities and the transport network that binds them together.

2.248 There is a need for strategies around planning, housing and employment to be integrated across the region, and this will be vital if our local authorities are to meet the significant new targets for growth across our areas. We already have good examples of cross boundary

and sector working in the development of new schemes and projects which try to balance these objectives and we reflect on these to show how people can move around the region in a sustainable way to access jobs, services, recreational activities and education opportunities.

2.249 This approach will recognise the important role of transport as an enabler not only of economic growth but of the health and wellbeing of people in the North East. Thus, investment in a high quality, convenient, reliable and affordable public and sustainable transport network is critical.

Summary Box – Our progress in social mobility and public health will stagnate

Without a high-quality transport network, people in isolated communities would struggle to access the opportunities offered by the region;

A high-quality transport network can bind together housing, employment, education and social opportunities and reduce inequality

Planning, housing, employment and transport should be better integrated across the region to make best use of our regional assets;

Impact of doing nothing – the need to act

2.250 Considering the above analysis, we should conclude that without adequate investment in our public and sustainable transport network we can be fearful that the full ambitions of the SEP will not be realised, and housing and employment sites may not be delivered. Equally without intervention there will be limitations on access to transport for those who rely on it the most and the region will struggle to maximise the potential of the public and sustainable transport network to connect the population to more and better jobs, educational institutions, healthcare services and social opportunities. Trends in single car occupancy could continue, which has profound impacts on health and air quality.

2.251 In short, without investment the North East would suffer from slower economic growth, a failing public transport network, increased congestion, deteriorating air quality, and worsening inequality. The Transforming Cities Fund offers a significant opportunity to avoid this ‘do nothing’ scenario, to continue to build on the progress being made towards addressing regional challenges. As will be discussed in subsequent sections, our ambitious Transforming Cities programme delivers the vital sustainable connections between residential areas and centres of employment that will help our economy to grow, reduce congestion and contribute to the achievement of our regional air quality and carbon emissions targets. This action must happen immediately to prevent these problems worsening and to make a real difference to the prospects of the North East.

Constraints and Interdependencies

In this section we

Set out the constraints and interdependencies for the Transforming Cities Fund programme.

Constraints

2.252 Table 10 sets out the identified constraints to our TCF bid at a programme level:

Table 10 Programme level constraints

TCF timescales	The timescales of the funding envelope mean there is limited scope for delay in delivery
Land ownership/legal processes	Some works would involve the purchase of land or other legal processes which has been built into the programme and identified in the risk register.
Nature of funding	As specified in the TCF guidance only capital funding is eligible
Existing transport network	The TCF programme must build on the existing transport network, operations and infrastructure delivering enhanced frequency and reliability
Construction	There is a need to coordinate the programme of works to avoid significant disruption across the region's transport network during the delivery period of the fund

2.253 These constraints have been incorporated into our work in developing this SOBC and our TCF programme. We have ensured that they have been embedded in our processes from scheme long list assembly through to the development of our preferred programme. These constraints will also be considered in full during the enactment of our assurance framework, once devolved funding has been allocated to our bid.

Interdependencies

2.254 The development and delivery of the TCF programme will need to take account of other projects being delivered by stakeholders as well as the interdependencies between the different major investments within the TCF programme itself. The risk register which is in the Management Case provides a more detailed analysis of interdependencies. High level interdependencies are outlined in **Table 11**.

Table 11 High level interdependencies

TCF Tranche 1 schemes	Tranche 2 programme needs to align with and ideally build upon the schemes that were successfully funded through Tranche 1 of the fund.
Air quality public consultation 2019	Newcastle, Gateshead and North Tyneside councils have collaborated to develop proposals to improve air quality. Preferred Options consulted on (CAZ D) can be expected to have a positive impact on travel habits and public transport patronage in the region.
New Metro fleet	TCF Tranche 2 programme analysis needs to account for the new fleet of Metro trains, due to be phased in on the network between 2021 and 2024.
Nexus Asset Renewal Programme	The programme should align with planned maintenance projects for Metro in both a strategic and deliverability context.
Network Rail infrastructure upgrades and maintenance programme	Tranche 2 programme needs to consider any major works planned to the region's rail network during the delivery period to ensure works are coordinated to minimise disruption.
Local Growth Fund Projects	The TCF delivery programme needs to consider major works that may be proposed by the remaining LGF schemes. This is likely to only marginally affect the front end of programme delivery.
Highways works	The programme should account for any major works planned to the region's highways network during the delivery period to ensure works are coordinated to minimise disruption. This includes, Strategic Road Network, Delivery of Road Investment Strategy 1 and 2 projects especially on the A1, A19 and A69 works, Major Road Network, there are several schemes in the region that have been shortlisted by TfN and we will need to react to. Our management case sets out how we will achieve this.

Objectives and Measures of Success

In this section we

Set out our objectives for the Transforming Cities Fund programme, relating Government objectives for the programme to our regional challenges; and

Explain the emerging measures of success that will be used to ensure that these objectives are achieved once we start delivering schemes, linking to our assurance framework explained in the management case of this SOBC.

Our Objectives

2.255 The overarching vision for our TCF programme has carried through from our Expression of Interest and our successful application for Tranche 1 funding. The vision links to the challenges that we face as a region as set out earlier in this Strategic Case.

2.256 This vision is:

“More sustainable connectivity, and more mobility, making sustainable transport the natural choice for people moving around our city region, banishing congestion and its polluting effects, and improving air quality and public health.”

More Sustainable Connectivity

- The region’s public and sustainable transport network serves significant proportions of the region with high frequency bus, rail and Metro services and well as connected and signed walking and cycling routes. There are opportunities to improve the reliability, resilience and quality of our services to encourage greater use.
- This concept through this bid is being termed “more sustainable connectivity”, defined as increasing the availability of public and sustainable transport and its use. We explore through this SOBC some of the challenges that lie behind this concept and opportunities to encourage use.

More Sustainable Mobility

- The geographic reach of the network in a polycentric environment is the focus when considering how to increase the quality and extent of the network, to reach all those who rely on our network.
- This challenge is the second part of our vision, which is “more sustainable mobility”. This is defined as “increasing the opportunity to access sustainable and transport and its use”. It is these opportunities that we will explore in greater detail as well as wider challenges facing our society to which we can provide solutions through this bid.

2.257 Our objectives explore the principles of this vision and align closely with those set out in DfT’s TCF Guidance. These objectives have been developed to ensure that they are SMART, to ensure that they can apply to the entire programme of schemes and to ensure that they lead us to a programme that can deliver a strong economic and environmental outcome for the region.

2.258 The following process has been deployed to build up the objectives used to develop our programme:

- Firstly, we have taken the programme objectives defined by Government in the Tranche 2 Guidance⁷⁵.
- Secondly, we have mapped the regional challenges identified in this Strategic Case to each of those TCF objectives; and
- Thirdly, we have developed programme objectives that draw together the spirit of the TCF objectives and the regional challenges faced.

2.259 The resulting Programme Objectives are shown in **Figure 36**.

Our Measurement of Success and What Constitutes Successful Delivery

2.260 Building on the programme objectives set out in **Figure 36**, we have developed SMART measures of success. These measures of success relate to wider regional targets where available, including the Metro and Local Rail Strategy and Nexus' targets for accessibility to destinations (which only apply to Tyne and Wear).

2.261 Currently several of the schemes within our programme have already been developed to either OBC or SOBC level. As a result, we have ensured that the objectives and measures set out in these existing business cases are fully aligned and feed into our programme level objectives and measures. For example, our measure for local rail patronage was based on forecast demand for the Northumberland Line scheme, and the Metro frequency measure was drawn from the Metro Flow business case.

2.262 The measures of success for our programme are very closely aligned with regional objectives set out in the SEP, the TfN Strategic Transport Plan, and the Local Industrial Strategy, with a focus on the wider economic outcomes of the programme that will draw from better accessibility, frequency and reliability of public and sustainable transport. This is reflected at a national level in the synergies between our measures of success and the objectives set out in the Transport Investment Strategy around creating a more reliable, less congested transport network that works for its users. Our measures around reducing car trips and increasing active travel and use of public transport link strongly to air quality objectives set out in the government's Clean Air Strategy. Our future mobility services measures link back to the Future of Mobility Grand Challenge in the Industrial Strategy.

2.263 These measures of success will be enshrined within our assurance framework for this TCF programme to ensure that every scheme in the programme contributes positively towards their achievement. Further details of the assurance framework can be found in the Management Case.

⁷⁵ DfT (2019), Transforming Cities Fund, Supplementary Guidance for Shortlisted City Regions: Tranche, Department for Transport, visited on 19 March 2019, https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/786857/transforming-cities-tranche-2-applications.pdf, Paragraphs 1.8-1.10.

Figure 36 Programme challenges, objectives and measures of success

DfT Objectives	Regional Challenges	Programme Objectives	Measures of Success	Evaluation and Monitoring Mechanism
Drive up productivity through improved connections between urban centres and suburbs	<ul style="list-style-type: none"> – Polycentric geography – Falling bus and Metro patronage – Low levels of walking and cycling to commute – GVA levels below national average – Low levels of high skill and private sector employment 	Improving capacity, reach, reliability and affordability of the public transport network, with a particular focus on identified congested corridors into employment centres, to encourage increased patronage.	<ol style="list-style-type: none"> 1. Increase the proportion of households that can reach employment within 60 minutes by public or sustainable transport. 2. a) Increase Metro patronage by 3% by 2030 b) Increase daytime frequency of Metro services by 20% network-wide. 3. Improve bus punctuality to 95% for services on corridors where investment is focussed. 4. Increase local rail patronage by at least 5% by 2023. 	<ol style="list-style-type: none"> 1. Report Accessibility analysis baseline and proposed. 2. Nexus Annual Report, DfT Light Rail and Tram Statistics; Metro 2019 and 2024 timetables. 3. AVL data, UTMC monitoring. 4. ORR Rail Statistics - Station Usage Estimates Data.
Improve access to work and deliver growth	<ul style="list-style-type: none"> – Growing and ageing population – 82,000 new jobs requiring sustainable transport choices – Pockets of deprivation with income and health inequalities affecting life expectancy – More integration of land use and transport strategies needed 	Deliver new and improved cycling and walking links that are affordable, accessible and sustainable between some of the most deprived neighbourhoods in the city region and centres of employment, which are well integrated with the wider transport network encouraging mobility.	<ol style="list-style-type: none"> 5. Increase percentage of adults cycling for travel at least three days per week. 6. Increase percentage of adults walking for travel at least three days per week. 7. Reduce inequality in life expectancy compared to national average. 8. Increase affordable travel distance by income quintile. 	<ol style="list-style-type: none"> 5/6. Sport England; Physical Activity dataset; Indices of Multiple Deprivation 2019. 7. Fingertips PHE. 8. DfT National Travel Survey.
Encourage use of Future Mobility Services	<ul style="list-style-type: none"> – Falling bus and Metro patronage – Ageing population – Changing work patterns – Changing attitudes to public transport 	Ensure that capital investment delivered by this programme makes provision for the introduction of Future Mobility Services.	<ol style="list-style-type: none"> 9. Create a conducive environment for the development, trial and introduction of Future Mobility Services. 10. Deliver efficiency improvements to the public and sustainable transport network including enhanced information services. 	<ol style="list-style-type: none"> 9/10. UTMC monitoring, Delivery of ITS package.
Tackle air pollution and reduce carbon emissions	<ul style="list-style-type: none"> – Increasing car ownership – High proportion of commuting trips by private vehicle – Growing congestion in city centres and the river crossings – Traffic pollution hotspots in city/town centres 	Reduce carbon emissions from local transport by increasing the volume and proportion of journeys made by low carbon, sustainable modes. Improving the safety of our network. Contribute to achieving a reduction in NO2 emissions in the identified exceedance areas by 2023.	<ol style="list-style-type: none"> 11. Reduce the number of private car trips along our identified congestion corridors, contributing to increased modal share of public and sustainable transport. 12. Fewer pedestrians and cyclists killed or seriously injured in the region. 	<ol style="list-style-type: none"> 11/12. 2021 and 2031 census travel to work statistics; DfT and TADU data counts.
Deliver more homes	<ul style="list-style-type: none"> – Growing and ageing population – 109,555 new homes requiring sustainable development – More integration of land use and transport strategies 	Extend the reach of our public and sustainable transport network to support and enable the delivery of major housing development sites across the city region.	<ol style="list-style-type: none"> 13. Deliver improved strategic sustainable transport links (a regular bus service, a rail/Metro service or a segregated walking/cycling link) to at least 30,000 new housing units in the region. 	<ol style="list-style-type: none"> 13. Local Plan monitoring and infrastructure delivery.
Deliver apprenticeships and improve skills	<ul style="list-style-type: none"> – Low levels of high skill and private sector employment – Projected decline in working age population 	Reduce journey times to further and higher education providers from some of the most deprived neighbourhoods in the city region.	<ol style="list-style-type: none"> 14. Increase the number of house-holding in England's top 10% most deprived areas that can access further or higher education within 60 minutes travel time. 	<ol style="list-style-type: none"> 14. Accessibility analysis baseline and proposed; indices of Multiple Deprivation 2019.

Figure 37 Programme objectives – expected deliverables

Programme Objectives	Proposed Deliverables	Measures of Success
Improving capacity, reach, reliability and affordability of the public transport network, with a particular focus on identified congested corridors into employment centres, to encourage increased patronage.	Proposals will need to, Focus on radial routes by providing alternative options to the car, Increase the reach of the national rail network and drive up use, Target pinchpoints on the existing metro network to drive up frequency and support long term trends, Identify areas of congestion affecting our bus network and seek to resolve them.	<ol style="list-style-type: none"> 1. Increase the proportion of households that can reach employment within 60 minutes by public or sustainable transport. 2. a) Increase Metro patronage by 3% by 2030 b) Increase daytime frequency of Metro services by 20% network-wide. 3. Improve bus punctuality to 95% for services on corridors where investment is focussed. 4. Increase local rail patronage by at least 5% by 2023.
Deliver new and improved cycling and walking links that are affordable, accessible and sustainable between some of the most deprived neighbourhoods in the city region and centres of employment, which are well integrated with the wider transport network encouraging mobility.	Proposals will need to, Deliver high quality, coherent walking and cycling links, across the region to deliver an increase in active travel with its health benefits; Extending the reach of the public transport network and increasing service frequency in deprived communities to encourage an increase in affordable travel distance.	<ol style="list-style-type: none"> 5. Increase percentage of adults cycling for travel at least three days per week. 6. Increase percentage of adults walking for travel at least three days per week. 7. Reduce inequality in life expectancy compared to national average. 8. Increase affordable travel distance by income quintile.
Ensure that capital investment delivered by this programme makes provision for the introduction of Future Mobility Services.	Proposals will need to, Recognise future demands as developed through our Foresight reporting and facilitate opportunities for the introduction of new forms of mobility; Support enhanced public transport information.	<ol style="list-style-type: none"> 9. Create a conducive environment for the development, trial and introduction of Future Mobility Services. 10. Deliver efficiency improvements to the public and sustainable transport network including enhanced information services.
Reduce carbon emissions from local transport by increasing the volume and proportion of journeys made by low carbon, sustainable modes. Improving the safety of our network. Contribute to achieving a reduction in NO2 emissions in the identified exceedance areas by 2023.	Proposals will need to, Focus on the congested corridors to encourage modal shift towards public and sustainable transport on routes to employment; and Deliver improvements which encourage improvements in road safety.	<ol style="list-style-type: none"> 11. Reduce the number of private car trips along our identified congestion corridors, contributing to increased modal share of public and sustainable transport. 12. Fewer pedestrians and cyclists killed or seriously injured in the region.
Extend the reach of our public and sustainable transport network to support and enable the delivery of major housing development sites across the city region.	Proposals will need to, Recognise the spatial planning priorities from the region in respect of housing and employment locations planning to serve these locations by public and sustainable transport.	<ol style="list-style-type: none"> 13. Deliver improved strategic sustainable transport links (a regular bus service, a rail/Metro service or a segregated walking/cycling link) to at least 30,000 new housing units in the region.
Reduce journey times to further and higher education providers from some of the most deprived neighbourhoods in the city region.	Proposals will need to, Understand the mobility needs of the future economy and its workforce, delivering an increase in mobility opportunities to training locations for all members of society.	<ol style="list-style-type: none"> 14. Increase the number of house-holding in England's top 10% most deprived areas that can access further or higher education within 60 minutes travel time.

2.264 The proposed deliverables in order to meet the objectives are shown in **Figure 37**. These demonstrate the required characteristics of schemes in the programme and link to the measures of success to deliver the objectives.

Our Stakeholders

In this section we

Identify the key stakeholders engaged with in developing the draft SOBC;
 Outline the contribution of key stakeholders in developing the programme;
 Summarise the communication methods used to engage stakeholders;
 Highlight challenges and opportunities and how these have/will be addressed.

Our Stakeholders Outlined

2.265 There are a wide range of stakeholders affected by this programme that we have set out to engage with at relevant stages. Our Stakeholder Engagement Strategy is shown at **Appendix E**. To date, the TCF team has worked closely with local authority scheme promoters (7 local highway authorities and Nexus) throughout the process, guiding the generation of schemes for the long list and collaboratively developing them to the level of detail required for appraisal.

2.266 Feedback from political stakeholders (members of the Joint Transport Committee) and Senior Officers has been sought and taken on board at the appropriate points in the process of developing the bid. We also have worked closely with transport operators (bus operators, Metro and Northern Rail) in developing our programme.

2.267 Furthermore, stakeholder engagement has occurred with trade association and campaign bodies, the development industry and specialist organisations such as Public Health England. Their support and insight has been critical to the development of the SOBC and to its onward success.

2.268 The Stakeholder Analysis chart below and following table identifies in more detail the stakeholders involved in this project, their level of contribution and influence in the project in respect of shaping projects and decision making. We recognise the importance in engaging these parties from the early key stages in terms of leveraging support and to help shape the programme, identifying at the local level what is needed and how this can best be delivered.

2.269 To date, we have collated evidence of public attitudes in relation to public transport in the North East region through the air quality consultation and through the Nexus Insight Panel. Through this Panel we have conducted our own survey to generate opinion on the proposals.

Figure 38 Stakeholder analysis

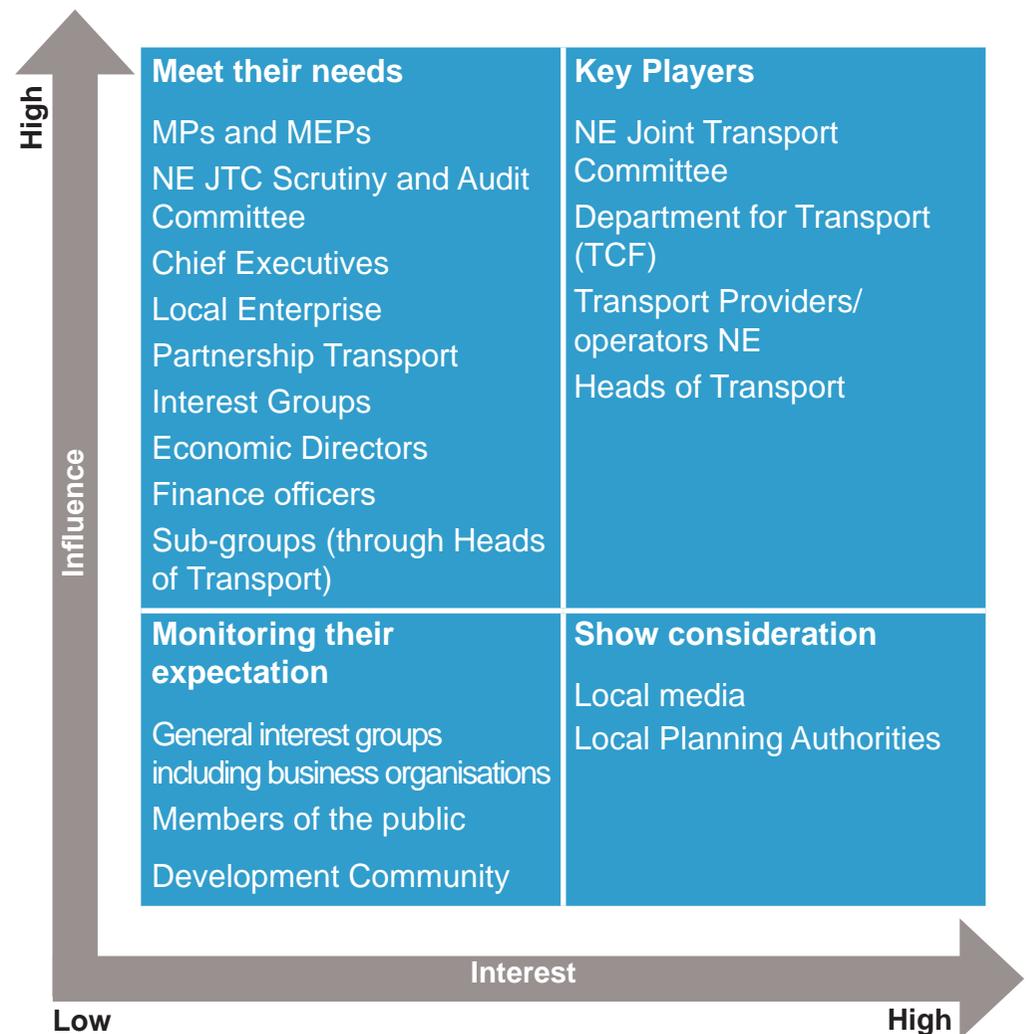


Table 12 Stakeholder engagement

	Stakeholder	Contribution	Action (to address potential conflicts/demands)
<p>Key players (these are the people we will fully engage with and levels of engagement)</p>	DfT	Government Department and funding body, Co-developer of this bid; advising and challenging on all aspects of the business case	Regular co-development calls. Ongoing review of materials. Sub-groups to progress other elements of the bid; economic case with NE consultants.
	Joint Transport Committee	Formal decision making.	Regular briefings and face-to-face meetings, in accordance with governance structure.
	Heads of Transport	Coordinate (regionally) and approve programme.	Weekly teleconference held to discuss all aspects of the business case.
	Scheme promoters	Provide scheme level information.	Frequent meetings and discussions to develop the five cases; engagement across all areas.
	Transport providers / operators	Operate services on infrastructure that we deliver.	Regular dialogue.
	Bus Operators (GNE, Arriva, Stagecoach)	Operate services on infrastructure that we deliver. Delay information / data to inform schemes comes from the operators.	Regular discussions; issues and updates. Workshops with operators, local authorities and Nexus. Commissioned Bus Measures Study to develop an analysis of bus delays and produce a pipeline of schemes for future bids.

	Stakeholder	Contribution	Action (to address potential conflicts/demands)
Meet their needs (these are groups that have high influence but are not involved on a day to day basis)	MPs and MEPs	Support for the bid. Enthuse constituents on the positive investments that are being made.	Stakeholder Engagement Strategy and Communications Plan as appendix to the bid. Attendance at Party Conferences (October 2019).
	NE JTC Overview and Scrutiny Committee	Scrutinise the bid.	Briefings as required.
	NE JTC Audit Committee	Audit the process and decision making	Briefings as required.
	Chief Executives (Transport Strategy Board)	Supportive steer.	Briefings, regular liaison face-to-face sessions.
	The North East LEP	Align with the Strategic Economic Plan and emerging Local Industrial Strategy.	Detailed review of the case has been undertaken by the LEP. Areas identified have been strengthened and subsequently reviewed.
	Transport Interest Groups	Remit in supporting sustainable and public transport.	Consulted with these groups, e.g. Sustrans and Living Streets at stages.
	Third parties (Highways England and Network Rail)	Programme wide planning; identify challenges, conflicts, dependencies on the network.	Review of the business case has been undertaken. Flagged for risk workshop re coordinated delivery, initial conversations have occurred and a formal grouping to be arranged post submission.
	Economic Directors	Supportive steer.	Briefings, regular liaison face-to-face sessions.
Finance Officers	Section 31 Officer sign-off.	Pre-submission review of the 'financial' case and sign-off granted.	

	Stakeholder	Contribution	Action (to address potential conflicts/demands)
<p>Show consideration</p> <p>(We will keep these people abreast of the project as they are helpful with the detail of the bid and its onward success).</p>	Sustainable Transport Group	Development of coordinated package of cycling interventions.	<p>Workshop; package development.</p> <p>Meetings every two months to consult over cycling elements of the programme.</p> <p>KPIs & objectives.</p> <p>High-level cycling principles document – developed by the region.</p>
	ITS Strategy Group	Development of coordinated package of ITS interventions.	Project led by AECOM to develop package of measures in conjunction with scheme promoters.
	CATAS (Combined Authority Technical Analysis Sub-Group).	Develop objectives / KPIs	Meetings and review of proposed measures for the programme.
	Public Health England / National Institute for Health and Care Excellence	<p>Provide up to date measures, bespoke analysis.</p> <p>Developing realistic and achievable targets.</p>	<p>Involvement in the development of Draft Regional Transport Plan.</p> <p>Consultation on bid content, face-to-face discussion with PH professionals.</p>
	Local Planning Authorities	Policy teams.	<p>Ongoing liaison with local authorities; analysis of the link between housing / employment deliver and TCF interventions.</p> <p>Paper was distributed including GIS mapping for sense checking and approval by authorities.</p>
	Local Media,	Support / develop infrastructure linked to wider campaigns.	<p>Communications plan has been developed led by communications team at Nexus.</p> <p>Communications working group with all communications officers for key players.</p>

	Stakeholder	Contribution	Action (to address potential conflicts/demands)
Monitor their expectations (monitor these groups and take actions where necessary)	Business groups / general interest groups) ranging from Chamber of Commerce to environmental groups and groups representing specific sectors of the community etc).	Ensure interests are represented in the bid.	Communications plan has been developed.
	Development community	Consult / coordinate.	Review business case and seek support for the programme.
	Members of the public	Local knowledge. Consult / coordinate. Users of interventions.	Communications plan has been developed. Public survey was undertaken in August 2019.

Our Options and Proposals

In this section we

Explain our methodology for shortlisting schemes and developing our preferred (high), medium and low-cost scenarios

Set out our rationale behind the development of our thematic packages

At a programme and package level, assess how our schemes address the TCF objectives

Summarise the high-level impacts and risks of the proposed programme

Corridors for Investment

2.270 At the Expression of Interest stage of the TCF process, we explored existing travel patterns through travel to work analysis and looked at current and future economic assets to devise four geographic priority corridors for investment, shown in **Figure 39** and **Figure 40** below (spatial and schematic form),

Figure 39 Spatial map of opportunities corridors in the region

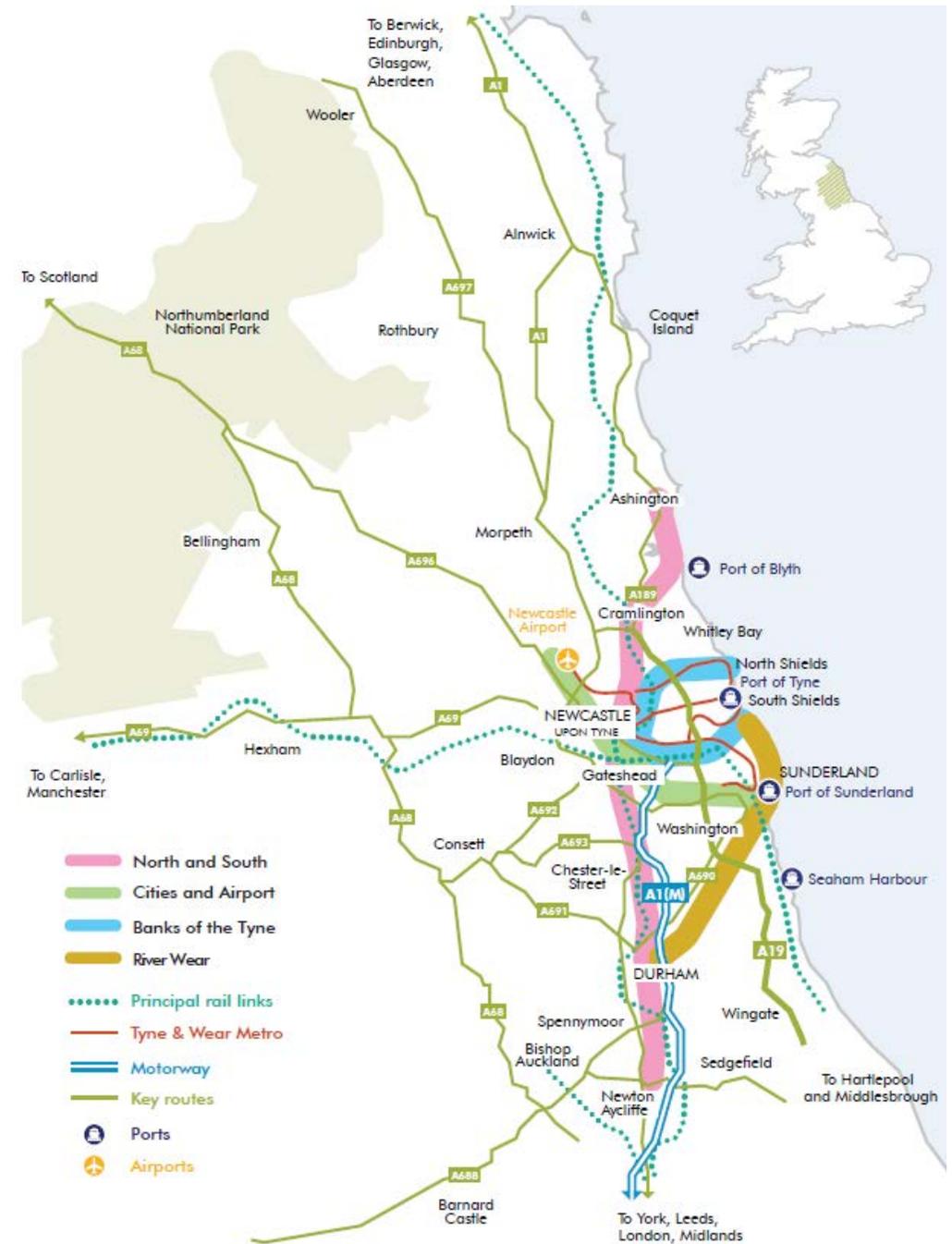
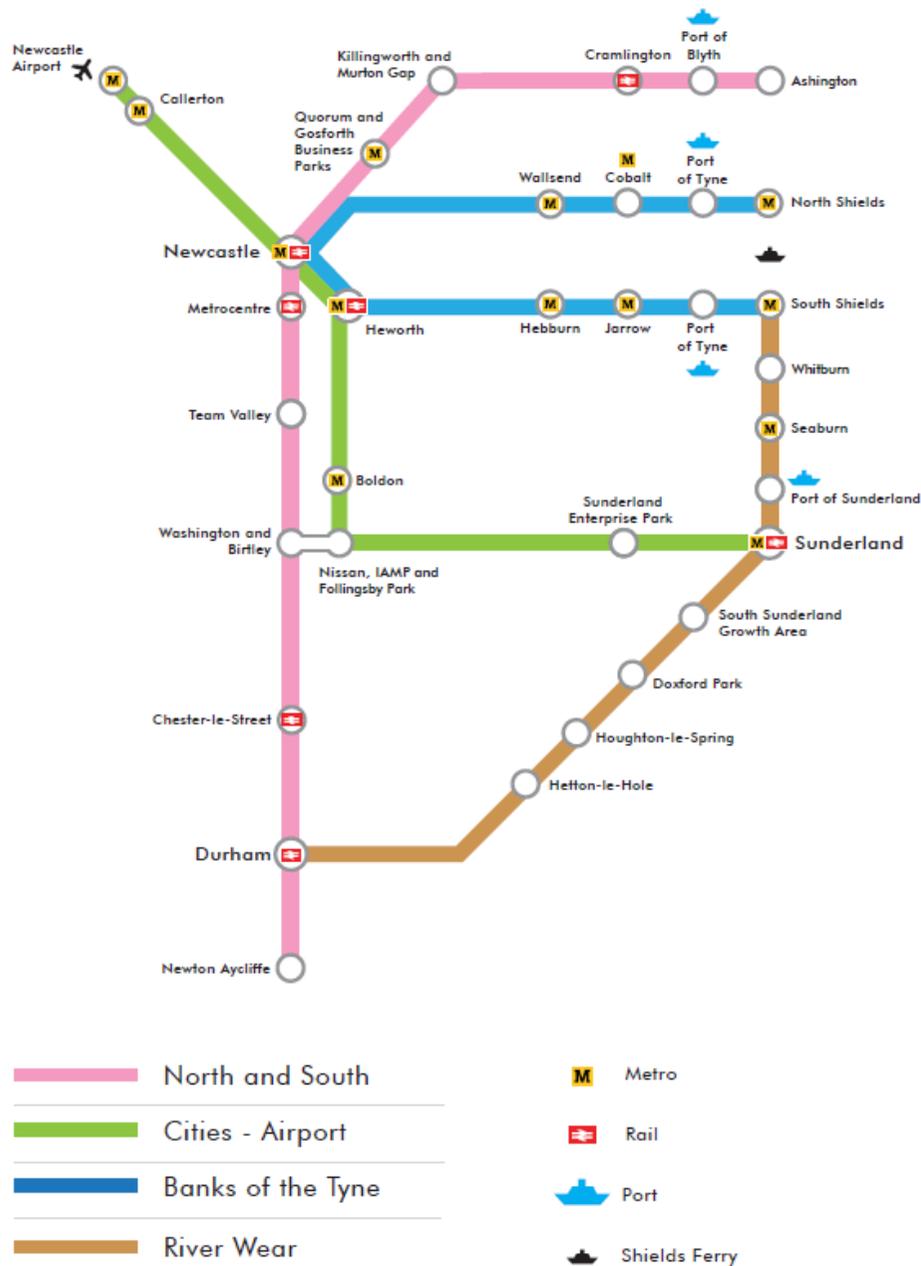


Figure 40 Schematic map of opportunities corridors in the region



2.271 Together these corridors support the areas of greatest opportunity in the city region. They align to significant areas of movement between centres such as bus corridors into city centres, routes towards international hubs, flows along our Metro network and between the city region and rural areas.

Thematic Scope

2.272 The programme is focused on public and sustainable transport improvements to increase the quality, capacity, reach and ultimate use of the network in line with our vision as demonstrated in the way we have categorised the proposed interventions into the following thematic packages based on low carbon modes:

- Transforming Bus Corridors;
- Transforming Walking and Cycling Corridors;
- Transforming City Centre Gateways;
- Transforming Park & Ride; and
- Delivering the Metro and Local Rail Strategy.

Methodology to Develop our TCF Programme

2.273 Following our successful EOI in early 2019, local authorities and Nexus began developing and submitting suitable schemes to the North East's Transport Strategy Unit, working within the guidance available to form a long list of sustainable and public transport interventions broadly in line with the principles of the bid. These schemes were initially tested against the criteria of the fund at a very high level; scheme promoters were particularly challenged on the sustainable transport credentials of their schemes and their deliverability. Working with scheme promoters on that basis, the TCF team compiled a long list of potential schemes to be included in the bid.

2.274 The long list subsequently required further sifting and prioritisation due to the number of schemes causing the bid to be over-programmed. A shortlisting process was undertaken to ensure the schemes met the criteria of the fund and performed well against TCF objectives and were therefore likely to generate a favourable return on investment. A sift was conducted based on the information provided by promoters in a standard pro forma template. Schemes were initially tested against the core requirements of TCF set out in **Figure 41**.

Figure 41 Key attributes guiding scheme sifting for Transforming Cities Fund Tranche 2

<p>Deliverable</p> <p>This programme must be delivered between 2020 and 2023, free of legislative or institutional barriers</p>	<p>Objectives</p> <p>The programme and its components must deliver on the objectives set out for TCF, and our regional equivalents</p>	<p>Value for Money</p> <p>Every component of the programme, and the programme itself, must deliver good value for the investment of public funds</p>
<p>Ambition</p> <p>This programme must be ambitious and transformational, driving real change in transport use</p>	<p>Match Funding</p> <p>The programme and its components must be capable of attracting match funding from alternative public sector, and private sector sources</p>	<p>Regional Support</p> <p>The programme must garner widespread support regionally, and work hand in hand with other regional programmes</p>

Shortlisting

2.275 The sifting exercise comprised two stages. The first stage set out six ‘pass/fail’ criteria which were compulsory for schemes to progress any further in the process:

- Is it a public transport or sustainable transport scheme focused on intra-city connectivity?
- Is it a capital infrastructure investment that targets benefits to public or sustainable transport users?
- Does it have or contribute to city region scale transformational impacts?
- Does it meet DfT’s programme objectives?
- Can it be delivered within the funding window offered by the TCF?
- Is match funding available and confirmation provided?

2.276 This first stage resulted in a shortlist of schemes which would be taken forward in the process for further development and refinement. The second stage of the sifting exercise subsequently guided the development of our cost scenarios.

Development of high, medium and low-cost scenarios

2.277 There is a clear opportunity through this bid to intervene at varying degrees to achieve our vision. This links to the three cost options: our Preferred High Cost Programme, plus supporting Medium and Low-cost programmes.

2.278 All schemes which passed the first stage of the sift and were shortlisted as described above are included in the preferred high cost scenario.

2.279 Schemes were then assessed against the TCF objectives as set out in the guidance. Each scheme was rated a score of 0 (does not meet the objective), 1 (partially meets the objective) or 2 (fully meets the objective), against the following six objectives:

- Drive up productivity through improved connectivity (priority objective)
- Improve access to work and delivering growth
- Encourage the use of future mobility systems
- Tackle air pollution and reducing carbon emissions
- Deliver more homes
- Deliver apprenticeships and improving skills

2.280 The first objective, ‘Drive up productivity through improved connectivity’, was designated a priority objective, thus the scores for this objective were doubled (to 0, 2 or 4).

2.281 A total score for each scheme was calculated, and a threshold was set to determine which schemes would be eligible for the medium cost scenario. Due to the quality of the submitted schemes, this was set high at a score of 8 and above to avoid the bid being over-programmed. A threshold was also set to determine which schemes would comprise the low cost scenario, this was set at a score of 9 and above.

Preferred High Cost Scenario



All schemes which met the six pass/fail criteria

Medium Cost Scenario



Schemes which met the six pass/fail criteria and achieved a score of 8 and above against TCF objectives

Low Cost Scenario



Schemes which met the six pass/fail criteria and achieved a score of 9 and above against TCF objectives

2.282 From the shortlisted schemes, similar thematic packages to our Tranche 1 bid emerged; these along with the spatial corridors for improvements identified in our EOI have been used to structure the bid.

2.283 The shortlist of schemes falling into the high, medium and low-cost scenario bids can be found in **Figure 42** and described in **Appendix H**. The thematic packages and corridors are illustrated in the map in **Figure 43** and included as **Appendix D**.

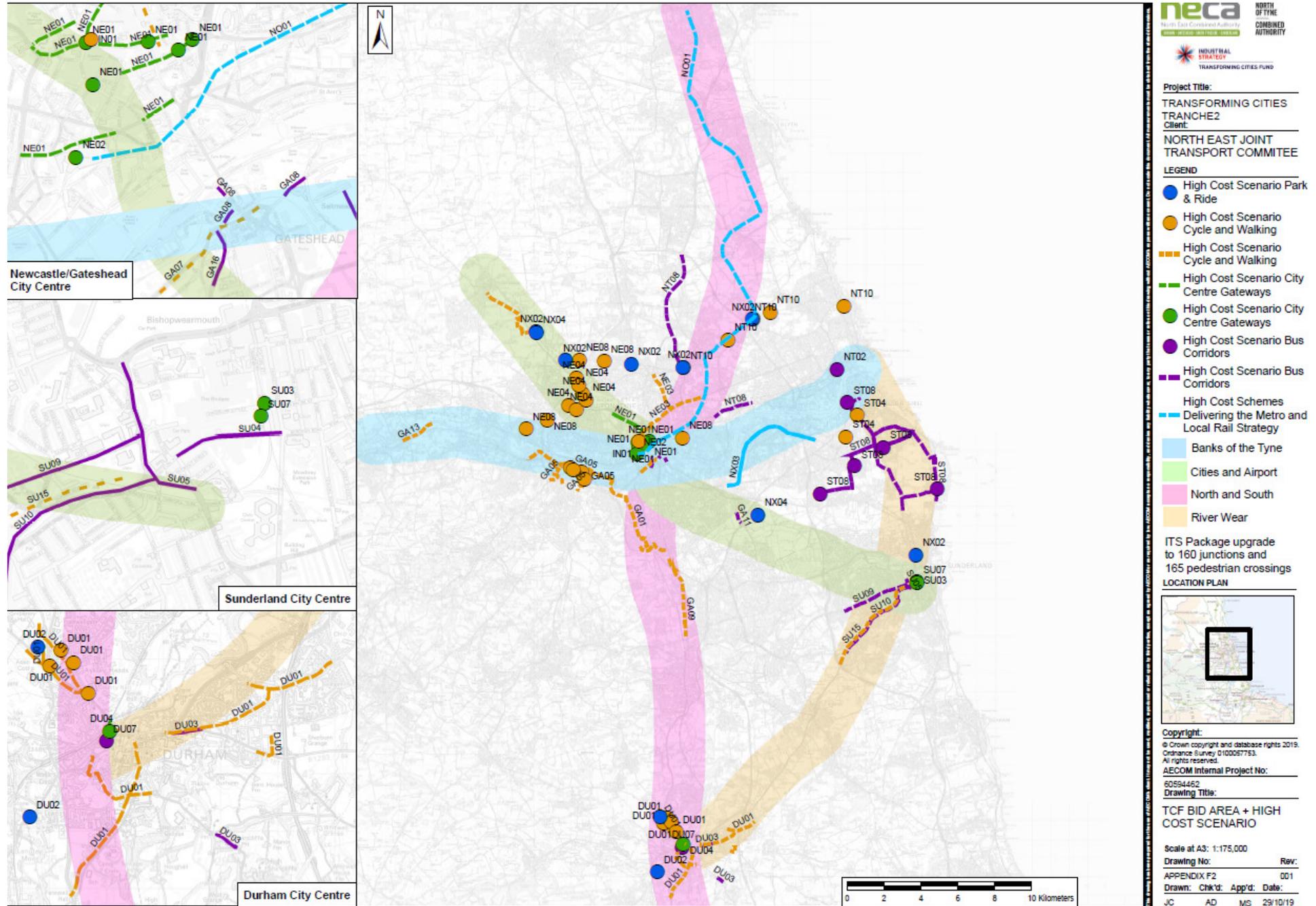
Spatial Corridors	Thematic Packages
Banks of the Tyne	Transforming Bus Corridors
Cities and Airport North and South	Transforming Walking and Cycling Corridors
River Wear	Transforming City Centre Gateways
	Transforming Park and Ride
	Delivering the Metro and Local Rail Strategy

Figure 42 Programme of schemes for Transforming Cities Fund Tranche 2

Preferred Programme of Schemes

Thematic Package	Schemes by Corridor	Legend		For Medium Cost Scenario remove...	For Low Cost Scenario also remove...
		■ North and South ■ Banks of Tyne	■ Cities and Airport ■ River Wear		
Transforming Bus Corridors	A188/A189 Bus Corridor ■; Hills Street/Gateshead Quays ■; A195 Bus Lane ■; Gateshead Interchange Bus Lane ■; North Shields Transport Hub ■; South Shields-Newcastle Bus Improvements ■; South Shields-Sunderland Bus Improvements ■; Durham Bus Priority ■; Durham Bus Station ■; Holmeside Bus Rationalisation ■; Sunderland Inner Ring Road Bus Improvements ■; Chester Road Bus Corridor ■; A690 Route Action Plan ■; Intelligent Transport Systems ■ ■ ■ ■			None	North Shields Transport Hub ■ Durham Bus Priority ■
Transforming Cycling and Walking Corridors	Birtley to Eighton Lodge ■; Newcastle & North Tyneside Strategic Cycle Links ■; Newcastle Outer West ■; Airport-Ponteland Cycle Route ■; Intu Cycle Storage ■; West Tyneside Cycle Route ■; Metro Green Sustainable Access ■; Askew Road Cycle Route ■; Keelmans Way ■; Newcastle Streets for People ■; North Tyneside Metro Cycle/Walk Links ■; South Tyneside Healthy Metro Access ■; Durham Walking/Cycling Improvements ■; A690 Strategic Cycle Network ■			Newcastle & North Tyneside Strategic Cycle Links ■ Birtley to Eighton Lodge ■ Keelmans Way ■ A690 Strategic Cycle Network ■	Airport-Ponteland Cycle Route ■
Transforming City Centre Gateways	Newcastle Central Gateway ■; Transforming Newcastle City Centre ■; Sunderland Central Station ■; Sunderland Station Car Park ■; Durham Rail Station Access ■			None	Durham Rail Station Access ■
Transforming Park and Ride	Metro Park & Ride Enhancements ■ ■; Follingsby and Callerton Park & Ride ■ ■ ■ ■; Durham Park & Ride Expansion ■			None	Metro Park & Ride Enhancements ■ ■
Delivering Metro and Local Rail Strategy	Northumberland Line ■; Metro Flow ■ ■ ■			None	None

Figure 43 Schemes included in the preferred high cost scenario



Project Title:
TRANSFORMING CITIES
TRANCHE2

Client:
NORTH EAST JOINT
TRANSPORT COMMITTEE

- LEGEND**
- High Cost Scenario Park & Ride
 - High Cost Scenario Cycle and Walking
 - High Cost Scenario City Centre Gateways
 - High Cost Scenario City Centre Gateways
 - High Cost Scenario Bus Corridors
 - High Cost Scenario Bus Corridors
 - High Cost Schemes
 - Delivering the Metro and Local Rail Strategy
 - Banks of the Tyne
 - Cities and Airport
 - North and South
 - River Wear

ITS Package upgrade to 160 junctions and 165 pedestrian crossings



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AECOM Internal Project No:
60594452
Drawing Title:

TCF BID AREA + HIGH COST SCENARIO

Scale at A3: 1:175,000
Drawing No: APPENDIX F2
Rev: 001
Drawn: Chk'd: App'd: Date:
JC AD MS 29/10/19

Programme Interventions: Transformative impacts

2.284 Through the Case for Intervention section later in this chapter we identify the impact of the scenarios on the ability to deliver the programme objectives and exemplify where substantial impacts will be felt.

2.285 It is important to identify the forms of interventions that are proposed through the programme to exemplify the transformative nature of the schemes.

2.286 The Bus Corridor interventions have been selected based on evidence from bus operators on delays on certain bus corridors. Bus corridors were selected based on the frequency of service and levels of patronage. These routes often operate on or parallel to arterial routes into our towns and city centres and represent high flows in or between important economic centres. Examples of interventions include two new interchanges, physical bus priority measures including lanes and gates and bus only links, all knitted together with a package of Intelligent Transport Systems interventions to smooth journey flow for bus users and relay important information back to the passenger.

2.287 Cycling and Walking corridors have been developed based on known commuter and leisure flows and the existing network. Workshops were held with stakeholders to identify the network interventions that were required and the evidence to support the need for these interventions. The schemes complement the existing National Cycle Network and local links and provide important uplifts in the quality, safety and comfort of these routes. In addition, the programme seeks to deliver several new links where they will add value in respect of encouraging a shift to cycling for commuter or leisure purpose. These can be where a route provides a link to an interchange, in such scenarios the programme recognises the whole journey approach with investment in cycle parking infrastructure where appropriate.

2.288 City Centre Gateways schemes are proposed for our three city centres, which will deliver interventions focused on improved walking and cycling experiences together with more efficient bus movements and improved rail station access. Many of these interventions fall within the policy priorities of the City and County councils as enablers to growth and sustainable development of the city centres in question.

2.289 Park & Ride enhancements are planned on the Metro Network through a physical expansion at one site and technology upgrades to improve the experience of use. In addition, a new site is planned to deliver express bus services into Newcastle improving journey times, reducing congestion and improving journey times. We have recognised the success of the Durham Park & Ride system and the future demands that will be placed upon it with investment set to deliver one new Park & Ride and expand another. All interventions are planned to intercept traffic on the strategic transport network and alleviate pressure on routes into city centres.

2.290 Our rail and Metro interventions are designed to link new communities to the existing rail network together with expanding the reach of the public transport network, delivering the vital capacity and frequency uplift necessary to cater for the demand placed on the network and its future growth. Interventions have been developed through partnership working between Northumberland County Council, Nexus and Network Rail, together with existing train and freight operators to ensure maximum effect is achieved from these projects.

Regional pipeline

2.291 The nature of the sifting exercise meant that a number of ambitious, high quality schemes put forward by local authorities were not able to be included in the shortlist. Largely these schemes would deliver well against regional policy and strategy objectives and would address our challenges as described in previous sections, however unfortunately due to the limited timescales of this bid it was agreed that they would not be deliverable within the TCF timeframe. This was not a reflection on the overall quality of the schemes or the local and regional commitment to them going forward. The initial development work on the schemes will feed into a regional pipeline, ensuring they are in the greatest state of readiness for any future funding opportunities that may arise.

2.292 In addition, the Bus Measures Study currently being undertaken, and guided by a collaboration between bus operators and local highway authorities, will also produce a further pipeline of bus measures founded on a detailed analysis of bus delays.

Summary Box – Developing our Options

We ensured schemes are deliverable and perform highly against TCF objectives;

We ensure schemes come together as packages and programme to form a coherent network of interventions across our region;

Our programme will transform our regional transport network across all major modes to address our key challenges around the economy, environment and wider society; and

We plan to work up our regional pipeline projects to ensure progress of TCF can be built upon going forward when other funding streams become available.

Future Proofing our TCF Programme

2.293 The ambitious programme of public transport and sustainable transport investments developed by the North East will be delivered by 2023, their effects and benefits will endure for many years and decades to come. However, the programme has been conceived based on our current understanding of transport demands and challenges, and how they might develop over future years as the economy of the region grows and new developments are delivered.

2.294 There are wider influences on travel behaviour that also need to be considered, to ensure that our programme of investments can have an enduring long-term benefit to the region across a range of potential futures. This future proofing section explains the work that we have done, and the conclusions drawn.

2.295 The future of transport is inherently uncertain, this qualitative assessment recognises that and looks at several plausible scenarios to see how “future proofed” our programme is. These scenarios have been developed by using the Government Office for Science Futures Toolkit⁷⁶, which provides a flexible and structured approach to thinking about future scenarios and future proofing across all aspects of Government. The scenarios also draw upon work undertaken by and drawn upon work undertaken by Government Office for Science (GOS)⁷⁷ and Transport for the North (TfN)⁷⁸.

2.296 First, we have undertaken an exercise to identify the future challenges and influences on travel demand in the future. This exercise is based on the findings of the Strategic Case for our TCF programme, and on a small workshop conducted with some expert facilitators.

2.297 The outcome of this initial process was to:

- Identify several future changes that will influence travel demand and behaviour over the lifetime of our TCF schemes;
- Assess these changes qualitatively to assess which are more influential and less influential on travel demand by public transport and sustainable transport; and
- Assess these changes qualitatively to assess which are more uncertain to arise and less uncertain (i.e. more certain) to arise during the lifetime of the schemes.

2.298 This has led us to develop the grid at **Table 13** that identifies a selection of influences on travel demand. These influences are rated against both their likelihood of occurring, and the strength of impact if they were to occur. These are the changes that we have used to guide subsequent thinking on future proofing.

⁷⁶ Government Office for Science, The Futures Toolkit: Tools for Futures Thinking and Foresight Across UK Government, November 2017, <https://www.gov.uk/government/publications/futures-toolkit-for-policy-makers-and-analysts>

⁷⁷ Government Office for Science, The Future of Mobility Foresight: A time of unprecedented change in the transport system, January 2019, https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/780868/future_of_mobility_final.pdf

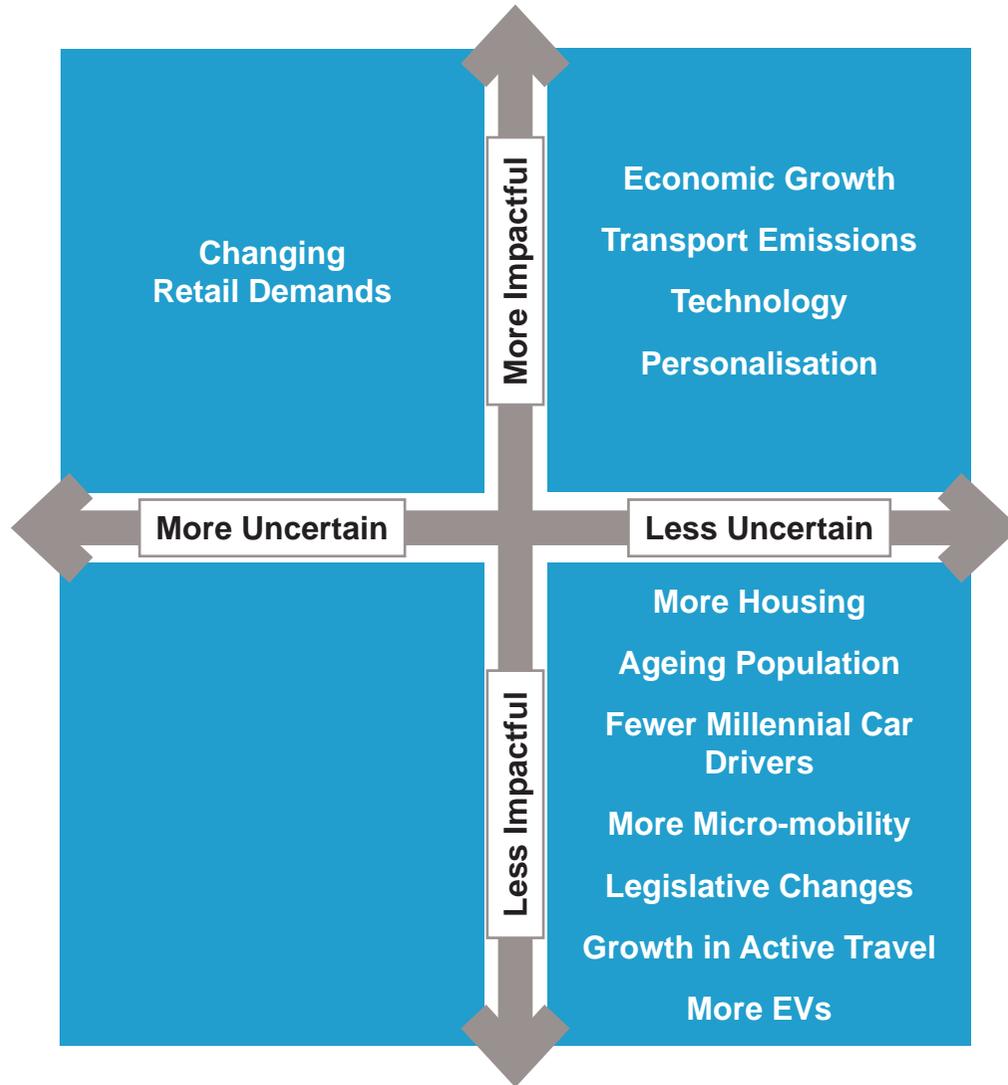
⁷⁸ Transport for the North, Future Transport Demand in the North of England, <https://transportforthenorth.com/wp-content/uploads/TfN-Future-Transport-Demand-Statement.pdf>

Table 13 Influences on travel demand

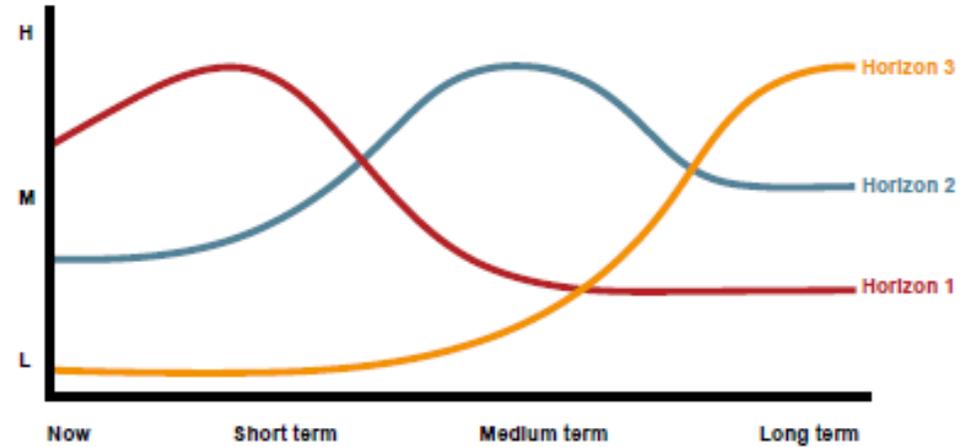
Factor	Potential influence(s) on travel	More or less impactful	More or less uncertain (and time horizon)
Need for economic growth	Need to connect new and existing employment sites with housing sites and markets.	More	Less (short term)
Ageing population	Greater demand for travel modes tailored to people with mobility issues, greater off-peak travel,	Less	Less (short term)
Growth in personalised travel	Greater use of road space and kerb space by taxis.	More	Less (short term)
Changing retail demands	Less demand for city centre shops, more demands for deliveries	More	More (short term)
Need to address transport emissions and protect the environment	Fewer car trips, more trips by sustainable means	More	Less (short/medium term)
Need for more housing	Greater travel demands by all modes	Less	Less (short/medium term)
Fewer young people obtaining driving licences and using private cars	Greater travel demand by public transport, cycling and walking.	Less	Less (medium term)
Micro mobility modes	Greater demand for micro mobility use.	Less	Less (medium term)
More Electric Vehicles	Greater demand for EV charging	Less	Less (medium term)
Growth in active mode use	Greater demand for walking cycling links and parking	Less	Less (medium term)
Transport legislative changes	Enabling new forms of transport to flourish, e.g. micro mobility	Less	Less (medium term)
Move towards technology influencing travel behaviour	Use of technology to plan journeys	More	Less (long term)
	Technology reduces need for journeys		
Technology that personalises travel provision	Technology that provides bespoke travel solutions	More	Less (long term)
Autonomous vehicles	Growth in use of autonomous vehicles	More	Less (long term)

2.299 The contents of the above grid are shown graphically in **Figure 45**. The factors that are in the top right corner of this figure – those that have high impacts and are more certain to arise – are the focus of the rest of this future proofing work.

Figure 44 Influences on travel demand matrices



2.300 The Futures Toolkit sets out a methodology for Three Horizons Model for undertaking a horizon scanning exercise, which has been used in this analysis (see below). Horizon 1 is influenced by the present-day issues that primarily drive investment decisions, Horizon 2 is influenced by emerging issues in the medium term and Horizon 3 is influenced by longer term issues.



2.301 Drawing on the above analysis of travel demand influences in the future, and informed by the GOS and TfN work, we consider that the three horizons for this analysis should be:

- **H1** – present strategic issues. These are the issues that are driving the development of the TCF programme right now. For this analysis, the primary present driver of the programme is **to drive improved economic performance**;
- **H2** – medium term strategic issues. These are the issues that are going to rise to prominence in the medium term – for this programme we think that the medium term should be within the next 5-10 years (2024-2029). For this analysis, the primary medium-term issue for transport will be **to address and reduce the environmental impacts of transport**; and

– **H3** – longer term strategic issues. These are issues that are going to rise to prominence in the longer term – for this programme we think this is 10 or more years hence (2029 and beyond). For this analysis, the primary longer-term issue for transport will be **to adjust to much greater technology and personalisation in fulfilling transport demand**.

2.302 For Horizon 1, the primary focus today is to invest in transport networks that deliver improved economic for the region. This objective lies at the heart of both the Government's objectives for TCF and the region's wider objectives for development, as set out in the Strategic Economic Plan, the emerging Local Industrial Strategy and the emerging Regional Transport Plan.

2.303 For Horizon 2, we think that the protection of the environment will receive higher prominence amongst decision makers in the medium term. We are already seeing signs of this emerging at both a regional scale (many of our authorities have declared climate emergencies and three of our councils are working with Government to address traffic-related pollution exceedances) and at a global scale. Indeed, environmental objectives and outcomes have been enshrined in the region's transport plans for many years. However, as the regional economy recovers and thrives, we think the environment will become an even greater influence on transport choices and investment decisions.

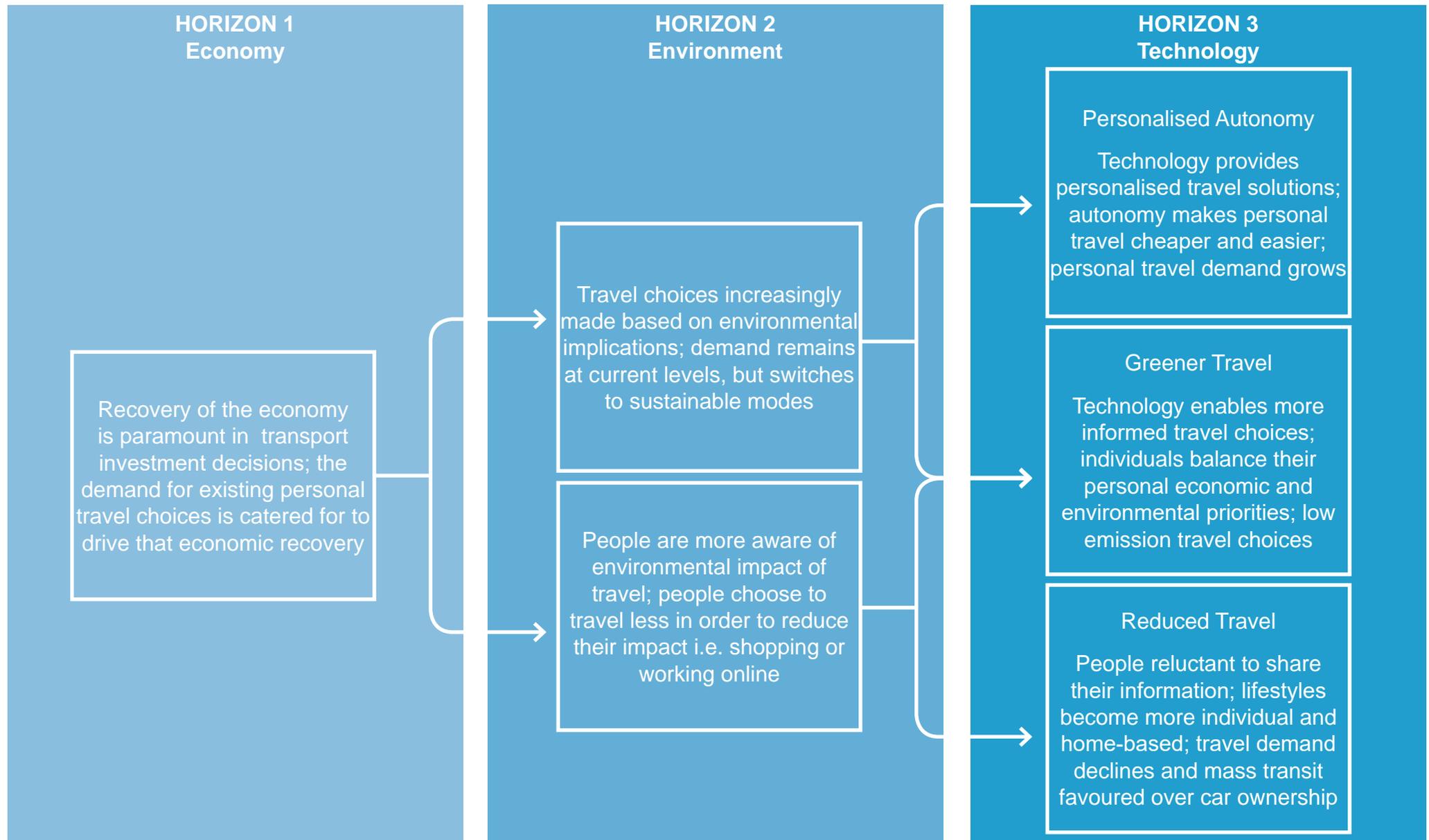
2.304 This rise in prominence of environmental considerations could lead to two potential outcomes. On the one hand, demand for travel may remain at current levels but people will increasingly reject modes of travel that cause the greatest environmental damage and chose modes with smaller environmental footprints. On the other hand, demand for travel may reduce as people choose to use technology to work and shop from their homes rather than travel as they do today. Of course, the future will not be a straight choice between these outcomes, it will be an amalgamation of both – but for horizon scanning purposes we consider them as two distinct scenarios.

2.305 For Horizon 3, we think that the greater prevalence technology and personalised travel experience that technology can deliver for people will become a dominant factor on influencing travel behaviour. We are already seeing trials and early adoptions of Mobility as a Service and automation of personal travel, underpinned by the increasing deployment of artificial intelligence and machine learning.

2.306 Again, this could lead to two potential outcomes. On the one hand, autonomy and technology could make personal transport a lot cheaper, safer and more accessible to many more people, who in turn are willing to share information about their lives in order to receive a personalised travel service. In this scenario, travel in personal vehicles and smaller shared vehicles could grow considerably. On the other hand, technology could lead to people's lifestyles being further embedded in their homes with a reluctance to share lots of data about their minute by minute choices and behaviours. In this scenario, demand for travel will stagnate and the use of mass transit modes that are available throughout the day could be further embedded into society.

2.307 By mapping these three horizons, we have developed three longer term scenarios that form the basis of our future proofing exercise, as set out in **Figure 46**.

Figure 45 Development of horizon scanning scenarios



2.308 This future scanning analysis leads us to three long term scenarios against which we can test our TCF programme:

- **Personalised Autonomy:** travel demand grows and is delivered through personalised and small shared autonomous vehicles.
- **Greener Travel:** better information sees demand grow for travel by lower emission modes.
- **Reduced Travel:** people travel less, are less inclined to own vehicles and more inclined to use mass transit.

2.309 Of course, the long-term future could end up being an amalgam of all three of these scenarios (and other scenarios that we cannot yet conceive of). But examining our programme against these scenarios is useful in testing its long-term applicability to travel behaviours and demands.

2.310 In **Table 14** we examine our regional TCF objectives against our three future scenarios. It is worth remembering that these regional objectives are built upon strong foundations – existing and future regional challenges and the Government’s objectives for TCF. They therefore form a strong foundation for our TCF programme based on today’s priorities, and ensuring these foundations are fit for the long-term future is important.

2.311 In **Table 15** we then use the same format to examine our thematic packages against our three future scenarios. We use qualitative judgements to examine whether the types of investment delivered in our thematic packages stand the test of time under some or all these scenarios.

2.312 In each table we use a simple three-point scale to assess the impact of each long-term scenario:

- For Table 14

Achieving the objective is strengthened
Achieving the objective is largely unaffected
Achieving the objective is weakened

- For Table 15

Effect of thematic package is strengthened
Effect of thematic package is largely unaffected
Effect of thematic package is weakened

2.313 We then draw some high-level conclusions based on this qualitative analysis.

Table 14 Longevity of Regional TCF Objectives in Long Term Horizon Scenarios

Future Scenario	Personalised Autonomy	Greener Travel	Reduced Travel
Description	Technology provides personalised travel solutions; autonomy makes personal travel cheaper and easier; personal travel demand grows.	Technology enables more informed travel choices; individuals balance their personal economic and environmental priorities; low emission travel choices thrive.	People reluctant to share their information; lifestyles become more individual and home-based; travel demand declines, but mass transit favoured over car ownership.
Regional TCF Objectives			
Expanding the reach, quality and capacity of our public and sustainable transport network	Personalised travel will expand the reach of the network	Thriving low emission travel choices will facilitate expanded network	Reduced travel demand but need for sustainable modes holds up
Increasing modal choice	Personalised travel offers new mode choices	Existing modes will focus on lower emissions	Demand for mass transit modes will hold up
Reducing air quality / congestion problems	Personalised autonomous travel modes likely to improve environment but could worsen congestion	Focus on lower emission modes	Mass transit favoured over personal vehicle use
Facilitating housing growth	Personalised travel allows housing growth to thrive across a range of sites	Housing growth facilitated by lower emission modes	Housing growth focused on mass transit nodes.
Broadening the reach of our labour markets by increasing social mobility	Personalised travel may or may not be available to all sectors of society	Enhanced role for sustainable modes, offering accessibility for all	Enhanced role for sustainable modes, offering accessibility for all
Integrating investments with future mobility concepts	Scenario envisages significant growth in future mobility concepts	Scenario envisages significant growth in future mobility concepts	Scenario envisages significant growth in future mobility concepts

Table 15 Longevity of TCF Thematic Packages in Long Term Horizon Scenarios

Future Scenario	Personalised Autonomy	Greener Travel	Reduced Travel
Description	Technology provides personalised travel solutions; autonomy makes personal travel cheaper and easier; personal travel demand grows.	Technology enables more informed travel choices; individuals balance their personal economic and environmental priorities; low emission travel choices thrive.	People reluctant to share their information; lifestyles become more individual and home-based; travel demand declines, but mass transit favoured over car ownership.
TCF Thematic Packages			
Transforming Bus Corridors	Bus priority and interchanges have limited role in serving personalised autonomous travel	Bus priority and interchanges will benefit thriving low emission travel choices	Mass transit market will hold up, and benefit from bus priority and interchange investments
Transforming Walking and Cycling Corridors	Personalised travel may reduce demand for cycling and walking	Informed travel choices will encourage cycling and walking	Individual lifestyles might facilitate some more cycling and walking
Transforming City Centre Gateways	Personalised autonomous travel can be tailored to deliver maximum benefit from city centre improvements	Informed travel choices can be tailored around city centre improvements	Individual lifestyles may reduce demand in city centres
Transforming Park & Ride	Personalised autonomous travel can be integrated with Park & Ride facilities	Informed travel choices will drive best use of Park & Ride investments	Reduced private vehicle ownership may limit demand for Park & Ride
Delivering the Metro and Local Rail Strategy	Personalised autonomous travel can be integrated with rail and enhance the benefits of rail investment	Informed travel choices will drive best use of rail network	Increased reliance on mass transit modes

2.314 In summary we can conclude that:

- Our regional TCF objectives stand the test of examination against longer term horizon scenarios. Achievement of the objectives is generally enhanced in each future scenario, and only one objective (air quality/congestion) is hampered in one future scenario (Personalised autonomy).
- Our thematic packages are similarly well tailored to a range of future scenarios. In the balanced Greener Travel scenario nearly all the thematic packages make a positive contribution in the longer term. In the other scenarios, Reduced Travel and Personalised Autonomy, the role of most thematic packages are enhanced, while there are three occurrences of a weakened role.

2.315 We can therefore be confident that based on a qualitative assessment of our programme objectives and thematic packages in a range of horizon scanning futures, our TCF programme is reasonably well future proofed in the long term. While the role of thematic packages is reduced in certain horizon scanning scenarios, this only arises in our more extreme scenarios and these impacts can be managed over time.

2.316 This work allows us to think about what actions could be taken to embed the benefits of our TCF programme under these potential future scenarios. While there is detailed work that will need to be undertaken, by policy makers and delivery partners alike, to mitigate the potential impacts of future scenarios on our TCF programme, some high-level conclusions can be drawn from this analysis:

- Should the **Personalised Autonomy** scenario come to pass, there appears to be some additional benefits for our city centre, Park & Ride and rail packages. Negative impacts on the walking and cycling packages will need to be addressed by further encouraging use of these links for leisure and fitness purposes, as well as day to day commutes.
- Should the **Greener Travel** scenario come to pass, the better balancing of environmental priorities will encourage more demand for public transport, cycling and walking modes. This will enable the further expansion of our public transport networks (coverage, frequency and times of operation), encourage further integration across different public transport modes/ operators and encourage more reallocation of road space away from private cars. It will also encourage operators to accelerate the introduction of lower and zero tailpipe emission vehicles.
- Should the **Reduced Travel** scenario come to pass, there are positive impacts on mass public transport modes as people become less reliant on owning and using their cars. However, this may have some negative impacts on the Park & Ride proposals, which will need to evolve and be capable of becoming multi-modal hubs, not just interfaces between cars and bus/Metro. Reduced travel to city centres may influence the future direction of bus services and create new markets for buses that can exploit their greater flexibility to serve new travel markets.

Case for Intervention

2.317 Our economic objectives and our vision for the transport network as established in the Strategic Economic Plan are clearly articulated in previous sections of this SOBC. This submission has presented an opportunity to reflect on the economic, social, connectivity and environmental challenges identified by our local authorities and promoters across the region and to look to address these challenges through targeted action. We now exemplify through the submission how the region should build on our success of a well-established public and sustainable transport offer and look to make transformational improvements to quality, capacity and choice, connecting people to opportunities.

Table 16 Impact of the scenarios on the thematic packages

		Thematic Packages				
		Transforming Bus Corridors	Transforming Walking and Cycling Corridors	Transforming City Centre Gateways	Transforming Park and Ride	Delivering the Metro and Local Rail Strategy
Scenarios	High Cost Scenario	5	5	5	5	5
	Medium Cost Scenario	5	3	5	5	5
	Low Cost Scenario	3	2	5	3	5

Key

1	Insignificant
2	Minor Impact
3	Moderate Impact
4	Major Impact
5	Significant Impact

Programme Impacts

2.318 In order to assess the impacts of the programme, we have utilised an impact model to summarise impact at a thematic and objective level (see **Table 16** and **Table 17**). This utilises a 1-5 scoring system based on expected impact of the scenarios on the corridors and on the programme objectives. Furthermore, we summarise the expected impact based on the technical studies that have supported the development of this business case and engagement to date.

Table 17 Impact of the Scenarios on the DfT Objectives

		Objectives					
		Expanding the reach, quality and capacity of our public and sustainable transport network	Increasing modal choice	Reducing air quality / congestion problems	Facilitating housing growth	Broadening the reach of our labour markets by increasing social mobility	Integrating investments with future of mobility concepts
Scenarios	High Cost Scenario	5	5	5	5	5	5
	Medium Cost Scenario	4	4	3	4	4	4
	Low Cost Scenario	4	2	2	3	4	3

Key

1	Insignificant
2	Minor Impact
3	Moderate Impact
4	Major Impact
5	Significant Impact

2.319 The analysis demonstrates that the greatest possible impact can be attained from the preferred high cost scenario with limits around modal choice, reducing air quality and congestion problems and facilitating housing growth most acutely experienced in the medium and low-cost scenarios. This is largely due to schemes such as walking and cycling measures and bus corridor schemes falling away from the programme due to cost pressures.

2.320 Overall it is considered the preferred high cost programme will provide a major impact against the objectives.

Economic Impact

2.321 The North East currently faces many interlinked economic challenges, particularly the gap in growth levels between our region and the rest of England (excluding London). Jobs are successfully being created, especially in our strong emerging sectors of advanced engineering, life sciences and the digital economy, and our programme is designed to connect people to these opportunities. Our packages support the region's ambition, as set out in the SEP, for a well-integrated and reliable transport network linking pleasant residential areas to centres of employment in a sustainable way.

2.322 We recognise the growth opportunities to bolster productivity and address connectivity challenges through targeted transport interventions. This programme of investment will provide confidence and capacity building to the regional economy, confirmation of funding will provide short term economic stimulus to address Brexit matters and long-term confidence about the business environment provided by our transport network.

Housing and Employment Growth

2.323 There is an inherent link between the delivery of transport interventions and development growth projections within our local authorities.

2.324 A methodology as explored below has therefore been developed to test the dependency and support the preferred TCF programme affords to housing and employment. This methodology is consistent with WebTag unit A2.3 and utilises Local Plan data from Strategic Housing Land Availability Assessments (SHLAAs) and Employment Land Reviews (ELRs) or equivalent. It merges this with consent data and any allocations to review the certainty of development.

2.325 Furthermore, a proximity analysis has been undertaken to review the likelihood that schemes will utilise schemes that are being delivered and this has been merged with a review of infrastructure requirements through Infrastructure Delivery Plans (IDPs).

2.326 This analysis has enabled an informed view to be taken on sites that are directly supported i.e. dependent on TCF interventions and those that will reasonably benefit from more sustainable links.

Table 18 Impact of TCF interventions on homes and employment floorspace

	Homes	Employment Floorspace
Directly supported by TCF interventions	10,238	77.76ha
Sites that would reasonably benefit from new public and sustainable transport links	22,695 (+33,072 with existing permissions)	407.04ha
Total	66,005	484.8ha

2.327 The results as noted in **Table 18** demonstrate that interventions directly relate to Local Plans and planned need. Ultimately the programme can directly and indirectly influence a significant proportion (66,005 residential units and 484ha of employment land) of the region's overall planned housing and employment growth.

2.328 Whilst there are many externalities around the achievement and delivery of this level of development, including around economic outlook, development intentions and land assembly matters the delivery of this programme provides the necessary conditions for growth. A proportion of match associated with the delivery of this programme emanates from planning obligations, as there remains a gap in the ability to fund outright the necessary infrastructure required in the Local Plan. In addition, in certain areas largely viability driven up front infrastructure investment is required to facilitate future growth. There is benefit in monitoring the success of this programme through what is reasonably delivered. An indicator we are using is around TCF's contribution to new homes through the delivery of public and sustainable transport links to at least 30,000 units. At a programme level this review period is planned five years post build to understand the link between the programme and new homes and jobs that have been delivered or are underway.

2.329 The full methodology, results and maps are available in **Appendix C** and the results are being utilised to inform the development of dependency model available in the economic case.

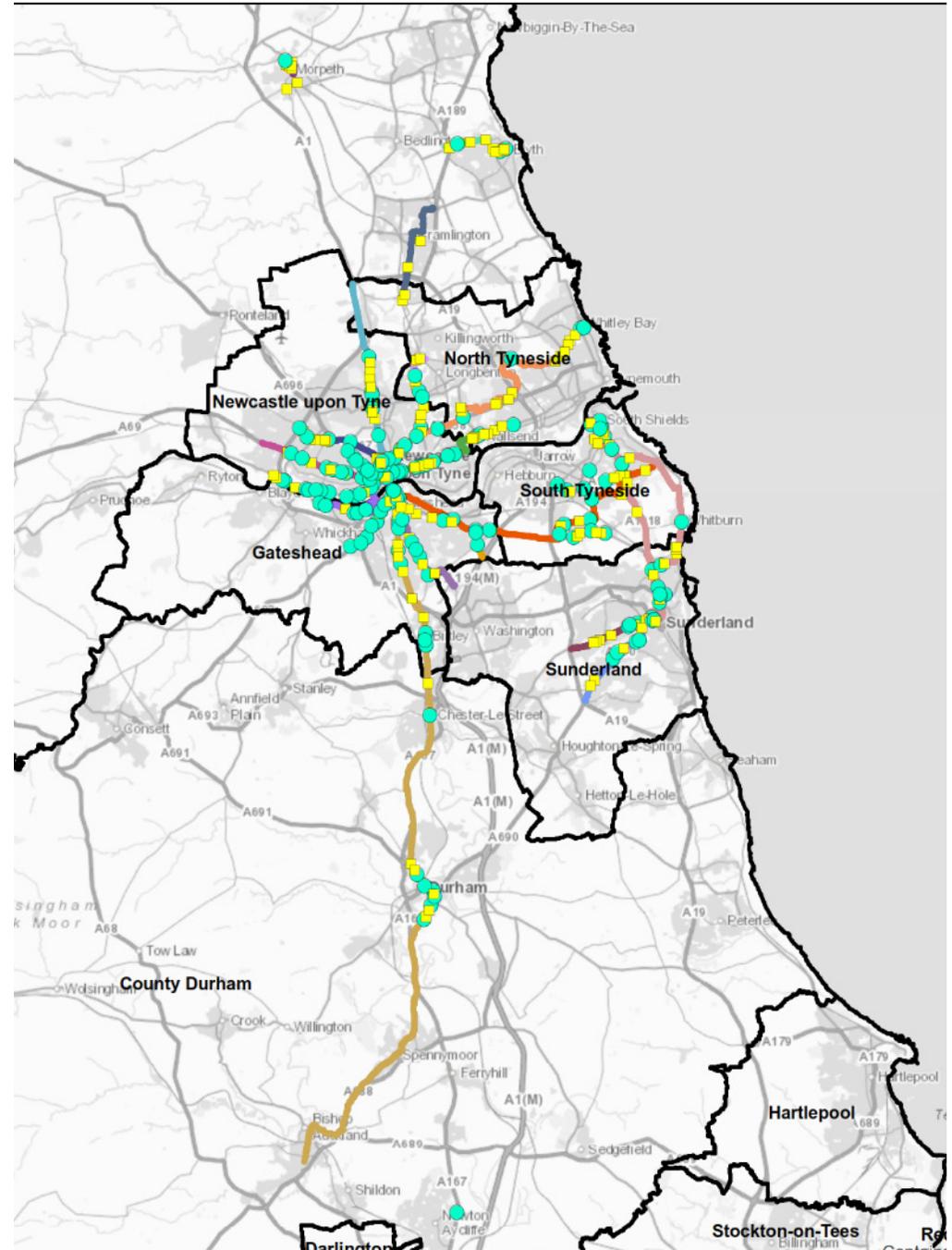
Intelligent Transport Systems

2.330 Our Intelligent Transport System package adds value to the infrastructure schemes proposed for buses in our programme. It will address some of the congestion issues on many of the bus corridors because significant efficiencies can be made by upgrading our existing signal and communications systems to make real time interventions for the benefit of bus travel. Such interventions are tried and tested in the North East, we will roll out this success on our busiest bus corridors.

2.331 Intelligent transport systems and, modern traffic signals and communications, will afford the opportunity to manage congestion, and those trips with no alternative than to pass through city and town centres. Those journeys by bus, cycle and on foot will gain most advantage from enhanced signal control. This investment will see a significant step change in how traffic is managed, giving city centres back to the people and advantage to buses on the busiest bus corridors.

2.332 The scheme proposes upgrade requirements and subsequent connection to the UTMC system for a total of 162 Extra Low Voltage (ELV) junction upgrades and 165 pedestrian crossings across the region, centred on the busiest bus corridors. An overview map is outlined in **Figure 46**.

Figure 46 ELV upgrade and bus corridor context map



2.333 In conjunction with the ELV upgrades, improvements to bus real time information (RTI) are proposed. Installation of sensors to increase bus location accuracy and frequency of polling buses allows for UTMC interventions in real time to allow bus priority through signalised junctions. It will enable green time at pedestrian crossings to be synchronised with traffic signal junctions upstream and downstream when in proximity, to prioritise buses that are behind schedule. This will still afford the same amount of green time for pedestrians, but better coordination will improve efficiencies for all sustainable modes.

2.334 The scheme will give control across the highway network so strategies to manage traffic and travel can be developed and change through time to reflect national, regional and local priorities. The scheme will support the delivery of the Industrial Strategy and Local Industry Strategy giving better access to areas with the greatest potential economic growth, city and town centres, enterprise zones and other key development sites in both housing and employment.

2.335 The ITS interventions will also serve to provide a more accurate level of real time passenger information that has not been achieved in the North East across a host of social media. This will foster greater public confidence in the public transport offer and reliability.

Cycling and Walking corridors

2.336 The cycling and walking package has been built using analysis from our local authorities, Sustrans and Living Streets. In applying the objective assessment process, the projects recognise the levels of current and potential future demand for cycling and walking. The programme proposes interventions that add value to the existing network through capacity and safety and quality improvements where necessary as well as extending the reach of the network.

Tranche 1 intervention: Boldon Business Park



2.337 Sustainable transport has multiple health benefits, due to cleaner air, increases in physical activity levels, and social contact. Investment in sustainable public transport and in safe walking and cycling environments is associated with a major boost to population health in

cities (the precise impacts vary depending on the overall local health profile and the nature and scale of transport innovation). Physical activity increases because of public transport use; the average daily activity time associated with transport use is estimated at around 20 minutes, rising to 30 minutes (the recommended level) for around one third of users⁷⁹.

2.338 The physical activity associated with regular cycle commuting and walking has a substantial impact on health through reducing the risk of heart and circulatory disease by as much as 35% and risk of early death by as much as 30%⁸⁰. However, this depends on good-quality cycle infrastructure of the sort outlined in this programme of work that are safe. The proposed programme will help the North East to share in these benefits.

2.339 Mental health benefits of active travel are also substantial, and this programme can have a positive impact on the mental wellbeing of the region. As examples, physical activity and time spent in natural environments due to sustainable travel are shown to have positive outcomes on health and wellbeing⁸¹. Sustainable transport and 'walkable' environments help to reduce social isolation and build social cohesion and capital, because of the social interactions that they facilitate⁸². This is particularly important for older people for whom public transport use is associated with lower rates of loneliness and depression⁸³. As well as mental health gains, sustainable transport use social and creative benefits as well as economic ones as a result of human contact, through improved connectivity across places and connections between people⁸⁴.

⁷⁹ Public Health England, 2019, NE Health Profile; <https://fingertips.phe.org.uk/profile/public-health-outcomes-framework/data#page/0/gid/1000049/pat/6/par/E12000001/ati/102/are/E06000047/iid/92901/age/1/sex/1>, last accessed on 30th October 2019.

⁸⁰ Götschi, T., Garrard, J. & Giles-Corti, B. (2015) Cycling as a part of daily life: A review of health perspectives. *Transport Reviews* 36, 45-71. <https://doi.org/10.1080/01441647.2015.1057877>

⁸¹ Zijlema, W., Avila-Palencia, I., Triguero-Mas, M., Gidlow, C., Maas, J., Kruize, H., Andrusaityte, S., Grazuleviciene, R. & Nieuwenhuijsen, M. (2018) Active commuting through natural environments is associated with better mental health: Results from the PHENOTYPE project, *Environment International* 121, 721-727

⁸² Boniface, S., Scantlebury, R., Watkins, S. & Mindell, J. (2015) Health implications of transport: Evidence of effects of transport on social interactions, *Journal of Transport and Health* 2, 441-446

⁸³ Reinhard, E., Courtin, E., van Lenthe, F.J. & Avendano, M. (2018) Public transport policy, social engagement and mental health in older age: a quasi-experimental evaluation of free bus passes in England. *Journal of Epidemiology and Community Health*, 72 (5), 361-368

⁸⁴ Sim, A., Yaliraki, S., Barahona, M. and Stumpf, M. (2015) Great cities look small, *Journal of the Royal Society Interface* 12 (109), 20150315. <https://doi.org/10.1098/rsif.2015.0315>

Cycle links around rail stations



2.340 As a region we have committed to deliver a step change in the way we deliver this package of schemes. Ahead of the formal publication of LCWIPs from around the region, this bid has developed a series of walking and cycling principles covering four areas of connectivity, quality, safety and accessibility and comfort. These principles demonstrate coherence in implementation and design. This high-level agreement is available as part of **Appendix F**.

Rail Station Design Guidance

2.341 The Department issued guidance in September 2019 around ensuring that schemes included within the TCF package deliver better passenger experiences, support community engagement and effective placemaking are delivered to the highest environment standards and have a strong role in fostering economic growth locally. The three-rail

scheme included in this submission are in our three City centres of Durham, Newcastle and Sunderland and form important components of the City Centre gateway packages of investment. All involve substantial access improvements and deliver a step change in the quality for passenger experiences and are linked closely to placemaking. A full assessment of the schemes against the objectives is available and is summarised in **Table 19**.

Table 19 Station development checklist – programme level

Better Passenger Experience	
Ensure safety and security	Improve journeys
<p>Improvements to the visibility and access to the station is being achieved for all three projects.</p> <p>Pedestrian lighting on the approaches as well as within the station will be provided together with CCTV.</p>	<p>Deliver enhanced access to improve flow and experience for all passengers.</p> <p>Network Rail / ORR standards will be deployed to ensure the effective design of visually pleasing spaces that can be easily maintained.</p> <p>New facilities will be available at two of the three stations enhancing journey experience.</p>
Closer community integration	
Integrate with the local place and foster 'place-making'	Help create wider social and community benefit
<p>Fundamentally all schemes align to Local Plans and City Centre development strategies forming important infrastructure projects to realise the economic growth potential of cities and deliver vital sustainable improvements. With enhanced facilities we can build confidence in a modern, clean, convenient and safe public transport.</p> <p>Design - where possible avoiding level differences and improving flow through new direct walking routes into city centres and key destinations.</p> <p>Delivering clear and logical entrances to the stations which announce themselves and integrate well with the surrounding urban realm and street pattern.</p>	<p>Passenger focus with modern clean, safe and secure access points and facilities at our three stations.</p> <p>Integrated city centre wayfinding and onward travel into the projects to ensure onward connectivity.</p> <p>Associated community use benefits at one of the three stations achieved through design.</p> <p>We seek where possible to exceed industry norms including Design Standards for Accessible Stations (DfT – 2015).</p>

Passenger experience

2.342 The interventions include a strong element around improved passenger experience. The packages recognise the whole journey experience with measures looking to recognise onward journeys, such as connectivity to metro and local bus services. Some of our projects include a significant community dimension to deliver effective local ownership of solutions to improve access and use of sustainable and public transport modes.

2.343 The delivery of our bus, Metro (Flow) and Local rail (Northumberland Line) improvements will drive up passenger experience and satisfaction which we proposed to monitor, through improved punctuality / reduced delays and overall performance upgrades.

2.344 We will utilise modern design standards when designing our interchanges, on street infrastructure as well as the important real time dimension that is emerging from ITS. The interchange opportunities we will deliver through the programme are demonstrated in **Figure 47**.

Social Mobility, Accessibility and Skills

2.345 The vision includes a component around more sustainable mobility and connectivity including for groups that are not well served by forms of public transport. Whilst the work on growth identifies new jobs and homes our accessibility modelling looks at accessibility levels for existing sites and we have applied a test looking at access to identified prime and enabling capabilities from the TfN Strategic Transport Plan (STP) The results of the base case were reported in our challenges section.

2.346 Applying the uplift in frequency on the Metro associated with the Metro Flow scheme (assuming a 30min frequency as planned on Northumberland Line and 10mins on Metro with associated wait times) and adding in the Northumberland line services, indicates that across the entire North East, there is a 5% increase in the number of jobs that can be accessed by public transport thanks to this Metro investment scheme (an increase of 8,704 jobs per household). Looking at TfN capability locations 22prime and enabling sites can be accessed within an hour's journey time up from 20 in the base case. This is shown in figures **Figure 48** and **Figure 49** with the background data available upon request.

Figure 47 Interchange opportunities in the North East

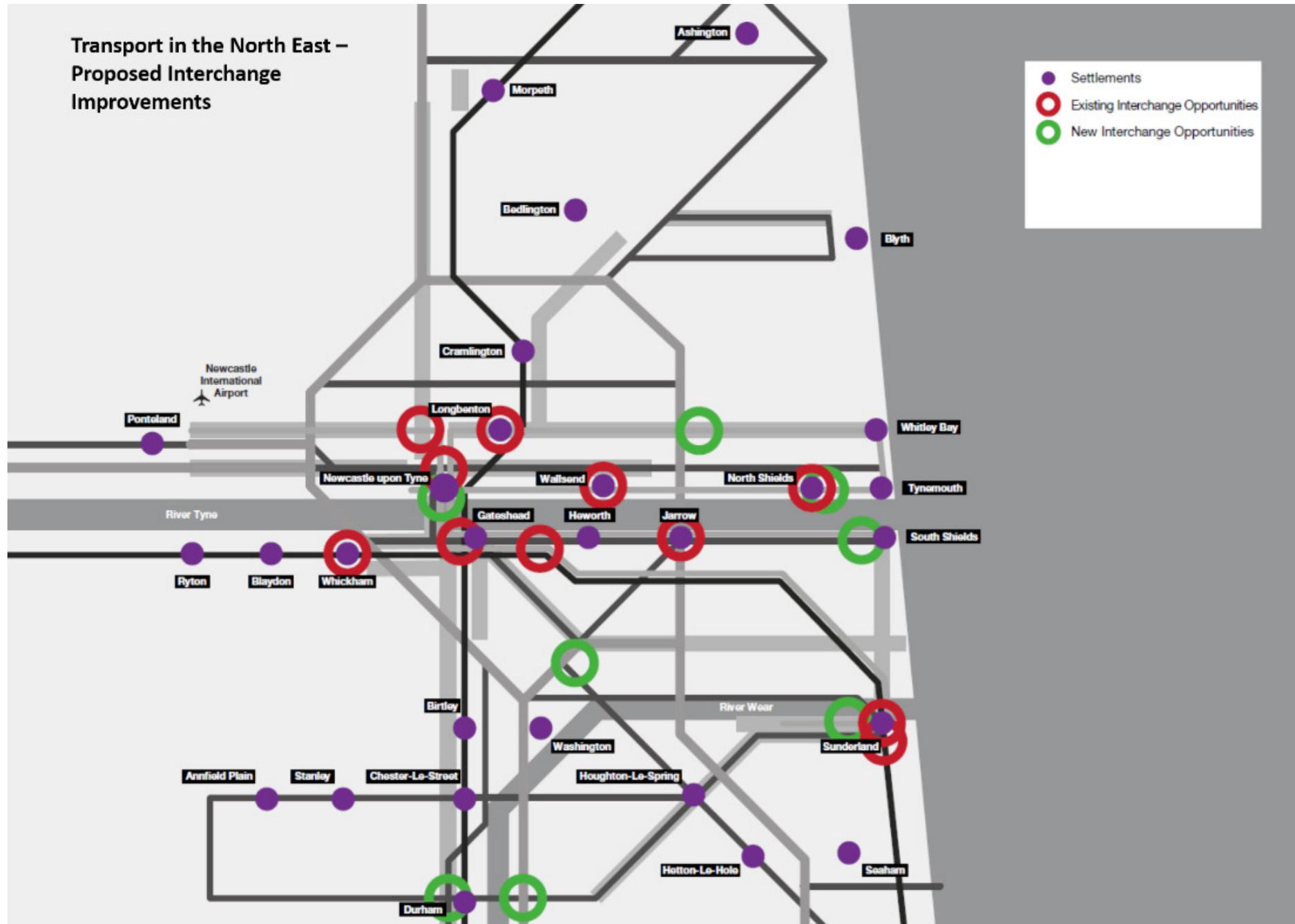


Figure 48 Baseline accessibility and with interventions to all jobs

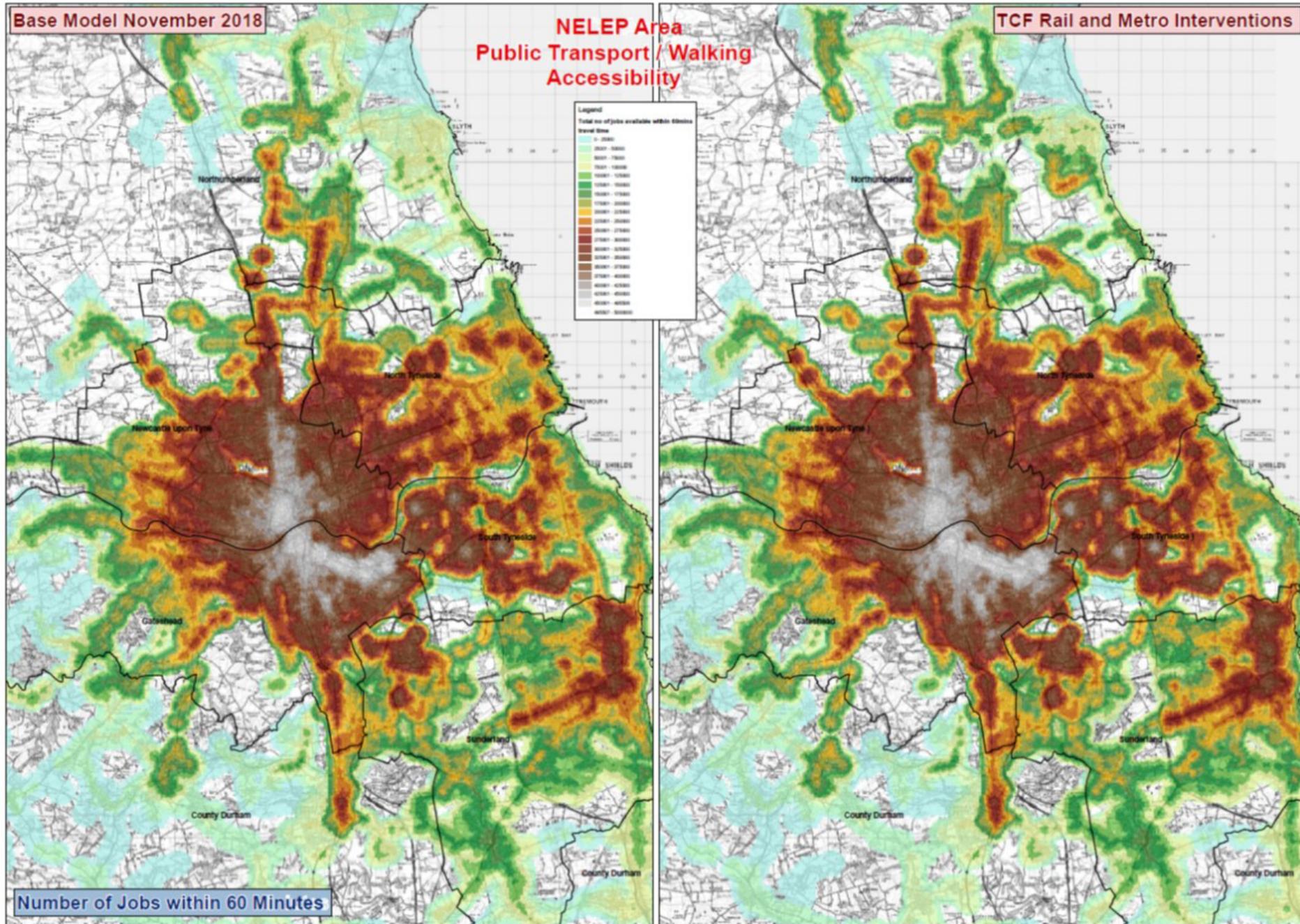
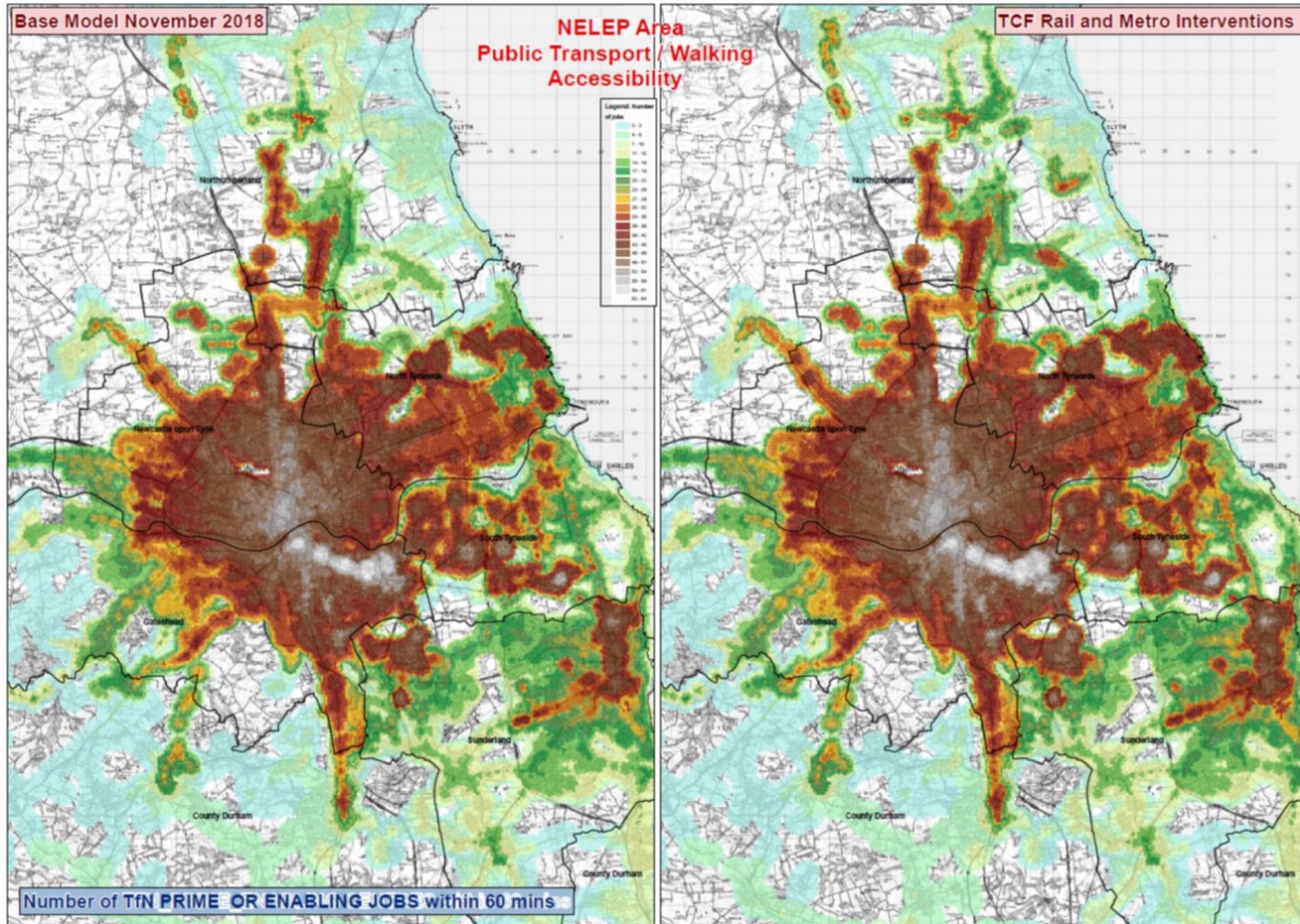


Figure 49 Baseline accessibility and with interventions to Prime and Enabling capabilities



2.347 The Northumberland Line serves substantial proportions of South East Northumberland that are within the top 10% deprived wards in England. The addition of the passenger rail service complements the existing bus services and offers new markets including interchange opportunities with Tyne and Wear Metro at Northumberland Park and mainline rail services at Newcastle Central station.

“Applying the above analysis there is a 17% increase in jobs that can be accessed by households within an hour’s journey time (59,712 jobs were accessible within 60mins public transport travel time in the base case and with interventions this increases to 71,664). This, combined with the results of the Metro Flow analysis, is a very significant improvement in access to jobs and training for people in the North East region.

2.348 The Metro flow scheme provides added capacity and resilience to the network to cater for current and future demand with a ten-minute frequency and our bus walk and cycle routes interventions connect direct to communities to improve connectivity and faster journey times through ITS interventions to a range of important economic, education and social destinations. We are aiming for a step change in how people perceive and critically use public transport, integral to our vision of more sustainable connectivity, more mobility, critically being the natural choice for people moving around our region.

2.349 This is positive from an employment market perspective providing additional choice and reach for the network as well as for wider societal benefits. With greater reach we improve access to skills and training opportunities for apprentices as well as the opportunities that will be directly provided through the transport programmes promoted. Our programme will create apprentice opportunities, in terms of design, delivery and project management. Our local partners have a track record of recruiting developing and retaining apprentices. In addition, Nexus has strong links with the Newcastle College Rail Academy where Nexus’ current Permanent Way and Signalling apprentices are undertaking learning. Nexus will use these links to ensure any Rail Academy Graduates are in the best position to engage in the delivery of the Infrastructure works should the main contractor require additional local resource together with local investment in the Metro Training and Maintenance Skills Centre (largely funded through LGF).

2.350 To maximise impact, we consider the programme should be supported by behaviour change funding to encourage use of modes and innovative affordable ticketing products. We will work with the proposals associated with the Clean Air Zone around communications and marketing to encourage modal shift. Changing work patterns (such as the emergence of the gig economy) and an ageing population have the potential to cause a shift towards off-peak travel in the coming years, so our programme is designed to be robust in this context by proposing permanent and accessible improvements to infrastructure, the benefits of which will not be limited to the traditional peak period.

Environment

2.351 Air quality in the North East fails to meet EU targets across several locations, however local authorities are committed to tackling this and much is already being done, as discussed in previous sections. Levels of NO₂ and CO₂ will only be successfully brought down if this work incorporates large scale transport interventions, which is why our programme of schemes aims to put commuters onto more sustainable modes, removing private vehicles from our roads. Our programme will harness the momentum for change and has the potential to drastically improve the environment and public health.

2.352 Meanwhile, there are transport challenges to be overcome in order to meet our economic and environmental targets. The constraints of our transport network have been detailed in previous sections. Our programme will tackle the congestion that damages the reliability of our bus network, open up Metro infrastructure to remove the barrier to a more frequent service, expand the local rail network to meet demand, enhance the park and ride experience with better locations and more convenient ticketing options, and create safe and accessible walking and cycling routes, which together will combat the dominance of the private car for travel to work. A major shift in transport habits across the North East will be essential in order to improve growth and productivity, therefore significant targeted investment in our network is critical.

Health

2.353 The public health benefits associated with encouraging a shift to public and sustainable transport are substantial. The challenging health baseline present in the region is being targeted by our TCF programme.

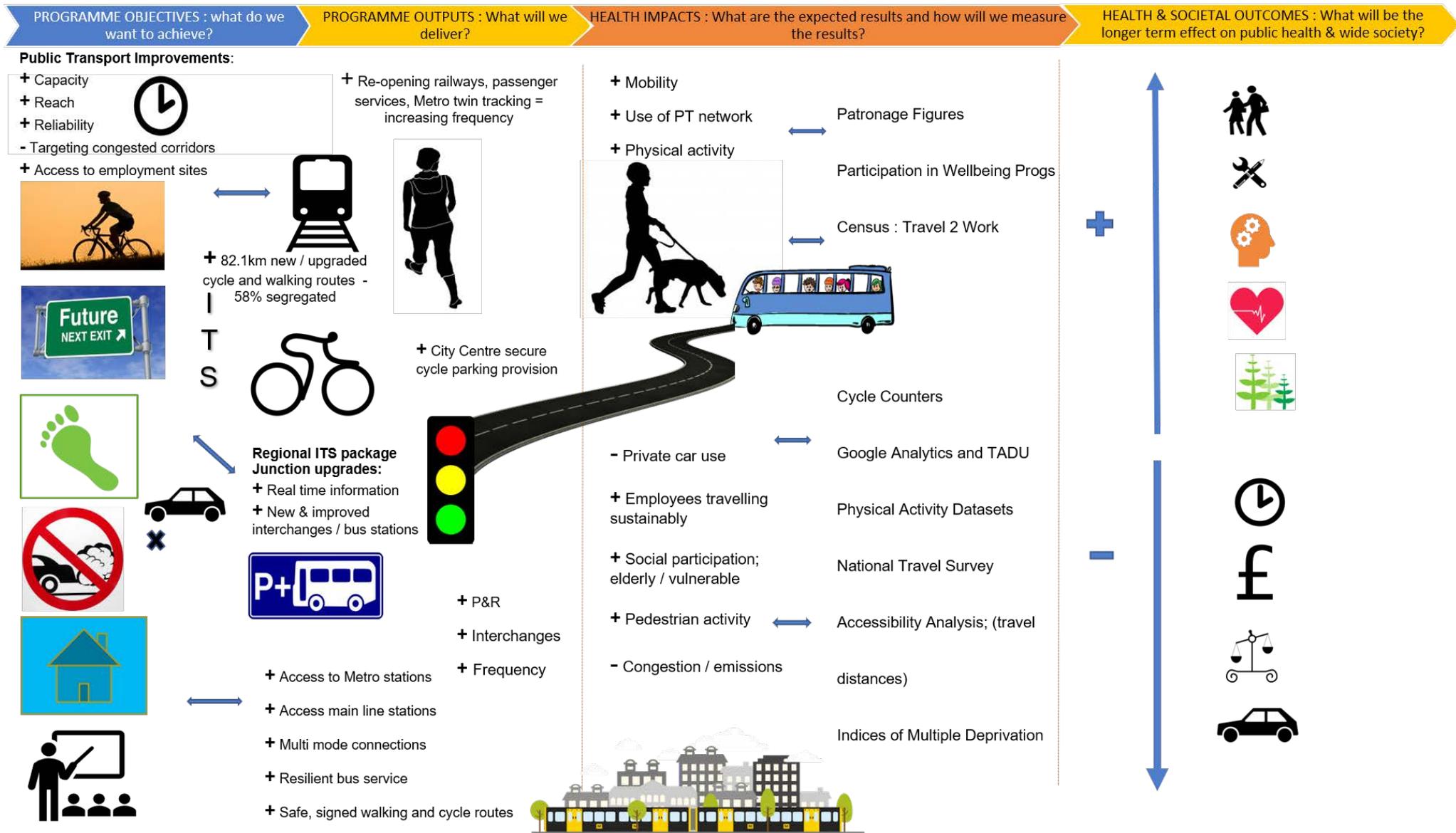
2.354 We are encouraging greater use of public and sustainable transport, by providing additional choice of improved links. This has the potential to have significant impacts on indicators such as regular levels of walking and cycling use and more general indicators around healthy life expectancy and wider societal impacts. With more activity and use of public and sustainable networks comes with it the potential for reduced incidents on the network and injuries.

2.355 Importantly we will deliver a network of improvements to provide increased confidence in the network and use to drive up quality of life across the region. We have undertaken a Health Impact Assessment working with our Public Health Directors and Public Health England to exemplify this action. This is summarised in **Figure 50** below with the full output in **Appendix G**.

2.356 **Figure 50** provides a review of the impact our TCF programme will have on the general public health of the region but also improving wider societal impacts. We anticipate significant benefits to accessibility as demonstrated through our analysis, but crucially to address affordable access to the network. In doing so we can drive up patronage which has positive activity benefits associated with this. On the societal impacts we are looking to deliver improved perceptions on the reliability of the network together with an increased skills base, increased labour market participation and an increased awareness of personal environmental impact.

2.357 Undertaking this assessment has enabled us to strengthen indicators and look at a more focused monitoring and evaluation strategy using different forms of data as to how people use the network.

Figure 50 Public health and societal outcomes of planned investments



Public Opinion

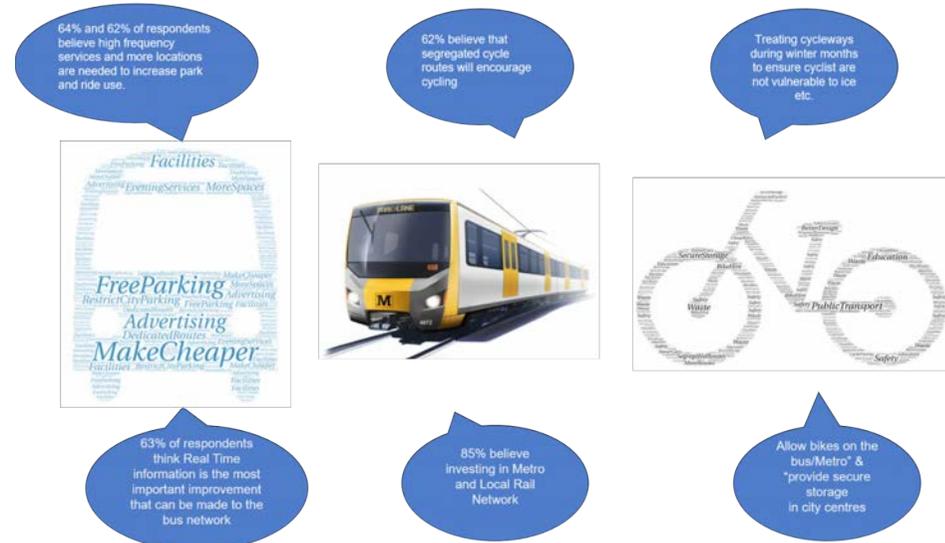
2.358 At the outset in designing the programme we sought public opinion to test needs. This was attained through existing survey results which supported the Air Quality and Nexus Insight panels.

2.359 In order to ensure a robust programme, we retested our concepts through an online survey which was available to all residents in the region between 28th Aug 2019 to 11th Sept 2019. Promoted through social media including on the My Metro page, the response also included feedback from participants of the Insight Panel. 573 responses were received.

2.360 The findings illustrated in **Figure 51** can be summarised as:

- Real time information is the most important improvement that can be made to the bus network
- Segregated cycle routes are believed to be the best way to encourage the public to cycle more
- High frequency services and more locations are believed to be the top two ways to encourage the use of Park and Ride
- Investment in the Metro and Local Rail Network perceived to benefit the region most
- 26% of respondents have avoided applied for a job because of poor public transport connectivity,
- 79% of respondents believe that investment will change travel habits,

Figure 51 A summary of survey responses



2.361 The results provide a great level of assurance that the schemes being promoted through this submission are of the right calibre to make a significant difference to the way members of the public travel around the region.

2.362 As a region we are looking to make significant investments in our rail and metro network, transformational upgrades to the highway network to improve bus journey times with associated improved customer information. We are improving the quality and reach of the signed walking and cycling network, 79% of which will be segregated with step changes in the typology and design of the network investing in quality gateways to our cities supporting linked regeneration strategies and improving a significant number of interchanges and a network of park and ride facilities.

2.363 The pen portraits in **Figure 52** also help to demonstrate the impact this programme will have on the everyday lives of the travelling public around the region.

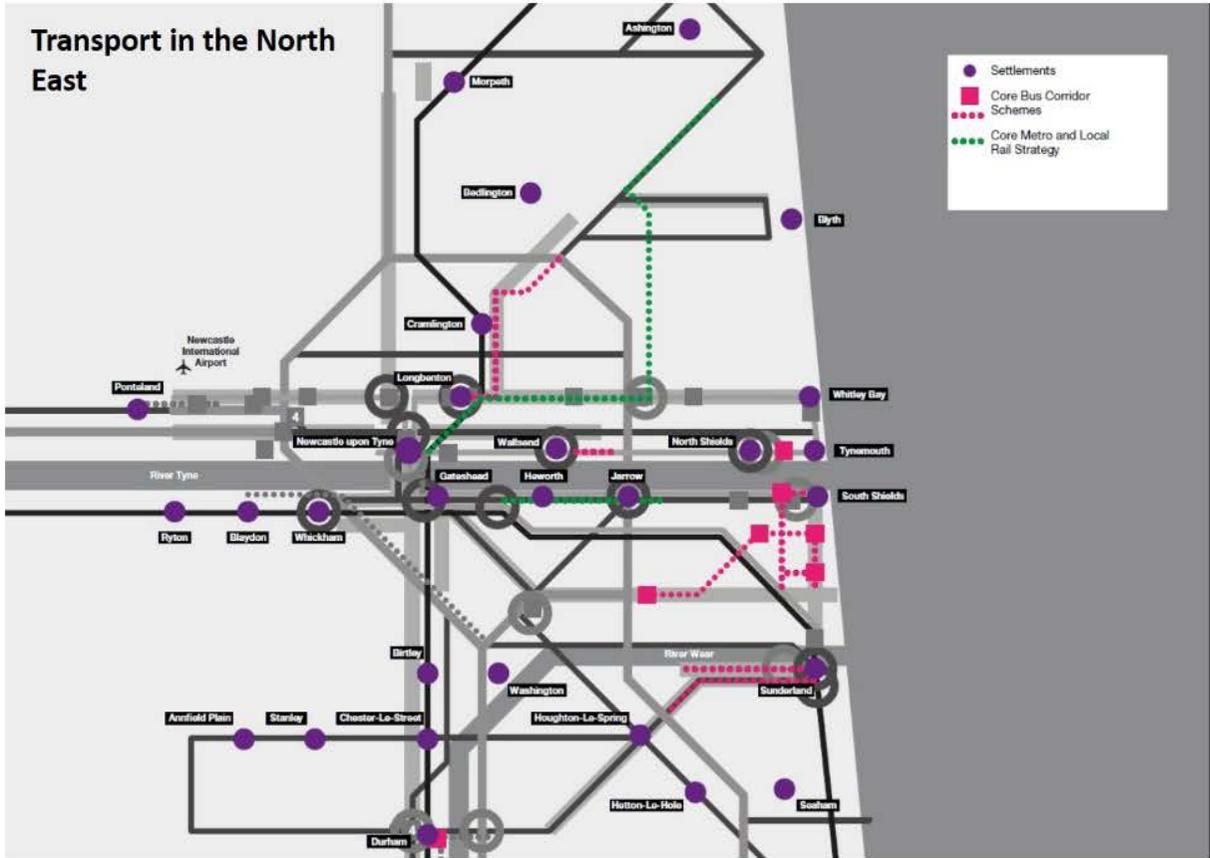
Figure 52 Pen pictures

'I'm really supportive of the off-road cycle connection between Newcastle Airport, Callerton and Ponteland along the disused railway line. I live a few miles from Ponteland and work in a business park in Longbenton where congestion in rush hour is a big challenge. It gives me options to travel safely by bike to the Metro and onwards to Longbenton, with good bike parking provision or even cycle all the way to work on NCN1 when the weather is decent. I also support any investment into making the Metro system more reliable' (Alex, Black Callerton).

'I still live at home in Gateshead but am in my 2nd year at Sunderland University and use public transport daily through the week. I get the Metro to Sunderland and the bus Connect service to the campus. I support the investment in the Metro system reliability and better bus integration; more frequent and reliable service would give me confidence that my journey isn't going to be interrupted. I also support investment into real time information'. (Phillippe, Dunston)

'I am applying to study Renewable and Subsea Engineering at Newcastle College. I don't have a car and intend to stay at home so the Northumberland line will mean that I can transfer to bus at Blyth Bebside to access the Port of Tyne Training Services. It also opens up opportunities to 12,000 jobs in the area once I complete my training. (Varun, High Heaton).'

'I work in the centre of Newcastle and live approximately 5 miles out at Newcastle Great Park. There is a good bus service that I use regularly but it would be nice to have an alternative some days. There have been loads of improvements to cycling into town, mostly off road. I would really like to cycle, but poor facilities at work and lack of secure parking has put me off. I am really pleased to hear that facilities will be introduced at Eldon square, this is long overdue and gives me an alternative to bus' (Andy, Gosforth).



'I work in Middlefields industrial Estate and walk to / from the Metro at Tyne Dock, which takes about 10 minutes. It's a well used route for workers in the area so good to see that more will be done to improve access and safety around the station, particularly past peak time when it's a bit quieter. You feel safe on the Metro but it's the access to and from the Metro but people want good facilities parking or you can leave your bike' (Ali, Wrekenton)

'I work at Doxford International Business Park, which is a huge employer in Sunderland. It's really important to have good links to housing and employment in this area and taking pressure of routes such as the A690 corridor, which is definitely an issue for a lot of the staff that work here, far too many people travel by car. I usually drive to work but I really support more investment into bus and cycling in this area, gives people more viable and reliable options and I would definitely consider shifting to bus or bike if it proved more efficient'. (Aaron, Hendon).

'Really good to see that this bid will include lots more P&R and bus improvements around Durham. I regularly use the Sniperley P&R site to access the centre. I'm retired but I come into the centre a couple of times a week. The facilities there are really good and it always seems really busy. It's good to know that Durham bus station is going to be replaced as well and facilities updated. I usually don't have to wait long for a bus but makes a big difference especially in the winter months having a comfortable place to wait, and creates is attractive for visitors to the area, students etc'. (Edmondsley, County Durham).

Contribution of Schemes to Objectives

Programme level

2.364 At a programme level, our TCF bid is demonstrably aligned to the two overarching objectives that have been drawn down from the TCF guidance. The programme addresses the challenges set out earlier in this chapter and our improved transport network will accelerate economic growth, improve air quality, and better connect people to opportunities across the city region.

Focus on improving capacity on commuting trips, access to employment centres, enterprise zones and development sites, improving reliability, and supporting economic growth

2.365 The programme contributes to delivering a more coherent sustainable transport network between residential areas and centres of employment. In many cases the schemes enhance the current network by filling in gaps and extending existing interventions. As demonstrated by the maps in **Appendix D**, the schemes are clustered around our city and town centres, as well as areas of development such as MetroGreen and IAMP/Nissan, with spokes spreading out to residential suburbs. By transforming the way people travel to work in the North East along these corridors and reducing journey times, the programme will support increased productivity, reducing the productivity gap between the North East and the rest of the UK.

2.366 Passenger experience has been at the forefront of scheme development. Our packages will reduce journey times for buses through priority measures reducing the potential for of delays in amongst general traffic. Access to public transport will also be improved in several schemes, meaning passengers will find it easier to use public and sustainable transport for their whole commute from door to door. Public realm and transport facilities will be transformed across our three city centres, creating a cleaner, more practical and more comfortable environment for passengers, again providing a strong impetus to shift to public and sustainable transport to work.

Reduce carbon emissions, for example by bringing about an increase in the volume and proportion of journeys made by low carbon, sustainable modes including walking and cycling

2.367 This programme can provide solutions to the region's air quality challenge and drive for decarbonisation. By improving public and sustainable transport it is expected that fewer people will choose to drive to work and instead will walk, cycle, or travel on bus, train or Metro, for all or at least a large part of their journey. The maps in **Appendix D** illustrate how the proposed schemes have strong links into the existing sustainable transport network, for example connecting Metro and bus stations to residential areas, again encouraging modal shift towards less polluting forms of transport and by virtue creating a healthier society and safer highway network.

Package level

2.368 Each individual scheme has been scored against the TCF objectives and the full results and scores can be found in **Appendix H**. Maps to illustrate each thematic package in the context of the existing transport network are included as **Appendix D**. Each package is shown to provide a valuable return on investment – each provides the crucial network of connections between residential areas and employment centres, through a range of sustainable, low-carbon modes, that is necessary if we are to attain our economic and environmental objectives.

2.369 The ways in which each thematic package in our preferred package of schemes addresses the two compulsory TCF bid objectives is summarised in the tables below.

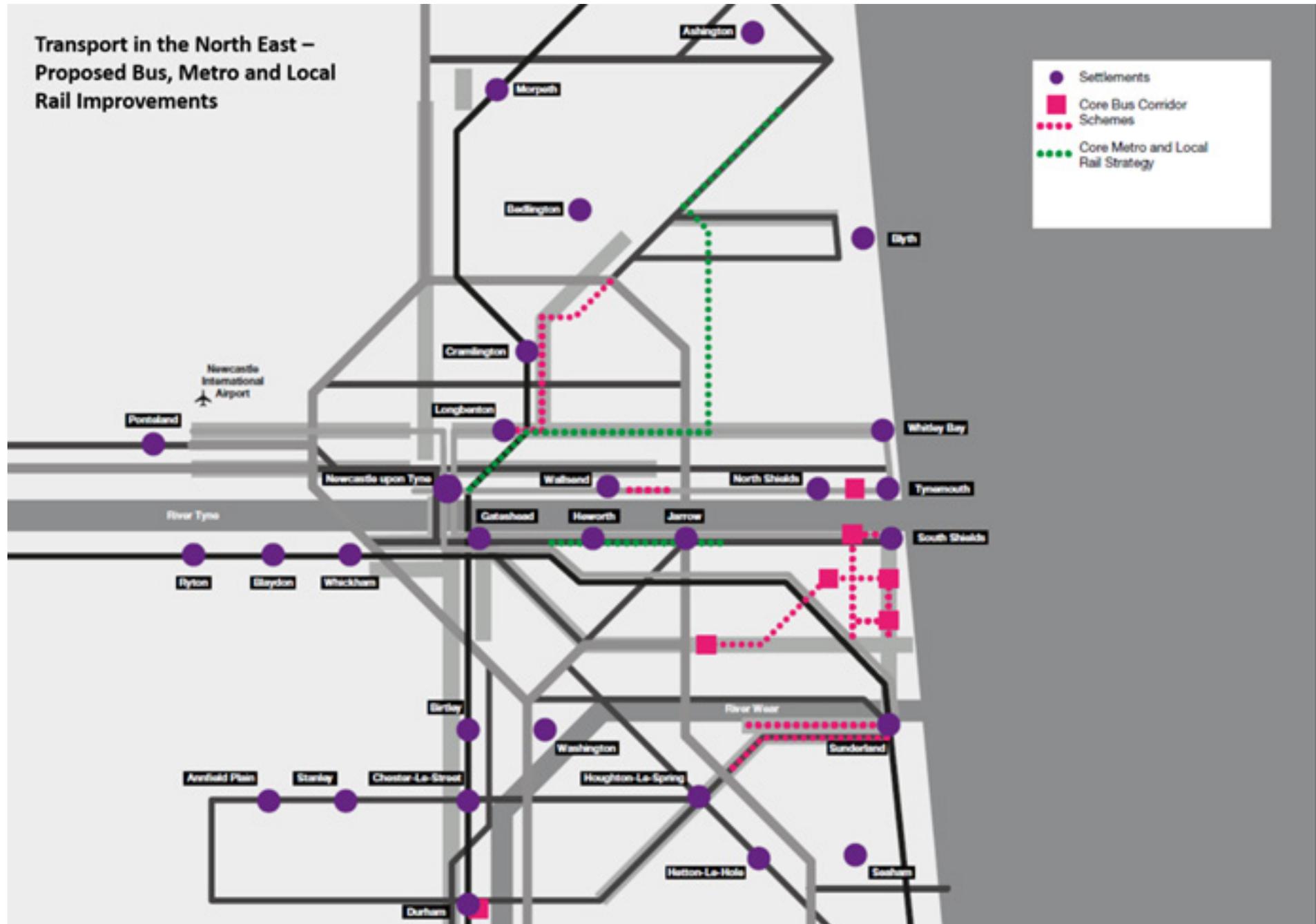
Transforming Bus Corridors

- A188/A189 Bus Corridor ■; Hills Street/Gateshead Quays ■; A195 Bus Lane ■; Gateshead Interchange Bus Lane ■; North Shields Transport Hub ■; South Shields-Newcastle Bus Improvements ■; South Shields-Sunderland Bus Improvements ■; Durham Bus Priority ■; Durham Bus Station ■; Holmeside Bus Rationalisation ■; Sunderland Inner Ring Road Bus Improvements ■; Chester Road Bus Corridor ■; A690 Route Action Plan ■; Intelligent Transport Systems ■■ ■■ ■■ ■■

Our 'Transforming Bus Corridors' package tackles the congestion hotspots that currently plague our bus network, causing delays and unreliability. By speeding up bus journeys from areas of housing into employment centres, this package of interventions will persuade more commuters to switch from their cars for their travel to work. We showcase the interventions proposed in relation to interchange improvements on the bus and rail network in **Figure 53** below.

<p>Improving capacity on commuting trips, access to employment centres and development sites to support economic growth</p>	<p>Bus journey times will be reduced on commuter routes (A188/A189 into Newcastle, also linking to Cobalt and Silverlink; A195 linking Heworth interchange to Follingsby Park; links into the urban cores of our town and city centres). This will reduce congestion through Gateshead, North Tyneside and South Tyneside thereby improving productivity through better regional connectivity. The rationalisation of city centre bus routes, notably in Newcastle and Sunderland, will also have a positive impact on public realm and pedestrian access to work and leisure</p>
<p>Reducing carbon emissions to increase the volume and proportion of journeys made by low carbon, sustainable modes and bringing about improvements in air quality including areas that are in exceedance of target levels</p>	<p>A reduction in journey times will make bus routes more attractive and will therefore encourage modal shift from private car; in combination with the longer-term replacement of bus fleet this will help to reduce air quality exceedances. Improved facilities for passengers, notably at major bus stations in Durham and North Shields, will result in improved customer satisfaction and encourage an increase in bus patronage and a shift away from private vehicles</p>

Figure 53 Bus, Metro and Local Rail interchange map



Case study: South Tyneside bus improvements – South Shields to Newcastle and Sunderland

South Tyneside, with its largest centres in South Shields, Jarrow and Hebburn and settlements at Cleadon, Whitburn, and the Boldon area, has a working age population of 93,300. It is also the location of the Holborn Riverside enterprise zone as well as IAMP on its boundary with Sunderland. In South Shields town centre, a major regeneration project is well underway with the £100m South Shields 365 masterplan which includes a new transport interchange currently under construction.

South Tyneside Council has worked closely with bus operators and Nexus over the course of the last several years to identify the main areas of congestion on South Tyneside's highways network. The two corridors selected reflect the main bus corridors for bus services from South Shields to Newcastle and Sunderland city centres. Addressing congestion on these vital routes through UTMC traffic signal upgrades and physical junction improvements will have demonstrable effects on the frequency and reliability of public transport services within South Tyneside and to the main city centres and employment sites.

The proposal aligns closely with the Transforming Cities Fund objectives as follows. It would:

- Drive up productivity through improved access to city centres and suburbs – by prioritising buses and improving journey time reliability, meaning vehicular trips will be removed from the network during peak periods, reducing congestion in the identified hotspots;
- Improving access to work and delivering growth – workers, and those particularly on limited incomes, will benefit from quick, reliable journeys on public transport, reducing the need to own and maintain a private vehicle for comparable journeys is reduced;
- Delivering apprenticeships and improving skills – improving access via public transport modes to employment sites such as Sunderland City Centre and the impending IAMP site will attract more and improved jobs into South Tyneside;
- Tackling air pollution and carbon reduction – the proposed measures will alleviate congestion and will improve air quality at selected junctions throughout the borough, enhanced by a successful application to the Clean Bus Technology Extension Fund (most of the commercially operated buses in South Tyneside are expected to be Euro 6 standard by April 2020);
- Delivering more homes – the strategic corridor packages will improve several junctions that are close to saturation point. Further to this, the Boldon/Tilshed level crossing closure scheme with the provision of a new road bridge and highway links, will unlock development sites with a potential for over 1000 housing units

Transforming Cycling and Walking Corridors

Birtley to Eighton Lodge ■; Newcastle & North Tyneside Strategic Cycle Links ■; Newcastle Outer West ■; Airport-Ponteland Cycle Route ■; Intu Cycle Storage ■; West Tyneside Cycle Route ■; Metro Green Sustainable Access ■; Askew Road Cycle Route ■; Keelmans Way ■; Newcastle Streets for People ■; North Tyneside Metro Cycle/Walk Links ■; South Tyneside Healthy Metro Access ■; Durham Walking/Cycling Improvements ■; A690 Strategic Cycle Network ■

2.370 Our 'Transforming Cycling and Walking Corridors' package closely interconnects with existing infrastructure, resulting in a coherent yet widespread network across the North East. In combination with our proposed transformation of public transport, this package will encourage more people to leave their cars at home and take up an active mode for the journey to work. **Figure 54** below demonstrates the overall improvements to the cycle network and interchange opportunities that exist.

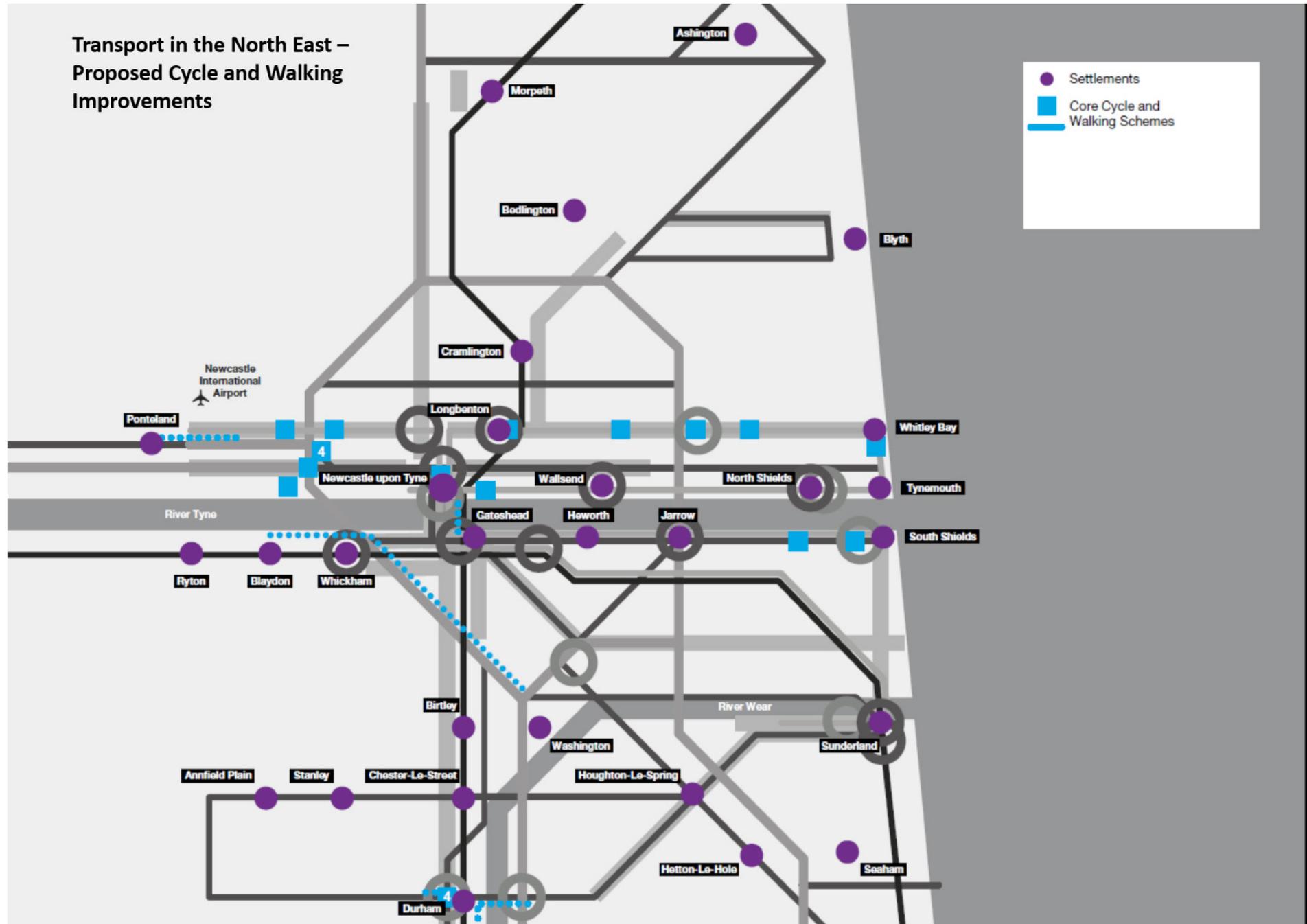
Improving capacity on commuting trips, access to employment centres and development sites to support economic growth

The longer route interventions along commuter corridors such as West Tyneside cycle route, Askew Road and Durham City Centre provide alternative access to centres of employment in all three city centres, plus Team Valley, Blaydon, Metrocentre, and further afield through interchange with Metro. The A690 corridor scheme delivers a substantial improvement along the alignment of a radial route into the City Centre and serving an established business park, directly connecting 22,243 people to the connection (those within 5km) Smaller scale interventions such as Metro Green and Intu Eldon Square cycle storage fill in gaps and connect to the wider network to remove barriers to use of existing infrastructure. The health benefits of walking and cycling, even for part of a journey, has been shown to improve productivity levels

Reducing carbon emissions to increase the volume and proportion of journeys made by low carbon, sustainable modes and bringing about improvements in air quality including areas that are in exceedance of target levels

Several schemes across the region have shown consistency in aiming to provide better walking and cycling access to the Metro network (Airport to Ponteland cycling route, Newcastle Streets for People, North Tyneside cycling/walking links and South Tyneside Healthy Metro access). Work is ongoing to draw up high level design principles to ensure interventions across the region are coordinated and meet a consistent standard. Use of public transport would also be expected to increase by improving access to it for pedestrians and cyclists; the schemes provide first/last mile solutions which enables and encourages modal shift to low carbon transport for whole journeys

Figure 54 Proposed cycle and walking improvements



Case study: Metro Green Sustainable Access

Metro Green is an ambitious project to transform brownfield land surrounding the Metrocentre, on the south bank of the River Tyne in Gateshead, into a new sustainable community of 850 homes, up to 15,000m² of office accommodation, in addition to commercial, leisure and community facilities, and a network of green spaces and pedestrian and cyclist routes. As well as the retail and leisure opportunities offered by the adjacent Intu Metrocentre, there are currently also several office developments, factory units, workshops, warehouses and open storage uses and depots in the area.

The scheme incorporates a range of sustainable transport improvements, particularly focused on pedestrian and cyclist access to the development, including new and upgraded pedestrian and cycleways, and bus priority (with an additional bus lane), enabling the longer term. The proposal aligns closely with the Transforming Cities Fund objectives as follows. It would:

- Drive up productivity through improved access to city centres and suburbs – improving connectivity within the area linking employment and housing sites into the Metrocentre Interchange
- Improving access to work and delivering growth – widening access to the expanding employment opportunities in the MetroGreen area and improving links from a housing growth area to employment opportunities across the wider area
- Tackling air pollution and carbon reduction – reducing congestion on the section of the A1 at the Metrocentre where NO₂ exceedances have been identified
- Delivering more homes – providing the right environment to establish and maintain sustainable travel as a feature of this growth area

Transforming City Centre Gateways

Newcastle Central Gateway ■; Transforming Newcastle City Centre ■; Sunderland Central Station ■;
Sunderland Station Car Park ■; Durham Rail Station Access ■

2.371 Our 'Transforming City Centre Gateways' package will result in a step change in the public transport environment. Delivering a significant improvement of three major transport hubs in our region, each of which is situated amongst significant employment growth, will greatly enhance people's sustainable access to work in our cities.

Improving capacity on commuting trips, access to employment centres and development sites to support economic growth

The package improves access by rail into our three city centres, with major enhancements at Newcastle and Sunderland stations and improvements to accessing Durham station, enhancing local, regional and national links to the clusters of high value jobs within those centres

Reducing carbon emissions to increase the volume and proportion of journeys made by low carbon, sustainable modes and bringing about improvements in air quality including areas that are in exceedance of target levels

Sustainable access to city centres will be more attractive and will encourage modal shift from car. More attractive rail links will reduce the number of journeys currently being made on our strategic road network, thereby easing congestion and improving air quality. More modern and comfortable facilities will improve customer satisfaction levels and perceptions of public transport, making it first choice for a greater number of commuters travelling in the region above the appeal of the private car

Case study: Newcastle Central Gateway

Newcastle Central Station is the principal rail gateway to Newcastle and the whole of the NELEP area, with 8.7m rail passenger usage in 2017/18 and a predicted 38% increase in passenger numbers by 2023. Phase 1 of the Central Gateway (funded through LGF) transformed the area surrounding the station, with vastly improved pedestrian and cyclist facilities and the provision of public transport priority. Central Gateway Phase 2 continues the transformation of access to Newcastle Central Station and will act as a catalyst for growth, enhancing pedestrian and rail passenger experience, while in the longer term facilitating the development of Forth Yards and resulting in additional economic benefits including increased employment opportunities. Key to this programme, our Transforming Cities Fund bid proposes further transformative public realm and pedestrian/cycle access improvements, including a new pedestrian/cycle access point in the west wall of the station, refurbishing the Forth Street pedestrian tunnel, and closing Orchard Street to vehicular traffic.

The proposal aligns closely with the Transforming Cities Fund objectives as follows. It would:

- Drive up productivity through improved access to city centres and suburbs – improving access for pedestrians and rail passengers to a concentration of high-value employment which are near the station
- Improving access to work and delivering growth –ensuring that travellers would be more easily able to access the high value jobs located around the station particularly in industries which are inherent to the SEP (Professional Services, Health Innovation, Digital)
- Delivering apprenticeships and improving skills – improving skills relating to urban design and placemaking, and links into improving rail skills pipeline, a nationally important issue
- Tackling air pollution and carbon reduction – areas proximate to Central Station are the poorest areas of air quality within the city, with NO2 levels which are three times the national limit values. Improvements to the location and movement of vehicles around the station footprint would assist in lowering idling and have consequent improvements in people’s health and wellbeing
- Delivering more homes – contributing to the deliverability of sites to the south of the station, which could be linked to between 1600 and 3100 homes (dependent on mix of other uses)

Case study: Sunderland Central Station

Sunderland is the region's second largest city with a population of 277,200 and a working age population of 175,500. Aside from the employment opportunities offered within the city centre, the local area also incorporates three enterprise zones at Port of Sunderland, IAMP and the A19 corridor, and significant employment centres at Doxford Park and Sunderland Software City, home to Digital Catapult North East. Sunderland rail station provides local rail access towards Newcastle as well as national rail links to London, and incorporates Metro services between Newcastle Airport and South Hylton which use the same track and platforms as heavy rail services. Our Transforming Cities bid proposes to transform Southern access to the station from Waterloo Street as part of a major station redevelopment, greatly improving facilities for passengers and pedestrians using the station concourse.

The proposal aligns closely with the Transforming Cities Fund objectives as follows. It would:

- Drive up productivity through improved access to city centres and suburbs – a new platform will open up new routes for rail users in Sunderland, leading to reduced journey times and reduced road congestion because of modal shift
- Improving access to work and delivering growth – improving links to jobs to the west of Sunderland, and links into Sunderland city from other parts of the region, particularly via the Metro network
- Tackling air pollution and carbon reduction – an enhanced railway station has potential to promote low carbon travel, through the re-opening of a third platform to increase metro and heavy rail capacity, and by attracting new passengers with improved station facilities and public

Transforming Park and Ride

Metro Park & Ride Enhancements ■ ■; Follingsby and Callerton Park & Ride ■ ■ ■; Durham Park & Ride Expansion ■

2.372 Our 'Transforming Park and Ride' package builds upon an already well-used network and provides extra capacity at strategic locations to get commuters into cities, business parks and other centres of employment sustainably. A transformed ticketing offer will result in a modern, integrated system that connects people seamlessly to opportunities. Our proposed Park and Ride Network is shown below in **Figure 55**.

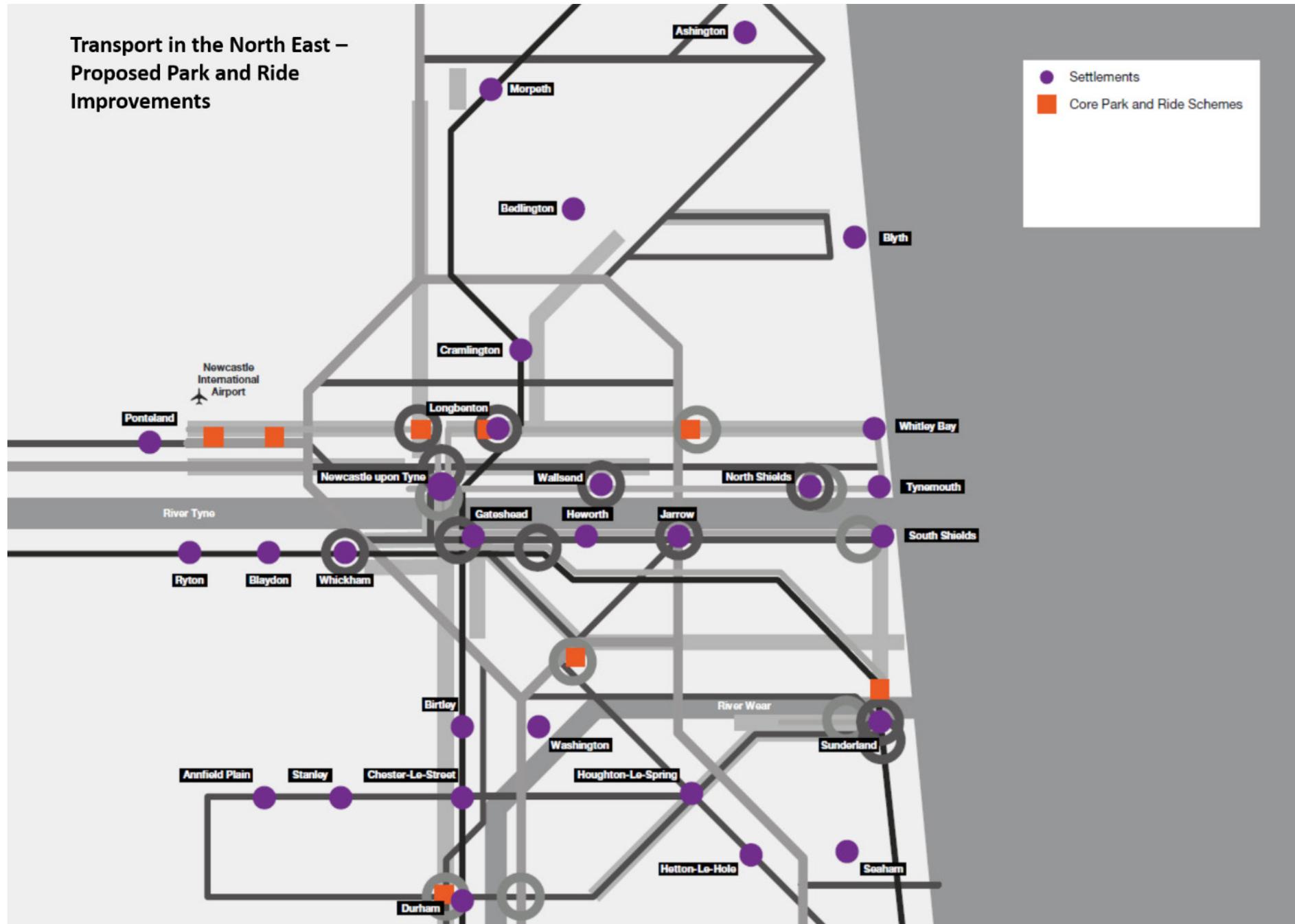
Improving capacity on commuting trips, access to employment centres and development sites to support economic growth

The park and ride package improves sustainable access to the employment and educational opportunities located in our city centres, business parks such as Follingsby/IAMP, and universities, reducing congestion on commuter corridors and so reducing journey times for all road-based modes. Park and ride enhancements at strategic points on the Metro will improve access to sustainable transport from right across the region

Reducing carbon emissions to increase the volume and proportion of journeys made by low carbon, sustainable modes and bringing about improvements in air quality including areas that are in exceedance of target levels

New and improved park and ride sites will intercept traffic on commuter routes (A1, A19, A189) and transfer passengers to low carbon modes. This modal shift, particularly within AQMA, will have a significant impact on air quality. Interchange between car and public transport will become less complex, and a more seamless transition between modes could increase uptake by reducing journey times and making park and ride a more attractive option than driving for a full journey

Figure 55 Park and Ride interchange map



Case study: Durham Park and Ride Expansion

Increasing economic ambition within Durham city is expected to be reflected in an increased number of trips into the city centre, potentially worsening congestion on corridors like the A690, which runs north east to south west through the city, and the A167, running north to south along the western edge of the city. There are currently three existing park and ride facilities situated at Sniperley, Belmont and Howlands, intercepting traffic on radial routes and providing an alternative to parking in the city centre.

The proposals for this Transforming Cities bid are to create a new 550 space park and ride site to the west of Durham City at Stonebridge, to intercept traffic on the A690, and to expand the site at Sniperley to increase capacity. This will facilitate several transformative developments within Durham city including Milburngate House, The Gates, Durham University expansion, County Hall relocation and Aykley Heads employment site.

The proposal aligns closely with the Transforming Cities Fund objectives as follows. It would:

- Drive up productivity through improved access to city centres and suburbs – reducing congestion by providing an attractive alternative to driving into the city centre, thereby improving journey time reliability for public transport in the urban core
- Improving access to work and delivering growth – expanded capacity for park and ride into Durham city is essential to the delivery of the Aykley Heads development, which will create up to 6,000 additional jobs, as well as meeting the demand expected to be created by other developments in the city
- Tackling air pollution and carbon reduction – the proposals will reduce the number of car journeys made within the designated AQMA in Durham city, with estimated vehicle kilometre savings of 1,764,921 by 2023 and 2,082,490 by 2037, resulting in lower levels of CO2 and other emissions

Delivering Metro and Local Rail Strategy

Northumberland Line ; Metro Flow   

2.373 Our ‘Delivering Metro and Local Rail Strategy’ package boosts economic growth by providing new and more frequent rail links between existing and developing residential areas and places of work. The benefits of this package will reach across a vast swathe of our region, delivering truly transformational outcomes. The future network improvements are shown in **Figure 53** above.

Improving capacity on commuting trips, access to employment centres and development sites to support economic growth

This package enables a reduction in journey times and increased frequency between our city and town centres across the region. The schemes link centres of employment to areas of deprivation and low car ownership, allowing more people to get into employment

Reducing carbon emissions to increase the volume and proportion of journeys made by low carbon, sustainable modes and bringing about improvements in air quality including areas that are in exceedance of target levels

Modal shift from car to the low carbon options of Metro and rail will increase, because of improved resilience on Metro and the new sustainable transport option being offered for those travelling from Northumberland into Newcastle and further afield. The significant reduction in journey times from Northumberland to Newcastle by rail in comparison with other modes, and enhanced frequency on Metro would come together to form a higher quality Metro and local rail network, which could underpin a shift in attitudes towards sustainable transport across the region

Case study: Northumberland Line

South East Northumberland holds significant opportunities for the region. The principal settlements here are Blyth (population 37,000) and Ashington (population 28,000) (Centre for Towns 2017). Since the historic decline of its mining industry, Ashington has become associated with narratives of decline. However, Blyth is an economic ‘good news story’ with new clusters of innovative businesses, the Port of Blyth – which handles 2 million tonnes of freight each year – and some significant development sites for renewable energy (Port of Blyth 2018). The port and offshore cluster is a major opportunity, and this is fast being joined by more innovative manufacturing companies – for example Tharsus robotics are undertaking genuinely world-leading work.

The Ashington, Blyth and Tyne railway line once connected these settlements with Newcastle, however, in 1964 passenger services were withdrawn. The proposed intervention would see the line – still used for freight – reopened for passengers, with new stations at Ashington, Bedlington, Blyth Newsham and Northumberland Park.

There are several constraints on growth in this region and this intervention could unlock this corner of Northumberland’s significant potential. The proposal aligns closely with the Transforming Cities Fund objectives as follows. It would:

- Drive up productivity through improved access to city centres and suburbs – by opening up access between Ashington and Newcastle, thereby bringing prosperity and regeneration to the area
- Improving access to work and delivering growth – by allowing residents in the area to access jobs in the wider conurbation; by improving access to jobs in Blyth from across the North East; and by providing businesses with access to a skilled workforce – especially in the strong engineering cluster where businesses currently struggle to find skills and appeal to graduates
- Delivering apprenticeships and improving skills – by opening up new learning opportunities for Ashington’s young people, as travel to one of the region’s colleges becomes practical via improved transport networks
- Tackling air pollution and carbon reduction – by providing opportunities for those who currently travel by car to use public transport instead
- Delivering more homes – by stimulating investment in the region and helping to bring forward the delivery of housing allocations

Case study: Metro Flow

The Metro is a significant asset for the region. It is popular and well-used, especially at peak hours, and with improvement will achieve the government's objectives for the Transforming Cities Fund. The Metro links the northern areas of North Tyneside and Newcastle to Gateshead, South Tyneside and Sunderland. Crucially, the network in turn integrates with local and pan-northern rail schemes – for example the Northumberland Line proposal, and schemes within the work programme which improve access to Metro stations via walking or cycling.

In 2017/18 annual Metro usage was 36.4 million passenger journeys, with 60 million trips a year forecast by 2030. However, overcrowding on Metro, reliability of the existing fleet, and station quality are growing issues.

The most urgent issue concerns the capacity constraints that result from some remaining single-track sections in the southern part of the network. Unless this is addressed – as outlined in this programme - the full potential of the Metro to support regional productivity, decarbonisation and social development cannot be realised.

Major improvements to the Metro system are already planned, with funding committed. These will help the Metro to support economic growth and sustainability. Plans include:

- Fleet renewal beginning in 2021 and complete by 2024
- An asset renewal plan that will be continued into the 2030s with a further £335m of investment into network infrastructure
- Investigating the economic benefits of adding new Metro corridors, and the technical feasibility of delivering them
- Technological innovations, such as advances in fuel cell technology, to enable greater future network flexibility.

However, without dual tracks right across the system the impact of this ambitious programme will be severely diminished. This scheme therefore proposes to dual the track between Pelaw and Bede, and to procure five additional trains, in order to achieve:

- More capacity: an estimated 30,000 additional spaces per day across the system
- More frequency: a 20% uplift in daytime services network wide each week
- More resilience: 100% improvement in service recovery on the part of the network which is most affected

Improving the Metro would meet the TCF objectives as follows:

- Drive up productivity through improved access to city centres and suburbs – the Metro connects the region's major urban and suburban centres, and improving its performance would improve access
- Improving access to work and delivering growth – every additional passenger journey the Metro and Local Rail network contributes £8.50 to the regional economy through increased productivity, economic growth and labour access

Rebalancing growth

2.374 In the Industrial Strategy, the government set out its ambition to rebalance the economy and drive growth across the country, supporting high value transport investments in areas of the UK where productivity is lower. This TCF programme will result in some important rebalancing outcomes, primarily in terms of the economy, but also encompassing other impacts, for example on public health and social mobility. Significant investment in transport interventions is essential if we are to close the gap between the North East and the rest of the country. **Table 20** summarises how we have considered the need to rebalance growth in the development of this programme.

Table 20 Rebalancing growth

<p>Step 1: Setting the context</p>	<p>The North East faces several disadvantages in comparison with the rest of the country. This includes economic growth, which is 16% lower than the rest of England excluding London, and productivity levels, which are 6% below the English average. The North East also suffers from above average levels of deprivation according to the IMD 2019. Our TCF programme is designed to address this fundamental inequality by boosting access to work, thereby closing the economic gap between our region and the England average.</p> <p>Using ‘improved productivity’ as a priority objective throughout the sifting process meant that economic rebalancing is a core part of the TCF programme design and development, with schemes concentrating on areas where better access to employment will create local and regional growth. For example, the programme will fulfil demand in deprived parts of South East Northumberland to travel into work within central Newcastle. The benefits of the programme are therefore focused on commuter corridors, between residential areas (both existing and planned) and centres of employment.</p>
<p>Step 2: Identifying transport barriers</p>	<p>There are several transport barriers that currently hinder economic growth in the North East. Congestion on arterial routes into our urban centres negatively affects bus journey times and reliability, there are resilience issues affecting Metro as well as a constraint on the frequency of its services, and our rail and walking/cycling networks do not reach significant areas of demand. All of this makes it harder for people to access jobs and thereby limits the growth of the North East economy.</p> <p>The TCF programme has been designed to directly address these transport challenges. Scheme promoters have worked with bus operators to identify the corridors where bus priority interventions are needed most, improvements to Metro infrastructure will remove the biggest constraint on the network allowing a frequency uplift, and there is proposed expansion of the rail and walking/cycling networks. This will have the important outcome of improving economic performance in the North East, supporting the rebalancing of the economy with the rest of the country.</p>

<p>Step 3: Exploring options and strategic alternatives</p>	<p>The TCF programme has been thoroughly assessed against the TCF objectives in a two-stage prioritisation process, which ensured that the programme would help to reduce economic and social inequalities that exist between the North East and other regions.</p> <p>The case for intervention has become clear through comparing the programme with a ‘do nothing’ scenario, in which access to jobs would be limited by poor connectivity, stunting economic growth and failing to meet the ambitions of the SEP.</p>
<p>Step 4: Exploring impacts of interventions</p>	<p>The outcomes of the programme will help to reduce the gap between the North East and the rest of the country on several levels. Less congestion and better connectivity will improve access to work, producing economic benefits, while a rise in the use of public transport and active travel will reduce inequalities around public health. The transformational aspect of the bid will ensure that change is widespread and long term.</p> <p>Full information about the impacts of individual schemes, thematic packages and cost scenarios can be found in the economic case.</p>
<p>Step 5: Aligning with wider local plans and objectives</p>	<p>The Policy and Strategy section of this SOBC demonstrates that the programme has a good policy fit in terms of the regional investment priorities set out in the TfN Strategic Transport Plan, NELEP Strategic Economic Plan and the upcoming Local Industrial Strategy.</p> <p>The aims set out in the local plans of each of the seven local authorities in the North East are centred on economic development, as well as promoting equal opportunities and social mobility, which is in alignment with the rebalancing impact this programme will have.</p>
<p>Step 6: Considering wider evidence and stakeholder views</p>	<p>As set out previously, regional stakeholders have been deeply involved in the process of scheme and programme development, and will be responsible for scheme delivery, demonstrating their commitment to the objectives of TCF and our programme.</p> <p>Letters in support of this programme from a range of stakeholders, again demonstrating commitment to the programme including its rebalancing outcomes, can be found in Appendix A.</p>

Conclusion

2.375 The North East city region is a polycentric economy with three city centres, numerous secondary towns and other employment sites - including major business parks where complex travel to work patterns are dominated by car usage. The challenges facing the region that have been set out above, including congestion, air quality exceedances, deprivation and lower levels of productivity, can be addressed by transforming our sustainable transport network, giving people easier, low carbon access to jobs.

2.376 Our TCF Tranche 2 programme will have a transformational impact on the economy and the environment by opening new job opportunities, widening labour markets, improving access to skills and training, and encouraging modal shift from cars to sustainable transport.

2.377 The two rail schemes in our TCF programme will improve access across our city region by rail and Metro; our city centre transport gateways will improve both local and long-distance connectivity by rail and bus; and investment in bus, cycling, walking and Park & Ride in key travel corridors and city centres will build upon past infrastructure investment to provide coherent improvements to connectivity. Our proposals for investment in bus measures is the largest seen in our region for a generation.

2.378 Linking back to our vision of “More sustainable connectivity, and more mobility, making sustainable transport the natural choice for people moving around our city region, banishing congestion and its polluting effects, and improving air quality and public health”, our schemes seek to deliver solutions to boost the reliability of our bus network by addressing congestion hotspots, to deliver a step change in the quality and reach of the region’s walking and cycling network with crucial consistency in approach, to transform our city centre gateways with bespoke solutions that support wider investment and deliver places that can thrive, to intercept traffic on the strategic road network through new and improved park and ride facilities and to connect people to a more resilient, higher capacity Metro and local rail network that reaches more destinations.

2.379 This target is ambitious but considered to be deliverable, and we link to our subsequent cases to explain the affordability, value for money and deliverability in greater depth.

ECONOMIC CASE



3 Economic Case

Introduction

3.01 This economic case presents the appraisal of three programme level cost options in order to identify their impacts against objectives, benefits and value for money. The approach taken follows Treasury guidelines for developing Strategic Outline Business Cases. The appraisal approach reported here has been developed working alongside the Department for Transport, in a series of co-development meetings. These meetings were extremely helpful in discussing and agreeing assumptions and approach for some of the schemes forming the programme, especially at their stage of development at SOBC submission. Progress has been made since the draft June 2019 submission, with more certainty in design, costs and risks. For the two rail schemes which exceed the £40M threshold value, they continue to be developed to OBC stage, and the level of detail of these schemes again brings further confidence in costs and delivery. It is acknowledged they will be retained by the DfT through to FBC, although their costs and benefits are reflected in the programmes reported in this SOBC.

3.02 In line with Treasury's appraisal requirements, the impacts considered are not limited to those directly impacting on the measured economy, nor to those which can be monetised. The economic, environmental, social and distributional impacts of a proposal can all be examined, using qualitative, quantitative and monetised methods. In assessing value for money, all of these are consolidated to determine the extent to which a proposal's benefits outweigh its costs.

3.03 To this end, this economic case is structured, as follows:

- Scheme details and appraised options – which summarises the schemes described in the Strategic Case
- Overview of appraisal approach – describing the approach to the appraisal of the various schemes forming the overall programme, outlining key methodologies and assumptions.
- Appraisal results – overview of appraisal results at programme level.
- Summary of results – discussion of results at programme level, demonstrating how the proposed programme performs against the aims and objectives of the TCF fund and other key transport policy objectives.
- Value for money statement – summarising the overall value for money assessment of the programmes.

3.04 Additionally, a detailed technical report is also available upon request providing information on the following:

- Appraisal methodologies used;
- Appraisal assumptions (appraisal periods, values of time used, etc.)
- Demand assumptions (data sources, derivations etc.)
- Approach to calculation of PVC, PVB, BCR.
- Forecasting assumptions.

3.05 To aid legibility, these issues are not generally covered in the main text.

Scheme details and appraised options

3.06 The Strategic Case details the compelling case for intervention and the proposed schemes to deliver against a clearly defined set of challenges and objectives. It also sets out how a broad corridor approach provides the greatest opportunity to transform and promote sustainable travel across the North East region, through a series of five thematic intervention groupings:

- Transforming bus corridors
- Transforming walking and cycling corridors
- Transforming city centre gateways
- Transforming Park & Ride
- Delivering the Metro and Local Rail Strategy

3.07 Three programmes have been developed from numerous individual schemes; a low, medium and high cost. All seek to transform transport provision in the region, by connecting residents to employment, education and training opportunities, using greatly enhanced sustainable travel modes. The aim is to reverse trends for declining public transport patronage and reliance on private car use to achieve much needed, long term sustainable growth. The proposals will provide a comprehensive and effective sustainable travel network linking into planned developments for economic growth and housing provision.

3.08 They will support the delivery of the Strategic Economic Plan and the newly emerging Local Industrial Strategy.

3.09 The following sections outline the appraisal approach undertaken.

Appraisal approach and assumptions

Appraisal approach

3.10 The following key overarching principles, referencing the document “Transforming Cities Fund Supplementary Guidance for Shortlisted City Regions: Tranche 2” (DfT, January 2019) have been adopted in undertaking the appraisal:

- Section 3.3 – The principles for assessing value for money follow the guidance set out in DfT’s Value for Money framework.
- Section 3.7 - An Appraisal Summary Table will also be required for each business case to demonstrate that the full range of impacts has been considered.
- Section 3.8 - Value for money will be assessed at a programme level as opposed to an individual scheme level. This will include the requirement to consider additional issues, such as further modelling to quantify the interdependencies between the schemes within the programme. Where this is not possible, qualitative narrative should be provided to outline the likely impacts.
- Section 3.22 – It is expected that not all impacts will be monetised at draft SOBC stage, especially for wider benefits ascribed to small schemes. Where this is the case, the business case should set out the non-monetised impacts narrative around the benefits with appropriate supporting evidence.

3.11 The appraisal methodology adopted follows several approaches dependent on factors such as the nature of the scheme, availability of information and maturity of scheme development and appraisal already undertaken by scheme promoters. In general terms, each scheme has initially been appraised independently with each of the three cost programmes then reviewed with regards to interdependencies and adjustments made to input assumptions and benefits, as required.

3.12 Table 22 reproduces TAG Unit A2.1, outlining 3 levels of analysis that might be undertaken in Transport Appraisal. Our approach seeks to provide an appropriate level of appraisal of Level 1 user benefits with

Level 2 and Level 3 benefits considered where possible for the larger schemes expected to have a more significant impact.

Table 22 WebTAG Unit A2.1

	Level 1 (initial BCR)	Level 2 (adjusted BCR)	Level 3 (indicative monetised impacts or non-monetised impacts)
Fixed land use	User benefits	→	
		Static clustering	→
Implicit land use change		Output change in imperfectly competitive markets	→
		Labour supply impacts	→
Explicit land use change			Dependent development
			Move to more/less productive jobs
			Dynamic clustering
			Supplementary economic modelling

3.13 Where business cases and appraisals have been undertaken for schemes in an advanced stage of development within the programme compared to others, results and methodologies have been reviewed and incorporated into the programme-level results presented here.

3.14 For the remaining schemes, updated appraisal has been undertaken since the draft submission in June 2019. The approach adopted for each type of scheme in the programme is explained below.

UTMC/traffic signals/ITS

3.15 The appraisal of the ITS scheme has been developed based on real data feeds from automatic traffic counters, traffic flows obtained from new regional transport model developments and estimates of patronage on the busiest bus corridors. Bus patronage was based on the DfT TAG national average figure, with local adjustments made for location (urban, semi urban and non-urban bus routes) and by time of day, whilst vehicle passenger information was also derived by DfT national average figures by time of day and vehicle type. Journey time savings were derived from local and recent work undertaken by the UTMC centre on key corridors and junctions within the NECA region.

3.16 In response to bus operators' concerns and requests for support and intervention about congestion and delays to their services, traffic signal changes are proposed affording more green time to arms where buses were most delayed. This has benefits for both bus and general traffic at these locations on the arms of the junction causing the most concern. The spare capacity and lower demands on other arms mean the disbenefit to general traffic was minimised. The amount of benefit to be gained is determined partly by the proximity of upstream and downstream junctions and the locations of pedestrian crossings. With the advent of more sophisticated technology, determining accurately the location of buses with better communication networks permits signal timings and coordination to happen in real time to meet demands on the network throughout the day. These journey time savings have been proved in practice and found beneficial to bus companies requesting the changes to signal timings in the first instance, whilst journey time savings to general traffic were categorised into standalone and coordinated signal upgrades based on the local study findings. In many instances, there were few disbenefits to private car users.

3.17 For the Bus Real Time Information (RTI) improvements, journey time savings were derived from a proven 2016 TfL study of passenger actual waiting time reductions on improved Bus RTI schemes and applied to regional bus patronage figures. No increase in bus patronage levels has been applied.

Cycle schemes

3.18 The DfT's AMAT tool has been used to assess the benefits of cycle schemes. This requires as its inputs key information on scheme length, type, existing and proposed users etc. Local data is the preferred source of information for counts and use of growth figures based on local experience across the region. Where either base and/or growth indications were not available, the Propensity to Cycle Tool (PCT) has been used. Given the methodology of the PCT, journey to work data is only to be used in circumstances where local data and the PCT tool are not available.

Walking/public realm

3.19 The AMAT tool has been used as the main assessment tool, using the same approach as defined above. In the case of urban realm, additional economic benefits may be found – these have generally been appraised using TAG recommended methodologies and valuations, for example journey quality valuations, marginal external cost valuations etc.

Bus schemes

3.20 Bus AVL and patronage data has been used to assess the potential journey time benefits and patronage achievable from proposed interventions. These journey time benefits have been valued using standard TAG principles and values. Journey time savings have typically been identified as the difference in average journey times between time periods in which delay is identified to occur and a representative journey time achieved in another time period where delay does not occur, which is assumed to be the best journey time achievable.

3.21 Where improvements to waiting and interchanging infrastructure are proposed, TAG journey quality soft factors and journey time savings arising from the proposals have been used.

Park & Ride schemes

3.22 This appraisal has been undertaken using a LOGIT model considering generalised journey costs (journey time, interchange, fares, parking charges etc.) to forecast patronage and calculate benefits.

Journey quality impacts

3.23 For schemes which involve an element of journey quality improvement, such as improvements to waiting or interchanging environments, the recommended TAG values have been applied to appropriate patronage estimates, considering the level of improvement of facilities compared with what is existing and scaling the recommended values appropriately.

Rail schemes

3.24 For each of the two larger scale rail schemes in the programme, appraisal has been undertaken by the individual scheme promoters with the development of the appraisal proportional to the level of investment required to deliver the schemes. As such, scheme-specific public transport models have been developed by the promoters, with the oversight of the DfT, using TAG/PDFH approaches to model and appraise the impacts of the schemes. These models consider impacts on other PT modes and an allowance for any forecast changes to highway trips is also incorporated in the appraisal.

3.25 In both cases, Level 2 impacts, in the form of an assessment of Wider Economic Impacts, has been undertaken by the promoters and the results of this included in this Economic Case.

Assumptions

3.26 Several assumptions to enable the appraisal of schemes have been used, obtained from a variety of sources. These are explained below.

Scheme Patronage

3.27 Current users have been obtained through local counts, where available.

Cyclists

3.28 For current users, counts have either been taken from those provided by scheme promoters or from the Tyne and Wear Traffic and Accident Data Unit (TADU), where available. Where unavailable, the Propensity to Cycle Tool (PCT) has been used to estimate current users, using the 2011 census route network flows (LSOA). The census figures have then been factored using DfT's latest cycling figures for the relevant local authority to represent current levels of usage more closely with a further adjustment used, where appropriate, to account for leisure trips as well as commutes.

Pedestrians

3.29 Where an active mode intervention will enhance the pedestrian experience, and there is no local data available, user numbers have been estimated as follows:

3.30 Output areas (OA) along the scheme length have been identified and the number of daily trips by the OA population have been calculated using National Travel Survey (NTS) data. It has then been assumed that half of all these daily trips will use the scheme.

Bus patronage

3.31 The numbers of bus users have been provided by operators. In terms of future numbers, it has been assumed that there will be no change in patronage levels on services using these interventions. The rationale for this decision is due to the current decline in bus patronage, and that the schemes will stem this decline in patronage, therefore, keeping patronage the same as current levels. This assumption is based on local experience where, on the Durham Road bus corridor in Gateshead, similar bus-priority measures have arrested decline in patronage since construction.

Park & Ride

3.32 Park & Ride sites have been modelled in one of two ways:

- 1 Through LOGIT function-based P&R model which uses the generalised cost of P&R versus driving to a destination to examine likely interception rates for new P&R sites
- 2 Through using the North East rail demand model as a basis, factoring demand growth accordingly.

3.33 To inform the economic appraisal of the scheme, in both cases, the change in demand has been calculated, as has the subsequent impact on car park demand, car park revenue, metro/bus demand and metro/bus revenue.

Metro and Rail demand

3.34 Where required, rail demand has been taken from ongoing scheme patronage monitoring counts.

Scheme Costs

3.35 Scheme cost estimates have been provided by the various scheme promoters. The technical report provides a more detailed explanation of the process followed for each scheme in the packages, but the following general methodology has been applied to calculate PVC:

- Discounting – costs have been discounted from the year they are expected to be incurred to 2010 using government's standard discount rate of 3.5% per annum.
- Deflating – costs have been deflated to 2010 prices from the year they are expected to be incurred using the GDP deflator contained in the TAG databook.
- Varying levels of optimism bias have been applied for different elements of the programme. This is documented in the technical report.
- Where required, whole-life costs have been included in scheme costs. This is documented in the technical report.

Sensitivity testing

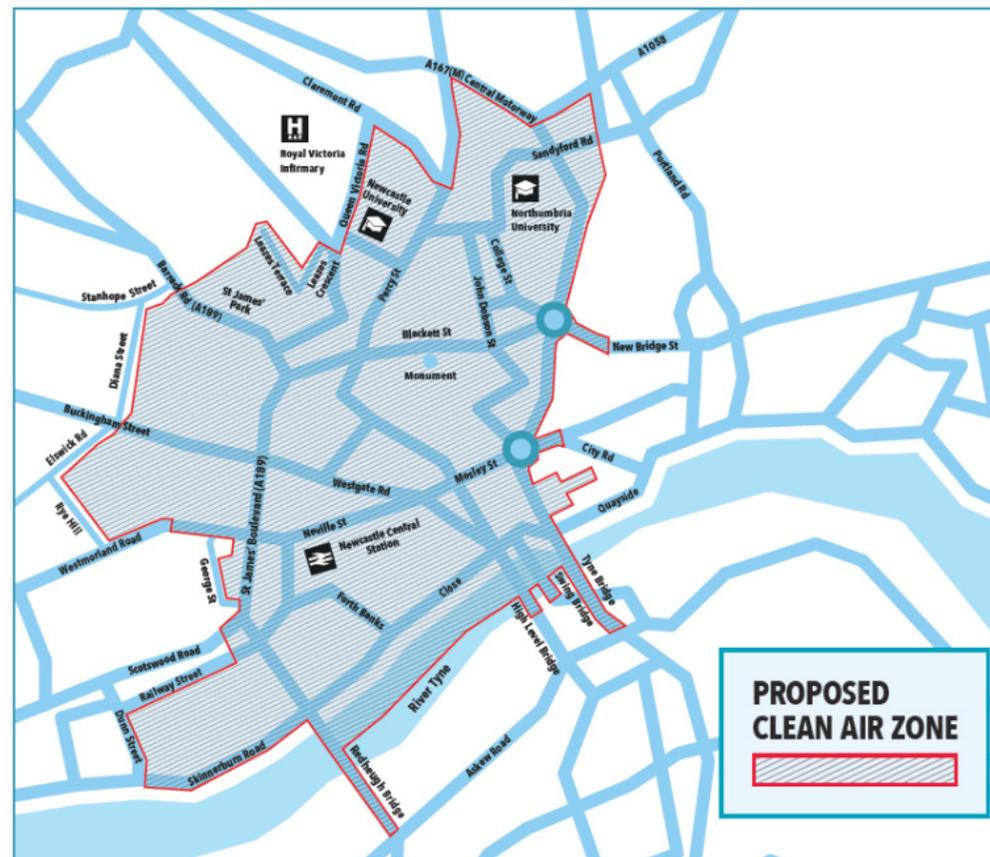
3.36 Sensitivity testing of the economic performance of the programme has been undertaken.

Clean Air Zone proposals

3.37 Consultation has recently been completed on the Newcastle/Gateshead proposals. The scheme under consultation is briefly described below:

“As part of the package of measures for addressing poor air quality, we are proposing to introduce a Charging Clean Air Zone Category C (CAZ C) in Newcastle city centre. This would apply to non-compliant buses, coaches, taxis (Hackney Carriages and private hire vehicles), HGVs and vans from 2021.

Additional measures would include lane restrictions on the Tyne Bridge along with changes to the roads layout at each end of the bridge in Newcastle and Gateshead; **the introduction of restrictions on traffic movements at the junction between New Bridge Street and Swan House on Central Motorway; and the development of new delivery hubs outside of the charging zone.**”



3.38 In terms of impact on the TCF programme, the following key issues should be noted. Firstly, that the geographical scope of the proposals is limited to Newcastle city centre and, secondly, that private cars are not subject to charging. The key impacts are expected to be a possible increase in congestion due to the changes to the Tyne Bridge with consequent re-routing to other river crossings (for example Redheugh Bridge) and possible mode shift. Modelling undertaken suggests that many of the trips affected by this are longer than typical walking/cycling journeys so, as such, the impacts on TCF schemes are expected to be limited to public transport schemes only.

3.39 Therefore, the impact of mode shift from the private car to relevant schemes is assumed with scheme benefits being directly factored to provide an indication of the potential impacts on the TCF programme. Mode shift calculations have been derived based on the current proportion of journey to work trips in Tyne and Wear, reallocating these trips to other modes. DfT Transport Statistics Table TSGB0108 shows that the current proportion of journey to work trips by car is 65% (2017). It is assumed that this reduces by 2%. This increases the mode share of other modes combined to 37%. It is assumed that the relative share of these modes to one another remains unchanged so, therefore, the benefits for these affected schemes are all increased by $37/35 = 5.7\%$.

3.40 The following schemes are affected:

- NE01 – Transforming Newcastle City Centre.
- NE02 – Newcastle Station Gateway.
- GA08 – Hills St / Gateshead Quays.
- GA16 – Gateshead Interchange Bus Lane.

Programme Synergies

3.41 It is possible that the programme will lead to a change in mode-choice across the region, as improved infrastructure encourages wider use of sustainable modes. It is considered that the key impacts in this regard are picked up in the scheme assessment for the two large rail-based schemes included in the programme – Northumberland Line and Metro Flow – so no specific sensitivity test has been carried out.

Futureproofing Scenarios

3.42 The future of transport is inherently uncertain; with this in mind, a number of plausible scenarios to see how “future proofed” our programme has been developed using the Government Office for Science Futures Toolkit, which provides a flexible and structured approach to thinking about future scenarios and future proofing across all aspects of Government. This analysis is presented in the strategic

case, but the key outcomes are presented here, and appropriate sensitivity testing undertaken to illustrate the programmes robustness against these potential future outcomes.

- Personalised Autonomy: travel demand grows and is delivered through personalised and small shared autonomous vehicles.
- Greener Travel: better information sees demand grow for travel by lower emission modes.
- Reduced Travel: people travel less, are less inclined to own vehicles and more inclined to use mass transit.

3.43 Table 15 in our strategic case, outlines the potential impact of these future scenarios on the thematic packages in the proposed programme. These are reflected in the sensitivity testing as follows:

- For each future scenario, scheme benefits for schemes in each of the thematic packages highlighted in red will be reduced by 2%.
- For schemes in each thematic package highlighted in green benefits will be increased by 2%.
- For schemes in thematic packages highlighted in grey, no change to benefits will be applied.

Interdependencies

3.44 It is required to understand interdependencies between schemes. There are two broad types of interdependencies that are considered.

- Cost changes on one mode leading to mode shift e.g. improved Metro journey times because of the track dualling project, or introduction of a new service, may lead to mode shift from highway and bus.
- General cost changes across the transport system, leading to increased trip making. This is a response that would often be assessed using a four-stage transport model. No suitable detailed transport model of the North East exists to carry out this assessment. Therefore, a combined approach, quantifying those elements which can be readily quantified, supported by qualitative evidence, drawing from previous experience, both local and further afield, is adopted.

3.45 **Table 23** illustrates the potential interdependency impacts identified and our assessment of their applicability to the proposed programme. These impacts are considered in the programme appraisal results presented.

Table 23 Interdependencies analysis

Schemes	Impacts on...				
	Rail/Metro	Bus	Highway	Cycle	Walking
	Potential impacts between Metro system and N2N rail (e.g. Northumberland Park)	Potential modal competition	Potential modal competition	Potential interchange at stations/stops	Potential interchange at stations/stops
Rail/Metro	Addressed in appraisal work for each individual scheme	Wider impact on bus network addressed in scheme appraisal work. No significant impact on demand for schemes in TCF programme identified as bus routes affected do not directly compete with schemes in the programme	Addressed in scheme appraisal work	Potential impact at all stations on route in form of “cycle and ride” trips	Potential impact at all stations on route in form of “walk and ride” trips
Relevant schemes	NO01, NX03	NO01, NX03 and all bus schemes.	NO01, NX03 and bus schemes.	NO01, NX03.	NO01, NX03
Level of impact	High - addressed in appraisal.	High – addressed in appraisal	High - addressed in appraisal	Low	Low
	Potential modal competition	Potential competition between routes/services	Potential modal competition impacts of reallocation of road space	Potential modal competition, impacts of reallocation of road space	Potential interchange at stations/stops
Bus	Potential competition between modes	No significant impact on demand for schemes in TCF programme identified as bus routes do not directly compete with one another	No schemes considered to significantly impact on highway network capacity for general traffic	No significant impact identified due to geographical proximity of schemes to one another	Potential impact on all routes but not included in quantitative analysis
Relevant schemes	All bus schemes and NO01, NX03	-	-	-	-
Level of impact	Addressed in appraisal.	Low.	Low.	Low.	Low.

Schemes	Impacts on...				
	Rail/Metro	Bus	Highway	Cycle	Walking
Highway	Potential interchange at stations/stops	Potential modal competition, impacts of reallocation of road space	Potential modal competition impacts of reallocation of road space	Potential competition between parallel/nearby routes	Potential modal competition
	Schemes in programme may increase private car use at expense of other modes	Schemes in programme may increase private car use at expense of other modes. However, buses also to benefit from priority so considered neutral	Scheme forms part of wider network programme so no significant impacts/interdependencies on other routes identified	Schemes in programme may increase private car use at expense of other modes	Schemes in programme may increase private car use at expense of other modes
Relevant schemes	ITS and Rail/metro schemes	ITS and bus schemes on affected corridors	-	ITS and cycle schemes	-
Level of impact	Medium	Low	Low	Medium	Low
Cycle	Potential interchange at stations/stops	Potential modal competition, impacts of reallocation of road space	Potential modal competition impacts of reallocation of road space	Potential competition between parallel/nearby routes	Potential modal competition
	Schemes unlikely to detract from longer distance rail trips, but potential for increase of cycle trips to stations/interchanges as part of shorter, multimodal trips. Increased cycle use included in appraisal (AMAT approach)	No significant impact identified due to geographical proximity of schemes to one another	Modal shift possible, especially for localised trips. Diversion factors and associated impacts are included in AMAT approach	Potential competition between schemes. Numbers have been adjusted within appraisal of relevant scheme from adjacent existing routes	Potential modal shift from walking to cycling for all scheme. Not included in quantitative analysis as scale of impact uncertain
Relevant schemes	All cycle and Rail/Metro schemes	-	-	Adjacent routes.	-
Level of impact	Medium – included in scheme appraisals	Low	Medium – included in scheme appraisals	Medium – included in scheme appraisals	Low

Schemes	Impacts on...				
	Rail/Metro	Bus	Highway	Cycle	Walking
	Potential interchange at stations/stops	Potential modal competition, impacts of reallocation of road space	Potential modal competition impacts of reallocation of road space	Potential competition between parallel/nearby routes	Potential modal competition
Walking	Schemes unlikely to detract from long distance rail trips. Possible increase in walking trips to stations as part of multimodal trips. Not included in quantitative analysis as scale of impact uncertain	No significant impact of walking related scheme on bus network identified	Walking schemes alone unlikely to impact on highway demand	Potential modal shift from walking to cycling for all scheme. Not included in quantitative analysis as scale of impact uncertain	No significant impact identified
Relevant schemes	-	-	-	-	-
Level of impact	Low	Low	Low	Low	Low

3.46 The proposed modifications to scheme benefits are summarised below. In most cases, potential impacts have been included in individual scheme appraisals using appropriate techniques. The only significant impact is the mode shift associated with the ITS scheme where the potential impacts is modelled through reducing the benefits of certain other schemes by 5%.

- Rail schemes – as noted, potential interdependencies with other modes are included in the scheme appraisals undertaken by promoters.
- Bus schemes – significant impacts on rail is included in the relevant scheme appraisals.
- Highway – ITS scheme may reduce mode share of other modes (rail/metro and cycling). Benefits of these schemes to be reduced by 5%.

- Cycle – potential impacts on other modes have been included in schemes appraisals through the AMAT approach. The potential for competing schemes has been included in scheme demand forecasts where appropriate.
- Walking – it is assumed that there will be minimal impacts on other modes.

Impact of Development

3.47 It is acknowledged that in some areas, significant levels of development can be expected to have an impact on demand for schemes and services. This is accounted for in the programme using the methodology described below:

- 1 Extraction of TEMPRO growth in trips at local authority level across the region for combined sustainable modes (walking, cycling, bus and rail). These have been extracted for the base year (2019) and 2030.
- 2 Consideration of specific developments to make alterations to growth factors based on scheme locations, development type, potential sustainability etc. Documents such as Planning Applications and Transport Assessments, as well as the local knowledge of scheme promoters and officers have been used to update growth factors if necessary. GIS mapping of schemes and local developments has been used to aid this process. The size, scale and location of the development sites are illustrated in the Strategic Case. Clearly, the closer the proximity the development the development is to the proposed scheme, the more likelihood of demand increasing (for example a large housing development site will likely add more cycle trips onto a cycle scheme). Consideration of the level to which the development of a given site might be facilitated by the sustainable measures proposed in the programme has also been provided. Therefore, for each site, we understand both the proximity to TCF schemes and the likelihood of trips from this site being positively impacted by TCF schemes.

Table24 Development Analysis

Authority Area	Proximity Score		TCF Sustainability Score		Development Score		TEMPRO Factor Change (average of Emp and Res)
	Emp	Res	Emp	Res	Emp	Res	
Durham	37%	100%	8%	1%	30	70	1
Gateshead	100%	64%	61%	55%	90	60	1.5
Newcastle	95%	89%	24%	16%	70	60	1.3
North Tyneside	100%	93%	4%	2%	70	60	1.3
Northumberland	38%	95%	74%	18%	50	70	1.2
South Tyneside	100%	92%	2%	53%	70	80	1.5
Sunderland	84%	42%	17%	5%	60	30	0.9

3 Revision of appraisal results to create modified TEMPRO growth factors. This is undertaken by each local authority area as follows:

Step 1 – Calculate the proportion of sites in a given local authority area which are close to TCF schemes. This provides a percentage “proximity score” for each local authority area.

Step 2 – For these sites, calculate the proportion of sites which are assessed to be highly positively impacts by TCF schemes as they are expected to be particularly facilitated by TCF schemes. This provides a percentage “TCF sustainability score” for each area.

Step 3 – Combine these two measures to produce an overall development score for each local authority area. This is done through the following calculation, which weights proximity as being twice as important in influence as the TCF sustainability score:

$$\text{Development score} = ((2 \times \text{proximity score}) + (\text{TCF sustainability score})) / 3$$

Step 4 – This is then rounded to the nearest 10% and used as the basis for modifying the TEMPRO growth using the formula (Development Score / 50). Therefore, a development score of 50% would require no modification with a score of 70% leading to a modification factor of 1.4. The factors adopted are shown in **Table24** below.

Step 5 – Modifications to TEMPRO growth

3.48 TEMPRO trip forecast changes for walking, cycling, bus and rail are negative (due to background assumptions forecasting an increase in mode share for private car). Therefore, the inverse of the factor changes calculated above has been applied to the reduction in trips to calculate a reduction. This is compared with the original forecast future trips to generate a factor, which is applied to benefits for the TCF schemes. For each authority the calculation followed is:

$(\text{Original Change in Trips} \times (1/\text{TEMPRO Factor Change})) = \text{New Change in Trips.}$

Then a final factor to apply to benefits is calculated by

$(\text{Base trips} + \text{New Change in Trips}) / \text{Original Future Trips} = \text{Final Benefits Factor.}$

3.49 This is shown in **Table 25** below. Note that it is not proposed to apply changes to certain schemes as follows:

- ITS01 – area wide scheme with large reach, assumed that benefits are not sensitive to specific development assumptions.
- NO01 – assumed that relevant impacts picked up in promoter appraisal.
- NX02 – assumed that relevant impacts picked up in promoter appraisal.
- NX03 – assumed that relevant impacts picked up in promoter appraisal.
- NX04 – assumed that relevant impacts picked up in promoter appraisal.

Table 25 TEMPRO Factor Modifications

	Name	County Durham	Northumberland	Gateshead	Newcastle upon Tyne	North Tyneside	South Tyneside	Sunderland
Original Future - Base	Origin	-18,667	-7,821	-8,632	-13,041	-5,430	-5,977	-14,280
	Destination	-18,703	-7,974	-8,664	-12,859	-5,439	-5,932	-14,213
Base	Origin	378,367	229,210	177,411	334,635	170,306	127,951	250,154
	Destination	376,902	231,678	175,011	335,396	169,559	128,694	249,619
Original Future	Origin	359,700	221,389	168,779	321,594	164,876	121,974	235,874
	Destination	358,199	223,704	166,347	322,537	164,120	122,762	235,406
Modified Change in Trips	Factor	1	1.2	1.5	1.3	1.3	1.5	0.9
	Inverse	1.00	0.83	0.67	0.77	0.77	0.67	1.11
Revised Future - Base	Origin	-18,667	-6,518	-5,755	-10,032	-4,177	-3,985	-15,867
	Destination	-18,703	-6,645	-5,776	-9,892	-4,184	-3,955	-15,792
New Future Trips	Origin	359,700	222,693	171,656	324,603	166,129	123,966	234,287
	Destination	358,199	225,033	169,235	325,504	165,375	124,739	233,827
Benefit Factor	Origin	1.000	1.006	1.017	1.009	1.008	1.016	0.993
	Destination	1.000	1.006	1.017	1.009	1.008	1.016	0.993

Appraisal Results

3.50 Appraisal results are summarised in **Table 26**.

Table 26 Summary programme level results (accounting for interdependencies)

Programme	PVB (£1000s)	PVC (£1000s)	NPV (£1000s)	BCR
Preferred Programme	£836,228	£282,451	£553,777	2.96
Medium Cost	£812,445	£272,212	£540,232	2.98
Low Cost	£773,662	£250,462	£529,622	3.07

3.51 AMCB Tables have been completed for the three programme levels and are shown below. Appraisal Summary Tables for the three programmes can be found at **Appendix I**.

Table 27 AMCB Preferred Scenario Results

Analysis of Monetised Costs and Benefits		
Noise	£910	(12)
Local Air Quality	£177	(13)
Greenhouse Gases	£3,133	(14)
Journey Quality	£227,875	(15)
Physical Activity	£48,048	(16)
Accidents	£16,531	(17)
Economic Efficiency: Consumer Users (Commuting)	£264,352	(1a)
Economic Efficiency: Consumer Users (Other)	£275,798	(1b)
Economic Efficiency: Business Users and Providers	£34,958	(5)
Wider Public Finances (Indirect Taxation Revenues)	-£33,776	(11) - sign changed from PA table, as PA table represents costs, not benefits
Present Value of Benefits (see notes) (PVB)	£836,228	(PVB) = (12) + (13) + (14) + (15) + (16) + (17) + (1a) + (1b) + (5) - (11)
Broad Transport Budget	£282,451	(10)
Present Value of Costs (see notes) (PVC)	£282,451	(PVC) = (10)
OVERALL IMPACTS		
Net Present Value (NPV)	£553,777.31	NPV=PVB-PVC
Benefit to Cost Ratio (BCR)	2.96	BCR=PVB/PVC

Note : This table includes costs and benefits which are regularly or occasionally presented in monetised form in transport appraisals, together with some where monetisation is in prospect. There may also be other significant costs and benefits, some of which cannot be presented in monetised form. Where this is the case, the analysis presented above does NOT provide a good measure of value for money and should not be used as the sole basis for decisions.

Table 28 Economic Efficiency of the Transport System – (TEE) Results Preferred Scenario

Non-business: Commuting	ALL MODES	ROAD	BUS and COACH	RAIL	OTHER	
<u>User benefits</u>	TOTAL	Private Cars and LGVs	Passengers	Passengers		
Travel time	£264,352	£51,303	£18,040	£194,419	£591	
Vehicle operating costs	£0	£0			£0	
User charges	£0	£0	£0	£0	£0	
During Construction & Maintenance	£0	£0	£0	£0	£0	
COMMUTING	£264,352 (1a)	£51,303	£18,040	£194,419	£591	
Non-business: Other	ALL MODES	ROAD	BUS and COACH	RAIL	OTHER	
<u>User benefits</u>	TOTAL	Private Cars and LGVs	Passengers	Passengers		
Travel time	£275,798	£99,786	£46,098	£129,169	£745	
Vehicle operating costs	£0	£0			£0	
User charges	£0	£0	£0	£0	£0	
During Construction & Maintenance	£0	£0	£0	£0	£0	
NET NON-BUSINESS BENEFITS: OTHER	£275,798 (1b)	£99,786	£46,098	£129,169	£745	
Business						
<u>User benefits</u>		Goods Vehicles	Business Cars & LGVs	Passengers	Freight	Passengers
Travel time	£46,796	£0	£29,521	£2,097	£0	£14,665
Vehicle operating costs	£0	£0	£0	£0	£0	£0
User charges	£0	£0	£0	£0	£0	£0
During Construction & Maintenance	£0	£0	£0	£0	£0	£0
Subtotal	£46,796 (2)	£0	£29,521	£2,097	£0	£14,665
Private sector provider impacts				Freight	Passengers	
Revenue	£179,226			-£10,405	£0	£189,631
Operating costs	-£78,999			£0	£0	-£78,999
Investment costs	-£1,433			£0	£0	-£1,433
Grant/subsidy	£124			£0	£0	£124
Revenue Transfer	-£110,756			£0	£0	-£110,756
Subtotal	-£11,838 (3)			-£10,405	£0	-£1,433
Other business impacts						
Developer contributions	£0 (4)		£0			£0
NET BUSINESS IMPACT	£34,958 (5) = (2) + (3) + (4)					
TOTAL						
Benefits (TEE)	£575,109 (6) = (1a) + (1b) + (5)					

Notes: Benefits appear as positive numbers, while costs appear as negative numbers.

All entries are discounted present values, in 2010 prices and values

Table 29 Public Accounts Table, Preferred Scenario

Public Accounts (PA) Table					
	ALL MODES	ROAD	BUS and COACH	RAIL	OTHER
Local Government Funding	TOTAL	INFRASTRUCTURE			
Revenue	-£48,371				
Operating Costs	£44,785				
Investment Costs	£28,924				
Developer and Other Contributions	-£1,433				
Grant/Subsidy Payments	£0				
NET IMPACT	£23,905 (7)		£0	£0	£0
Central Government Funding: Transport					
Revenue	-£142,927				
Operating costs	£55,616				
Investment Costs	£345,857				
Developer and Other Contributions	£0				
Grant/Subsidy Payments	£0				
NET IMPACT	£258,546 (8)		£0	£0	£0
Central Government Funding: Non-Transport					
Indirect Tax Revenues	£0 (9)				
TOTALS					
Broad Transport Budget	£282,451 (10) = (7) + (8)				
Wider Public Finances	£0 (11) = (9)				

Notes: Costs appear as positive numbers, while revenues and 'Developer and Other Contributions' appear as negative numbers.
All entries are discounted present values in 2010 prices and values.

Table 30 AMCB Medium Scenario Results

Analysis of Monetised Costs and Benefits		
Noise	£900	(12)
Local Air Quality	£176	(13)
Greenhouse Gases	£3,108	(14)
Journey Quality	£222,991	(15)
Physical Activity	£30,394	(16)
Accidents	£16,391	(17)
Economic Efficiency: Consumer Users (Commuting)	£263,979	(1a)
Economic Efficiency: Consumer Users (Other)	£275,326	(1b)
Economic Efficiency: Business Users and Providers	£34,633	(5)
Wider Public Finances (Indirect Taxation Revenues)	-£33,679	(11) - sign changed from PA table, as PA table represents costs, not benefits
Present Value of Benefits (see notes) (PVB)	£812,445	(PVB) = (12) + (13) + (14) + (15) + (16) + (17) + (1a) + (1b) + (5) - (11)
Broad Transport Budget	£272,212	(10)
Present Value of Costs (see notes) (PVC)	£272,212	(PVC) = (10)
OVERALL IMPACTS		
Net Present Value (NPV)	£540,232.72	NPV=PVB-PVC
Benefit to Cost Ratio (BCR)	2.98	BCR=PVB/PVC

Note : This table includes costs and benefits which are regularly or occasionally presented in monetised form in transport appraisals, together with some where monetisation is in prospect. There may also be other significant costs and benefits, some of which cannot be presented in monetised form. Where this is the case, the analysis presented above does NOT provide a good measure of value for money and should not be used as the sole basis for decisions.

Table 31 Economic Efficiency of the Transport System – (TEE) Results Medium Cost Scenario

Non-business: Commuting	ALL MODES	ROAD	BUS and COACH	RAIL	OTHER
<u>User benefits</u>	TOTAL	Private Cars and LGVs	Passengers	Passengers	
Travel time	£263,979	£51,303	£18,040	£194,419	£217
Vehicle operating costs	£0	£0			£0
User charges	£0	£0	£0	£0	£0
During Construction & Maintenance	£0	£0	£0	£0	£0
NET NON-BUSINESS BENEFITS: COMMUTING	£263,979 (1a)	£51,303	£18,040	£194,419	£217
Non-business: Other	ALL MODES	ROAD	BUS and COACH	RAIL	OTHER
<u>User benefits</u>	TOTAL	Private Cars and LGVs	Passengers	Passengers	
Travel time	£275,326	£99,786	£46,098	£129,169	£273
Vehicle operating costs	£0	£0			£0
User charges	£0	£0	£0	£0	£0
During Construction & Maintenance	£0	£0	£0	£0	£0
NET NON-BUSINESS BENEFITS: OTHER	£275,326 (1b)	£99,786	£46,098	£129,169	£273
Business		Goods	Business		
<u>User benefits</u>		Vehicles	Cars & LGVs	Passengers	Freight
Travel time	£46,471	£0	£29,521	£2,097	£0
Vehicle operating costs	£0	£0	£0	£0	£0
User charges	£0	£0	£0	£0	£0
During Construction & Maintenance	£0	£0	£0	£0	£0
Subtotal	£46,471 (2)	£0	£29,521	£2,097	£0
Private sector provider impacts				Freight	Passengers
Revenue	£155,874			-£10,405	£166,279
Operating costs	-£78,937			£0	-£78,937
Investment costs	-£1,433			£0	-£1,433
Grant/subsidy	£62			£0	£62
Revenue Transfer	-£87,404			£0	-£87,404
Subtotal	-£11,838 (3)			-£10,405	-£1,433
Other business impacts					
Developer contributions	£0 (4)		£0		£0
NET BUSINESS IMPACT	£34,633 (5) = (2) + (3) + (4)				
TOTAL					
Benefits (TEE)	£573,938 (6) = (1a) + (1b) + (5)				

Notes: Benefits appear as positive numbers, while costs appear as negative numbers.

All entries are discounted present values, in 2010 prices and values

Table 32 Public Accounts Table, Medium Scenario

Public Accounts (PA) Table					
	ALL MODES	ROAD	BUS and COACH	RAIL	OTHER
Local Government Funding	TOTAL	INFRASTRUCTURE			
Revenue	-£48,371				
Operating Costs	£44,785				
Investment Costs	£27,958				
Developer and Other Contributions	-£1,433				
Grant/Subsidy Payments	£0				
NET IMPACT	£22,938 (7)		£0	£0	£0
Central Government Funding: Transport					
Revenue	-£142,927				
Operating costs	£55,616				
Investment Costs	£336,585				
Developer and Other Contributions	£0				
Grant/Subsidy Payments	£0				
NET IMPACT	£249,274 (8)		£0	£0	£0
Central Government Funding: Non-Transport					
Indirect Tax Revenues	£0 (9)				
TOTALS					
Broad Transport Budget	£272,212 (10) = (7) + (8)				
Wider Public Finances	£0 (11) = (9)				

Notes: Costs appear as positive numbers, while revenues and 'Developer and Other Contributions' appear as negative numbers.
All entries are discounted present values in 2010 prices and values.

Table 33 AMCB Low Scenario Results

Analysis of Monetised Costs and Benefits		
Noise	£898	(12)
Local Air Quality	£177	(13)
Greenhouse Gases	£3,104	(14)
Journey Quality	£201,917	(15)
Physical Activity	£27,766	(16)
Accidents	£16,356	(17)
Economic Efficiency: Consumer Users (Commuting)	£262,433	(1a)
Economic Efficiency: Consumer Users (Other)	£274,217	(1b)
Economic Efficiency: Business Users and Providers	£34,478	(5)
Wider Public Finances (Indirect Taxation Revenues)	-£33,665	(11) - sign changed from PA table, as PA table represents costs, not benefits
Present Value of Benefits (see notes) (PVB)	£785,906	$(PVB) = (12) + (13) + (14) + (15) + (16) + (17) + (1a) + (1b) + (5) - (11)$
Broad Transport Budget	£256,283	(10)
Present Value of Costs (see notes) (PVC)	£256,283	$(PVC) = (10)$
OVERALL IMPACTS		
Net Present Value (NPV)	£529,622.42	$NPV = PVB - PVC$
Benefit to Cost Ratio (BCR)	3.07	$BCR = PVB / PVC$

Note : This table includes costs and benefits which are regularly or occasionally presented in monetised form in transport appraisals, together with some where monetisation is in prospect. There may also be other significant costs and benefits, some of which cannot be presented in monetised form. Where this is the case, the analysis presented above does NOT provide a good measure of value for money and should not be used as the sole basis for decisions.

Table 34 Economic Efficiency of the Transport System – (TEE) Results Low Cost Scenario

Non-business: Commuting	ALL MODES	ROAD	BUS and COACH	RAIL	OTHER	
<u>User benefits</u>	TOTAL	Private Cars and LGVs	Passengers	Passengers		
Travel time	£262,433	£51,255	£17,683	£193,326	£169	
Vehicle operating costs	£0	£0			£0	
User charges	£0	£0	£0	£0	£0	
During Construction & Maintenance	£0	£0	£0	£0	£0	
NET NON-BUSINESS BENEFITS: COMMUTING	£262,433 (1a)	£51,255	£17,683	£193,326	£169	
Non-business: Other	ALL MODES	ROAD	BUS and COACH	RAIL	OTHER	
<u>User benefits</u>	TOTAL	Private Cars and LGVs	Passengers	Passengers		
Travel time	£274,217	£99,725	£45,262	£129,017	£213	
Vehicle operating costs	£0	£0			£0	
User charges	£0	£0	£0	£0	£0	
During Construction & Maintenance	£0	£0	£0	£0	£0	
NET NON-BUSINESS BENEFITS: OTHER	£274,217 (1b)	£99,725	£45,262	£129,017	£213	
Business		Goods Vehicles	Business Cars & LGVs	Passengers	Freight	Passengers
<u>User benefits</u>						
Travel time	£46,316	£0	£29,479	£2,057	£0	£14,634
Vehicle operating costs	£0	£0	£0	£0	£0	£0
User charges	£0	£0	£0	£0	£0	£0
During Construction & Maintenance	£0	£0	£0	£0	£0	£0
Subtotal	£46,316 (2)	£0	£29,479	£2,057	£0	£14,634
Private sector provider impacts				Freight	Passengers	
Revenue	£155,874			-£10,405	£0	£166,279
Operating costs	-£78,937			£0	£0	-£78,937
Investment costs	-£1,433			£0	£0	-£1,433
Grant/subsidy	£62			£0	£0	£62
Revenue Transfer	-£87,404			£0	£0	-£87,404
Subtotal	-£11,838 (3)			-£10,405	£0	-£1,433
Other business impacts						
Developer contributions	£0		£0			£0
NET BUSINESS IMPACT	£34,478 (5) = (2) + (3) + (4)					
TOTAL						
Benefits (TEE)	£571,128 (6) = (1a) + (1b) + (5)					

Notes: Benefits appear as positive numbers, while costs appear as negative numbers.

All entries are discounted present values, in 2010 prices and values

Table 35 Public Accounts Table, Low Scenario

Public Accounts (PA) Table					
	ALL MODES	ROAD	BUS and COACH	RAIL	OTHER
Local Government Funding	TOTAL	INFRASTRUCTURE			
Revenue	-£45,977				
Operating Costs	£42,533				
Investment Costs	£26,204				
Developer and Other Contributions	-£1,433				
Grant/Subsidy Payments	£0				
NET IMPACT	£21,326 (7)		£0	£0	£0
Central Government Funding: Transport					
Revenue	-£142,927				
Operating costs	£55,616				
Investment Costs	£322,268				
Developer and Other Contributions	£0				
Grant/Subsidy Payments	£0				
NET IMPACT	£234,957 (8)		£0	£0	£0
Central Government Funding: Non-Transport					
Indirect Tax Revenues	£0 (9)				
TOTALS					
Broad Transport Budget	£256,283 (10) = (7) + (8)				
Wider Public Finances	£0 (11) = (9)				
Notes: Costs appear as positive numbers, while revenues and 'Developer and Other Contributions' appear as negative numbers. All entries are discounted present values in 2010 prices and values.					

Sensitivity tests

3.52 The results of the sensitivity tests carried out are shown in **Table 36**. All tests are carried out on the Preferred programme.

Table 36 Sensitivity test results

Test	PVB	PVC	NPV	BCR
Preferred	£836,228	£282,451	£553,777	2.96
Clean Air Zone	£840,092	£282,451	£557,641	2.97
Futures – Personalised Autonomy	£843,863	£282,451	£561,412	2.99
Futures - Greener Travel	£851,166	£282,451	£568,715	3.01
Futures – Reduced Travel	£841,756	£282,451	£559,306	2.98
Impact of Development	£838,480	£282,451	£556,029	2.97
Interdependencies	£812,443	£282,451	£529,993	2.88

3.53 The results demonstrate that the overall programme results are robust to changing assumptions, with the BCR remaining between 2.88 and 3.01 for all tests.

3.54 Clean Air Zone – a small increase is seen, reflecting the mode switch expected from the scheme. However, the relatively limited geographical scope of the scheme means this impacts only a small part of the proposed TCF programme.

3.55 Futures – taken together, the three scenarios proposed all have the potential to lead to improved programme benefits. In part, this is because all three scenarios are expected to lead to increased use of rail and Metro which form a large part of the proposed programme and all provide significant benefits.

3.56 Impact of development – as would be expected based on the analysis of developments presented earlier in this section, the impact of revised development assumptions is relatively small at programme level.

3.57 Interdependencies – whilst many of the key interdependencies are covered in the main scheme appraisal, the potential mode shift impact of the ITS scheme on rail and cycling has been included, seeing a reduction in BCR to 2.88.

Regeneration and Wider Economic Impacts

3.58 Quantification of potential regeneration and wider economic impacts has been undertaken for some schemes as part of appraisal undertaken by scheme promoters:

- Northumberland Line – more details are available within the forthcoming OBC and will be input into the Technical Report;
- Metro flow – Wider Economic Impacts benefits of £87m have been calculated and can be added to the overall scheme benefits to generate an adjusted BCR; and
- Newcastle Station Gateway – an assessment of the GVA of the scheme, considering developments that might be unlocked by the scheme, using the NELEP’s Economic Toolkit. This returns benefits of £112.4m (2017/18 prices and values) for the scheme, equivalent to 212 new jobs. In 2010 values/prices, this is worth approximately £75m and can be added to the overall scheme benefits to generate an adjusted BCR.

Environmental and Social Impacts

3.59 The environmental impact of active mode schemes has been captured through the DfT's AMAT process, and the appraisal of larger schemes. Impacts are therefore captured within the presented appraisal results in most cases. A summary of the environmental and social impacts of our programme is shown in **Table 37** and **Table 38**.

3.60 The social impact of active mode schemes has been captured through the DfT's AMAT process, and the appraisal of larger schemes. Impacts are therefore captured within the presented appraisal results in most cases.

Table 37 Environmental Impacts

Impacts	Comment	Assessment
Noise	Cycle and walking schemes have a positive impact on noise levels due to modal shift from highway although others, such as the Northumberland Line, may increase noise in proximity to the scheme, although this may be offset through reduced highway trips. Quieter propulsion vehicles introduced on bus routes may also have a beneficial impact for noise across the NE. Overall benefits can be considered as positive through the effect of modal shift away from highway to sustainable modes.	Beneficial
Air Quality	The programmes will see a shift to more sustainable modes of transport and therefore improved air quality as a result of this. This is the case for most elements of the programme. Programmes in the NE are actively developing greener fleets and freight options, with successes from introducing biomethane buses for some Stagecoach routes and electric buses for GNE, which have significantly lower or net zero tailpipe emissions.	Beneficial
Greenhouse Gases	The programmes will see a shift to more sustainable modes of transport and therefore will reduce greenhouse gas emissions as a result of this. Some schemes build on the 'Go Ultra Low programme' that has resulted in the development of a high-quality EV charging network across the NE, which will ultimately improve local AQ and reduce tailpipe emissions	Beneficial
Landscape	The programmes will have a neutral impact on landscape.	Neutral
Townscape	The programmes will have a beneficial impact on the townscape though the creation of greatly enhanced public realm in some locations and management of traffic within urban areas.	Beneficial
Historic Environment	The programmes will have a neutral impact on the historic environment. It is anticipated that the design of schemes, particularly town and city centre locations, will incorporate and enhance the setting of historical features where possible as part of a high-quality overall design.	Neutral
Biodiversity	The programmes will have a neutral impact on biodiversity.	Neutral
Water environment	While the majority of scheme will not have an impact on the water environment, the Keelmans Way Improvement scheme provides improvements to the river bank to mitigate the impacts of flooding on the cycle route and railway that runs alongside it. Overall the programmes will be slight beneficial.	Beneficial

Table 38 Social impacts

Impacts	Comment	Assessment
Commuting and other users	Bus journey times will be reduced on the key commuter routes into employment and commercial centres with a reduction in congestion through Gateshead, North Tyneside and South Tyneside. Better walking and cycling facilities throughout the cities to improve interchange, particularly with the Metro. Those commuting by rail will benefit from enhanced local, regional and national links to high value jobs. The Park & Ride schemes will offer an alternative mode of transport to education and employment opportunities along key routes. All proposals should improve journeys to employment and education sites.	Monetised in AMCB
Reliability impact on Commuting and Other	Bus service reliability is expected to improve because of enhanced bus priority and journey times. Intelligent Transport Systems (ITS) elements of the programme will support these improvements	Beneficial.
Physical activity	The programmes contain a large proportion of active mode schemes with approximately 82km of new and improved cycle and pedestrian facilities targeting health benefits.	Monetised in AMCB
Journey quality	The schemes provided in the programmes will enhance journey ambience with less traffic resulting in a safer and more pleasant environment.	Monetised in AMCB
Accidents	The programmes will see a reduction in incidents not only from a modal shift resulting in reduced traffic, but also from improved facilities for cyclists, improving safety.	Monetised in AMCB
Security	Some of the schemes, e.g. Durham Bus Station and Metro station schemes will provide improved security. Overall the programmes provide a slight beneficial impact on security.	Slight beneficial
Access to services	The active mode schemes are an important part of the programmes, to improve access to services in areas of deprivation where car ownership is low and access to key services is sometimes limited. Overall, the programmes provide a slight beneficial impact on access to services.	Slight beneficial
Affordability	The programmes are not expected to reduce travel costs as there are no direct impacts on fares or vehicle fuel costs.	Neutral
Severance	Many active mode schemes provide improvements to and new and existing pedestrian/cyclist crossing facilities. Overall, the programmes provide a slight beneficial impact to severance.	Slight beneficial
Option and non-use values	No significant impact.	Neutral

Introduction

3.61 Lack of reliability is one of the fundamental reasons people are less likely to make journeys by bus and has contributed to declining patronage levels on buses. Reliability has become more challenging for both bus operators and local authorities alike, impacted largely by growth in general traffic levels. The bus schemes within the programme are part of the North East's strategy to address reducing patronage and promote bus as a travel mode of choice.

Assessing reliability in this submission

3.62 TAG Unit A1.3, Section 6.5 details a reliability assessment methodology for public transport schemes, focusing on lateness (both average and variability) of services. Given the wide geographical coverage of our programme of schemes, the amount of data required to assess journey times and reliability, and the stage of this SOBC submission, a qualitative approach to assessing reliability is presented.

3.63 In advance of scheme implementation, more detailed quantitative assessment will be undertaken (where proportionate and timescales permit) to satisfy the requirements of the NECA Assurance Framework and demonstrate value for money.

Current Situation in the North East

3.64 The North East has an extensive bus network. Across the region a considerable number of buses can be classified as late using the approach adopted by Traffic Commissioners:

- Early = buses departing 1 or more minutes before advertised timetable time.
- On-time = buses departing during the window of up to 1 minute early to 5 minutes late.
- Late = buses departing 6 or more minutes after the advertised timetable time.

3.65 Regional statistics for bus operations are not available, due to commercial sensitivity. Operators have provided some insight into these results, which reveals that punctuality is a concern for operators, especially around areas where delays to the bus network can occur. As a result of delays on the highway network and other constraints (such as driver hours, bus position and recovering the timetable as quickly and efficiently as possible), bus operators are not always able to operate the total scheduled mileage. The amount of lost mileage is a tiny fraction of the total scheduled mileage.

North East's TCF Programme & Reliability

3.66 The bus schemes within the programme include priority measures through a combination of bus lanes and traffic signal improvements. Individually these measures will reduce journey times and will contribute to consistent journey times for passengers. Combined they will improve reliability on multiple bus journeys across scheme corridors and the wider bus network.

3.67 Journey time variability will be reduced as buses will be using bus lanes and dedicated infrastructure that will provide them with the necessary priority to avoid (pass) congestion and/or queuing traffic. Improved traffic signals will be more responsive to approaching buses and alter signals stages to minimise delay to buses and keep them moving. Individual journey time savings vary by scheme and are influenced by scheme length and/or type of priority measure.

3.68 The reliability benefits to services will not only be felt by users who use/travel through these interventions, but also by passengers on bus services across the district who will find reductions in the lateness of inbound buses. This improvement will result in improved punctuality of buses at stops later along that route, and of departure times of subsequent trips operated by that vehicle. As the positive changes to reliability can be felt beyond the location of the intervention, users of bus services across the region can benefit from these improvements to reliability.

3.69 With more buses operating on-time, operators will be able to run more of their scheduled mileage. This increased mileage results in more buses operating, which improves the reliability of that route (i.e. less of a wait between buses) and increases a passenger's perception and experience of a specific route.

Summary of results

3.70 The Strategic Case establishes the compelling argument for the delivery of the identified interventions across the North East region. This section outlines the benefits of the programmes.

3.71 The proposed programme has been designed to target unlocking housing, accessibility to employment, education or training sites or other economic hubs, such as the Metrocentre shopping centre. Many schemes have also identified opportunities for improving skills and apprenticeships to further increase economic benefits. The ITS scheme will future-proof results and deliver against objectives now and in the future, resulting in a transport network which is able to cope with increased demand over time, reducing the need for additional intervention. All types of schemes enable this through reducing car demand and increasing the overall capacity of the network.

Transforming Bus Corridors

3.72 The programme provides 2 new bus stations and 21.4km of bus priority measures. The aim is to reduce journey times and improve reliability for around 17m passengers annually and provide better accessibility to employment, education, training and leisure locations. Journeys will become more reliable and attractive to users with ITS interventions targeted at giving advantage to buses on the busiest bus corridors. This can be expected to encourage modal shift with a range on knock-on benefits associated with reduced car and highway usage.

3.73 The economic appraisals demonstrate that bus priority measures will bring benefits to users living/working near and passing through congested locations, particularly for commuters. The economic appraisal also considers the localised patterns of congestion, with the biggest journey time savings not always occurring during the traditional peak hours.

Transforming Walking and Cycling Corridors

3.74 The schemes will encourage active travel for many shorter distance journeys, through the inclusion of several local cycling and walking schemes, providing 82km of new/improved cycle routes expected to be used by around 1m cyclists and 12m pedestrians annually. Some schemes deliver onward connectivity opportunities e.g. Newcastle Airport-Ponteland link, with others delivering cycle parking facilities (such as the Intu Cycle Storage), building on improvements made through Cycle City Ambition Fund grants.

3.75 Many of the schemes in Gateshead have been designed with the aim to reduce NO₂ exceedances along the A1 through encouraging the increased use of active travel. This, and the direct health benefit of using active modes, will help improve the health of North East residents. Through the large proportion of active mode schemes in the programmes, the programme will create a healthier and more productive workforce, helping the North East attain health levels at least equal to other 'more healthy' areas around the UK.

3.76 The sustainable connectivity that the MetroGreen Sustainable Access scheme provides has been developed to tie in with the wider MetroGreen project. This project aims to renovate the brownfield land surrounding the Metrocentre into a new sustainable urban community. This project achieves the Transforming Cities Fund aims, by providing wider positive economic and social impacts of encouraging sustainable living.

3.77 The active mode schemes have also been designed with future-proofing in mind. For example, the Intu Cycle Storage scheme has identified the potential for expansion to deliver charging infrastructure for E-bikes and can be further increased in size if required.

Transforming City Centre Gateways

3.78 'Placemaking', as a concept in urban planning, is becoming increasingly common, and many schemes include improvements to the public realm, creating gateways for people arriving in urban centres. Newcastle is taking the opportunity to remove traffic from its urban core and making the central area more appealing for people to spend more time for leisure or recreational activities. In economic terms, the scheme in isolation provides high value for money. City Centre Gateways includes bus and rail stations. Durham Bus Station and Sunderland Railway Station will form enhanced gateways into these cities for people arriving on bus or rail. Both schemes bring benefits, mainly through the updating of old facilities and providing modern amenities that are expected from today's travellers.

3.79 Many schemes have been designed to provide innovative and modern solutions to the city and town centres in the North East. For example, the scheme Transforming Newcastle City Centre, aims to use new technology such as ANPR and VMS to facilitate access to the city centre and enable smart routing. Travel into/out of the city will be controlled to promote sustainable modes of transport.

Transforming Park & Ride

3.80 Park & Ride is a key component of achieving improved air quality, addressing congestion and transforming travel and enabling the transformation of public realm and delivery of active mode schemes. Over 1500 new spaces are provided in the programme. The P&R schemes deliver value for money, in that they achieve the aims of reducing congestion, contributing to improved air quality and enable public realm to be developed and enhanced. They have also been developed with future-proofing in mind, with new smart/digital ticketing solutions, AV and MaaS solutions and ANPR and VMS to link into UTMC. The schemes aim to provide better information and real time integrated journey planning and build on much of the work that has gone on before this funding opportunity.

3.81 Park & Ride for Durham demonstrates high value for money and will bring benefits for residents and visitors to Durham by reducing car trips into the City, reducing congestion and improving air quality.

Delivering the Metro and Local Rail Strategy

3.82 Each cost level programme within this bid include two rail schemes, Northumberland Line, providing 23.2km of new railway and four new stations, and Metro Flow, providing 4km of twin tracking and frequency improvements across the network. Both schemes provide high value for money and can transform the way people travel across large parts of the North East LEP region.

3.83 The Northumberland Line will provide a faster sustainable travel option into Newcastle, and the major employment site at the Port of Blyth. This increases accessibility to employment, education and training opportunities and provide users who switch mode, the opportunity to re-invest saved time in work or leisure time. Currently, there is no passenger rail line available, with the new scheme reducing public transport journey times by around 50%.

3.84 Metro Flow will transform travel across the Tyne & Wear Metro. The increased capacity will enable service and capacity enhancements directly on the affected line, but also improve journey times and reliability across the network.

3.85 Metro schemes have been designed to update technology with the future in mind. For example, proposals for the installation of EV charging points at stations, not only cater for electric car users but also encourage the growth of that demand, promoting sustainable travel choices.

Value for money statement

3.86 Based on the appraisal carried out, the three programme options presented belong in the following value for money categories.

Low cost – High (BCR between 2 and 4)

Medium cost – High (BCR between 2 and 4)

Preferred High cost – High (BCR between 2 and 4)

Table 39 Value for Money results

Programme	Cost (2019)	BCR	VfM Category
Low	£419,857,488	3.07	High
Medium	£449,979,568	2.98	High
High	£467,188,568	2.96	High

3.87 If Wider Economic Impacts calculated for some schemes are added (£162m), an adjusted scheme BCR of 3.6 (Preferred programme) is achieved.

COMMERCIAL CASE



4 Commercial Case

Introduction

In this section we

Confirm the commercial viability of our proposal; and

Highlight characteristics of specific schemes which have been considered in assessing commercial viability.

4.01 The schemes in our programme are all commercially viable. Scheme promoters have considered whole life costs during the development of the programme, as detailed in **Appendix J**, and have plans in place to meet those costs for the life of each capital scheme. The Financial Case includes sign off from the Section 31 Officer which signals that scheme promoters accept responsibility for meeting any ongoing revenue and capital requirements.

Highways schemes

4.02 In the case of infrastructure-only highways schemes, be they bus schemes or walking/cycling schemes, the investment will deliver new or upgraded public right of way infrastructure that will be maintained by the local highway authority once constructed. There are no other ongoing costs that will affect the commercial viability of these investments.

Rail Schemes

4.03 In the case of the two rail schemes within our programme the long-term commercial viability of each scheme has been assessed in detail within the business case for each scheme. Consequently, plans are in place to understand operating costs, maximise revenues and manage any resulting commercial risks. The proposed approach for each rail scheme is:

- For the Metro Flow scheme, Nexus is the vertically integrated owner and operator of the entire Metro network. Nexus will therefore accept the revenue risk associated with the scheme, offsetting the additional operating costs of more frequent services against the increased fare revenues that will arise from additional service levels and improved service reliability. Nexus will accept and bridge any shortfall between those costs and revenues. Nexus will also cover the increased costs associated with maintaining the additional infrastructure transferred from Network Rail;
- For the Northumberland Line, the costs of maintaining the line already fall to Network Rail and it is anticipated that such costs would be reduced in the short and medium term due to the investment in new track, signalling and level crossing infrastructure. The funding of operating costs will be from farebox revenues and potentially franchise subsidy payments from DfT, made available through future franchise agreements. Northumberland County Council are in advanced discussions with DfT about this and advice from civil servants is that accommodating this cost into existing and future franchise agreements will be achievable. The project aspiration is to examine all potential avenues that would lead to the service being operable without a call on the public purse (including procuring rather than leasing rolling stock). However, should subsidy be required, Northumberland County Council has made provision for revenue support for the first 3 years of operation.

Park & Ride Schemes

4.04 Our programme includes investment in new and expanded Park & Ride facilities. An initial business case has been put together by scheme promoters (Durham County Council and Nexus) that indicates the schemes can be commercially viable – that is, either the revenues generated can justify the provision of bespoke Park & Ride services, or the extra revenue is sufficient to attract existing bus services into the Park & Ride site.

North Shields Transport Hub

4.05 For the proposed new interchange in North Shields, options are being further developed with a view to maximising the commercial viability of this asset, taking into consideration the staffing and management implications.

Bus Infrastructure Schemes

4.06 It is noted that commercial bus operators will benefit from the improved speed and reliability of services that arise from the implementation of bus priority measures in the programme. This in turn will have the effect of reducing bus operating costs for certain services and attracting passenger and revenue growth. At present it is assumed that these benefits will be enjoyed by bus operators and used to offset the decline in patronage and increases in operating costs experienced in the region over many years.

Outputs

In this section we

Outline the outputs of this programme.

4.07 The outputs of the programme is chiefly a sum of the outputs of schemes which make up this programme. These outputs are mainly defined as lengths of new or improved infrastructure; however, in the case of the two major rail schemes, and some of the bus priority measures, wider outputs in terms of new and improved service levels are also identified. These outputs are shown in **Table 40** below.

Table 40 Programme outputs

Programme Outputs	
Re-opening rail track, re-introducing passenger services	23.2km
Associated new or reopened railway stations	4 no.
Twin tracking of Metro line to increase frequency of service	4km
Major rail station improvements / redevelopment	3 no.
New transport interchanges / new bus stations	2 no.
Bus priority measures	21.4km
Additional Park and Ride spaces for onward interchange	1,578
New smart and digital ticket solutions at park and ride sites	6 no.
Off-road segregated (cycle and/or pedestrian)	16.9km
On-road segregated (cycle and/or pedestrian)	48.3km
On-road non-segregated cycleway	16.9km
New bridges	2 no.
Secure cycle storage / cycle hub	3,056sqft.
Regional ITS package: junction improvements	165
Regional ITS package: pedestrian crossings	162

Procurement and Sourcing

In this section we

Set out our procurement strategy that will be deployed to engage the market;

Aim to identify the key resources required to deliver the Tranche 2 programme; and

Detail the risk allocation that is built into the procurement process.

Procurement Strategy

4.08 This programme is made up of schemes promoted by 9 partners:

Promoter	Nature of Organisation
Durham County Council	
Sunderland City Council	
South Tyneside Council	
Gateshead Council	Local Authority
Newcastle City Council	
North Tyneside Council	
Northumberland County Council	
Nexus	Passenger Transport Executive
INTU	Commercial Partner – Retail Landlord and Facilities Manager

4.09 Each of these promoters have their own procurement policies, which in the case of many public sector organizations is published. The procurement strategy for individual schemes is detailed in **Appendix K**. Our strategy is for scheme promoters to follow their own procurement policies and to manage suppliers and risk through their established processes. The following paragraphs offer a guide of the general approach we expect to be taken across promoters.

4.10 The capital highway investments will be delivered by the relevant local highway authority for each scheme. A range of procurement strategies will be deployed depending on the size and complexity of each scheme. In general:

- Smaller schemes will be designed in-house by the scheme promoters' engineering design teams and their advisors. Construction will then be delivered either by the authorities' in-house direct labour organization or by working with an engineering contractor. Off the shelf construction contracts, such as NEC3, will be used to ensure that the outputs and outcomes of each scheme are delivered, and an appropriate allocation of risks is achieved during the construction phase.
- Larger schemes are more likely to be delivered in partnership with a private sector contractor. Options for 'design and build' contracts based on an output specification will be explored, although in many cases the design of the scheme will be straightforward, and a more typical client/designer and contractor/constructor relationship will be deployed. The choice of contracting model will be selected in order to allocate appropriate levels of risk to the contractor and scheme promoter, based on how overall costs can be best managed.
- All schemes will be subject to the local assurance framework process which will require promoters to provide detail on how costs and risks will be shared throughout the contracts. The assurance framework provides a funding envelope and promoters will be required to manage the risks appropriately throughout this process. As scheme procurement activities are advanced, promoters will be required to draft and prepare contracts which will involve promoters

carefully evaluating and sharing ownership of risks with contractors. Promoters will seek appropriate approval and sign off to ensure only suitable risks are owned by the promoter and legal advice is sought if negotiations occur with contractors.

4.11 For the Metro Flow scheme, the proposal relies on the transfer of existing track assets from Network Rail to Nexus, which will allow Nexus to exercise full control over those assets once the necessary works have been completed. Nexus has already secured an outline asset transfer agreement with Network Rail which will be enacted once the funding for the scheme is confirmed.

4.12 Nexus is nearing contract award in the procurement of its replacement fleet and depot project. The contracts for which include provision for the supply and stabling of the additional trains required to enhance the daytime service frequency from five to six trains per hour. The procurement process (and cost) for acquiring these additional train sets is therefore in place.

4.13 During the development of its tender the Metro Fleet project team worked closely with the Metro Flow project team to understand the potential additional fleet requirement that Metro Flow would generate. Early discussions confirmed that it may be up to six and as such this was included as an evaluated option. Therefore, the tender responses received include a cost for up to six additional trains and the timeframes within which they can be ordered at that fixed price. The timeframes are:

- 12 months prior to the delivery of the last train - No additional mobilisation costs incurred. This dovetails with the delivery timescales for the Metro Flow scheme, provided it is funded by TCF.
- Less than 12 months prior to the delivery of the last train or up to 24 months after the last train has been accepted – Additional trains can be ordered but will include mobilisation costs.
- After 24 months from acceptance of the final train there is no guarantee additional units can be manufactured.

4.14 For the infrastructure works, Nexus will deploy an appropriate procurement strategy from the options that have been used to successfully deliver over £300m of infrastructure through the Metro Asset Renewal Programme (ARP) over the last 7 years. Delivery of the ARP is predominantly based on the NEC3 suite of Contracts.

4.15 NEC is a family of contracts that facilitates the implementation of sound project management principles and practices as well as defining legal relationships. It is suitable for procuring a diverse range of works, services and supply, spanning major framework projects through to minor works and purchasing of supplies and goods. NEC3 comes with full endorsement from the Construction Clients' Board of the UK Cabinet Office. This recommends NEC3 for use on all public sector construction projects. Nexus contract under the NEC3 April 2013 revision. In addition to Civil and Rail engineering projects all ARP station refurbishment contracts have employed NEC3.

4.16 The implementation of NEC3 contracts has resulted in major benefits for projects both nationally and internationally in terms of time, cost savings and improved quality. Since inception of the ARP, over 40 significant schemes have been completed by the Nexus Project and Commercial Management team Using NEC3 Contracts. A strong culture of continuous improvement is in place ensuring both technical and commercial lessons learned are quickly assimilated into the project delivery process.

4.17 For the Northumberland Line, the scheme promoter (Northumberland County Council) has created a project board structure including senior rail industry stakeholders to guide the three key elements of the phase 1 schemes:

- the construction of four new stations along with associated off-site highway, access and car parking works;
- the construction of upgraded infrastructure (track dualling, improved level crossings and associated signalling upgrades) that enables improved line speeds and the safe operation of regular passenger trains on what is currently a freight only railway; and
- the operation of a new passenger rail service on the upgraded line.

4.18 The commercial matters to be considered for delivering these three aspects are detailed in the SOBC for the project. In brief:

- The scope of the scheme put forward in the Transforming Cities Fund programme has been tailored to ensure that it is entirely deliverable within the timescales within which funding from TCF is available;
- The operation of passenger trains can either be delivered by an existing train operating company in the North East (most likely Northern Rail using existing cascaded rolling stock) with the operation of the service integrated into an existing franchise agreement; or a newly appointed operator working directly to a specification defined by Northumberland County Council.
- Several options for delivering the required infrastructure improvements have been explored, ranging from handing full design and construction responsibility over to Network Rail to transferring the infrastructure from Network Rail to an appropriate local body and delivering the infrastructure improvements via that body.

4.19 Options to vertically integrate the operation and improvement of the infrastructure with operation of the new rail service has also been considered. A decision on the preferred delivery method will be determined following further discussions between the rail industry, Northumberland County Council and other stakeholders (including freight operating companies and Nexus, as owner/operator of the Metro system).

Procurement Resources

4.20 The Tranche 2 programme represents a significant investment in public transport and sustainable transport in the region, which in turn will present a significant workload for existing procurement resources. The region already has existing procurement resources in place through the North East Procurement Organisation (NEPO), which enables the regional procurement of various services and supplies.

4.21 As the programme to be funded by TCF and delivered locally takes shape in more detail following receipt of the DfT's funding decision, the region will undertake a review to explore whether additional resources should be added to NEPO in order manage the frameworks and agreements that will be required to deliver the components of the programme. Alternatively, a separate and bespoke set of resources may be needed to guide procurement of the programme, this will also be investigated.

FINANCIAL CASE



5 Financial Case

In this section we

Set out our cost profiles for the Transforming Cities Fund programme- costs relate to DfT funding request and Local and Private contributions

Detail the whole costs which have been undertaken in the TCF programme

Preferred, Medium and Low Cost Scenarios

5.01 The financial case for Tranche 2 TCF Programme gives 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 TCF, the yearly cost profile and identifies where match contributions will be obtained to meet the scheme costs. Cost profiles have been prepared based on High, Medium and Low funding levels of investment, as detailed in **Table 41, Table 42 and Table 43**. A detailed breakdown of scheme costs can be found in **Appendix L**.

Table 41 Preferred (High Cost) Scenario**Schemes over £40 million (retained by DfT)**

	2019/20	2020/21	2021/2022	2022/23	Total
Total Programme Cost	£0.00	£20,988,809.28	£70,387,179.79	£129,670,102.93	£221,046,092.00
DfT funding request	£0.00	£13,633,809.28	£59,875,179.79	£120,723,102.93	£194,232,092.00
Local funding	£0.00	£7,355,000.00	£10,512,000.00	£8,947,000.00	£26,814,000.00
Private funding	£0.00	£0.00	£0.00	£0.00	£0.00
Total Match funding	£0.00	£7,355,000.00	£10,512,000.00	£8,947,000.00	£26,814,000.00

Schemes under £40 million (not retained by DfT)

	2019/20	2020/21	2021/2022	2022/23	Total
Total Programme Cost	£0.00	£101,945,299.25	£76,093,534.89	£68,103,642.70	£246,142,476.84
DfT funding request	£0.00	£82,382,703.22	£61,854,746.86	£55,068,967.27	£199,306,417.35
Local funding	£0.00	£18,252,496.03	£13,244,688.03	£8,938,575.43	£40,435,759.49
Private funding	£0.00	£1,310,100.00	£994,100.00	£4,096,100.00	£6,400,300.00
Total Match funding	£0.00	£19,562,596.03	£14,238,788.03	£13,034,675.43	£46,836,059.49

Total Preferred (High)-cost scenario

	2019/20	2020/21	2021/2022	2022/23	Total
Total Programme Cost	£0.00	£122,934,108.53	£146,480,714.68	£197,773,745.63	£467,188,568.84
DfT funding request	£0.00	£96,016,512.50	£121,729,926.65	£175,792,070.20	£393,538,509.35
Local funding	£0.00	£25,607,496.03	£23,756,688.03	£17,885,575.43	£67,249,759.49
Private funding	£0.00	£1,310,100.00	£994,100.00	£4,096,100.00	£6,400,300.00
Total Match funding	£0.00	£26,917,596.03	£24,750,788.03	£21,981,675.43	£73,650,059.49

Table 42 Medium Cost Scenario**Schemes over £40 million (retained by DfT)**

Schemes over £40 million (retained by DfT)	2019/20	2020/21	2021/2022	2022/23	Total
Total Programme Cost	£0.00	£20,988,809.28	£70,387,179.79	£129,670,102.93	£221,046,092.00
DfT funding request	£0.00	£13,633,809.28	£59,875,179.79	£120,723,102.93	£194,232,092.00
Local funding	£0.00	£7,355,000.00	£10,512,000.00	£8,947,000.00	£26,814,000.00
Private funding	£0.00	£0.00	£0.00	£0.00	£0.00
Total Match funding	£0.00	£7,355,000.00	£10,512,000.00	£8,947,000.00	£26,814,000.00

Schemes under £40 million (not retained by DfT)

	2019/20	2020/21	2021/2022	2022/23	Total
Total Programme Cost	£0.00	£93,423,299.25	£69,006,534.89	£66,503,642.70	£228,933,476.84
DfT funding request	£0.00	£74,660,703.22	£55,442,746.86	£53,618,967.27	£183,722,417.35
Local funding	£0.00	£17,452,496.03	£12,569,688.03	£8,788,575.43	£38,810,759.49
Private funding	£0.00	£1,310,100.00	£994,100.00	£4,096,100.00	£6,400,300.00
Total Match funding	£0.00	£18,762,596.03	£13,563,788.03	£12,884,675.43	£45,211,059.49

Total Medium-cost scenario

	2019/20	2020/21	2021/2022	2022/23	Total
Total Programme Cost	£0.00	£114,412,108.53	£139,393,714.68	£196,173,745.63	£449,979,568.84
DfT funding request	£0.00	£88,294,512.50	£115,317,926.65	£174,342,070.20	£377,954,509.35
Local funding	£0.00	£24,807,496.03	£23,081,688.03	£17,735,575.43	£65,624,759.49
Private funding	£0.00	£1,310,100.00	£994,100.00	£4,096,100.00	£6,400,300.00
Total Match funding	£0.00	£26,117,596.03	£24,075,788.03	£21,831,675.43	£72,025,059.49

Table 43 Low Cost Scenario**Schemes over £40 million (retained by DfT)**

	2019/20	2020/21	2021/2022	2022/23	Total
Total Programme Cost	£0.00	£20,988,809.28	£70,387,179.79	£129,670,102.93	£221,046,092.00
DfT funding request	£0.00	£13,633,809.28	£59,875,179.79	£120,723,102.93	£194,232,092.00
Local funding	£0.00	£7,355,000.00	£10,512,000.00	£8,947,000.00	£26,814,000.00
Private funding	£0.00	£0.00	£0.00	£0.00	£0.00
Total Match funding	£0.00	£7,355,000.00	£10,512,000.00	£8,947,000.00	£26,814,000.00

Schemes under £40 million (not retained by DfT)

	2019/20	2020/21	2021/2022	2022/23	Total
Total Programme Cost	£0.00	£87,611,939.25	£59,208,814.89	£51,990,642.70	£198,811,396.84
DfT funding request	£0.00	£69,597,370.22	£46,810,026.86	£40,263,782.67	£156,671,179.75
Local funding	£0.00	£16,704,469.03	£11,404,688.03	£7,630,760.03	£35,739,917.09
Private funding	£0.00	£1,310,100.00	£994,100.00	£4,096,100.00	£6,400,300.00
Total Match funding	£0.00	£18,014,569.03	£12,398,788.03	£11,726,860.03	£42,140,217.09

Total Low-cost scenario

	2019/20	2020/21	2021/2022	2022/23	Total
Total Programme Cost	£0.00	£108,600,748.53	£129,595,994.68	£181,660,745.63	£419,857,488.84
DfT funding request	£0.00	£83,231,179.50	£106,685,206.65	£160,986,885.60	£350,903,271.75
Local funding	£0.00	£24,059,469.03	£21,916,688.03	£16,577,760.03	£62,553,917.09
Private funding	£0.00	£1,310,100.00	£994,100.00	£4,096,100.00	£6,400,300.00
Total Match funding	£0.00	£25,369,569.03	£22,910,788.03	£20,673,860.03	£68,954,217.09

Capital Costs

5.02 The capital costs incorporated into this SOBC have been derived in three stages:

- 1** Scheme promoters have estimated the costs of their schemes based on scheme designs that are progressed to various levels. In all cases costs have been estimated using bills of quantities and standard unit costs and experience of similar schemes recently complete.
- 2** Cost estimates have been collated from scheme promoters using a pro forma approach, to capture overall capital costs and consider the whole life cost implications for the TCF programme. All costs are based on 2019 rates.
- 3** Schemes over £40 million in value have been verified by an independent cost estimator.

5.03 For the two rail schemes, a detailed analysis of capital costs has been undertaken. Details can be found in the outline business cases for each scheme. For other schemes a more high-level analysis of costs has been prepared. However, an assurance process has been undertaken to ensure cost estimates meet a minimum standard of certainty, suitable for inclusion in a SOBC.

5.04 An assessment of the Northumberland line capital costs has been undertaken by a Quantity Surveyor using industry standard metrics and previous project experience to generate the budget estimate for the project. In order to increase the robustness of both the engineering decisions and the Costs for the scheme it was agreed to engage with a leading UK contractor who would provide Early Contractor Involvement (ECI). Morgan Sindall were commissioned to review and challenge the costs; their review came in at around 1% differential to that of the Project QS which suggests a reasonable degree of robustness in the pricing.

5.05 In addition, an example of the process in which Durham County Council have developed scheme costs is as follows:

- Schemes are developed to a robust design level which provides confidence that the scope and cost estimates will not fluctuate.
- Bill of quantities are produced, considering all elements by the Principal Designer. Typical considerations include; general civils, street lighting, drainage, traffic and traffic signals.
- Fee levels for individual schemes are produced, considering other similar projects.
- Estimates for utility diversions are derived from enquiries with the Statutory Undertakers.
- Preliminary and contingency levels have been based on the complexity and risk of individual projects, involving early contractor involvement.

5.06 Furthermore, an example of the process in which Newcastle City Council have developed scheme costs is as follows:

- Individual projects have been developed up to Preliminary Design stage, and in most cases General Arrangement drawings have been generated and subsequently used to determine basic quantities of key elements of work. Where proposals have been less well defined, then 'all in' rates per square metre of proposed treatment, or linear rates of typical cross-sections have been developed and applied to the proposed areas of works, with bespoke provisional sums added where applicable.

5.07 Funding of the schemes will be from DfT and a combination of local and private funding. A summary of the funding sources is detailed in the detailed breakdown of scheme costs.

Thematic Packages

5.08 The table below identifies the capital cost split by thematic package for the preferred scenario:

Table 44 Breakdown of capital cost by thematic package - preferred scenario

Thematic Packages	Total £m	TCF ask
Transforming Bus Corridors	£111m	£91m
Transforming Walking and Cycling Corridors	£59m	£43m
Transforming City Centre	£58m	£50m
Transforming Park & Ride	£17m	£15m
Delivering the Metro and Local Rail Strategy	£221m	£194m

Match Funding

5.09 A significant sum of locally sourced funding is being allocated for the schemes, demonstrating our commitment to the successful delivery of the programme. The table below identifies the percentages of local and private funding for the preferred high, medium and low cost investment levels.

Table 45 Breakdown of match funding

	Local % Match	Private % Match	Total % of Match funding
Preferred (High)	14.4	1.4	15.8
Medium	14.6	1.4	16.0
Low	14.9	1.5	16.4

5.10 The sources of this local match funding are detailed in **Appendix M**, but as a guide match funding broadly comprises:

- Contributions from local authority capital programmes;
- Contributions from section 106 agreements associated with major developments;
- Contributions from the devolved Local Growth Fund; and
- Contributions from transport operators and infrastructure providers.

5.11 Moreover, the JTC's Chief Finance Officer has assured all sources of match funding are in place and ready to be committed to the individual schemes within the programme.

Risk

5.12 For schemes which are not to be retained by DFT due to their capital costs being under £40m, we have included in the capital cost estimate a full allowance for risks, contingencies, inflation and other cost variations that could arise.

Whole Life Costs

5.13 The whole life cost estimates for the individual schemes have been detailed in **Appendix J**. 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
- Additional resources

MANAGEMENT CASE



6 Management Case

Evidence of Similar Projects

6.01 Authorities in the North East have extensive experience in the delivery of large capital investment projects and complex programmes. The following case studies provide an overview of some of the projects the region has successfully delivered.

NELEP Local Growth Fund

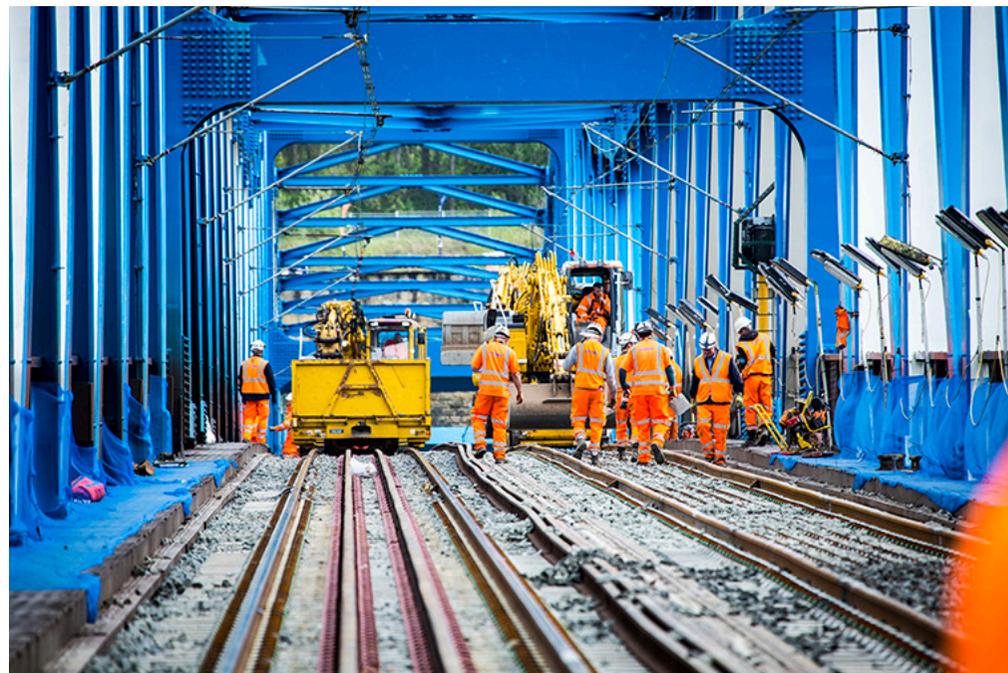
6.02 The North East Local Enterprise Partnership's Local Growth Fund is a capital programme of £270 million that forms a key element of the North East Growth Deals agreed with Government between 2014 and 2017, which works to achieve the objectives set out in the Strategic Economic Plan (SEP). Significant progress has been made to date and the investment programme is now over half way through. Many projects are now in operation and many more under construction creating employment sites and buildings for business innovation and growth, strategic transport improvements and new learning facilities supporting local communities.

6.03 Several high-profile sustainable transport projects have been enabled by LGF including Newcastle Central Metro Station refurbishment, South Shields Transport Interchange and Horden Railway Station in County Durham, along with the new Metro training and maintenance skills centre in South Shields. The LGF also includes the Local Sustainable Transport Fund, a regionwide mini-programme focusing on sustainable methods of transport, including cycle ways and improved traffic management systems to enable more reliable public transport links.

Nexus Asset Renewal Programme

6.04 Nexus is the Passenger Transport Executive for Tyne and Wear, and is owner and operator of the region's Metro system. Nexus has the appropriate powers to operate the Metro as an integrated railway in which it maintains and renews rail infrastructure as well as operating the train service.

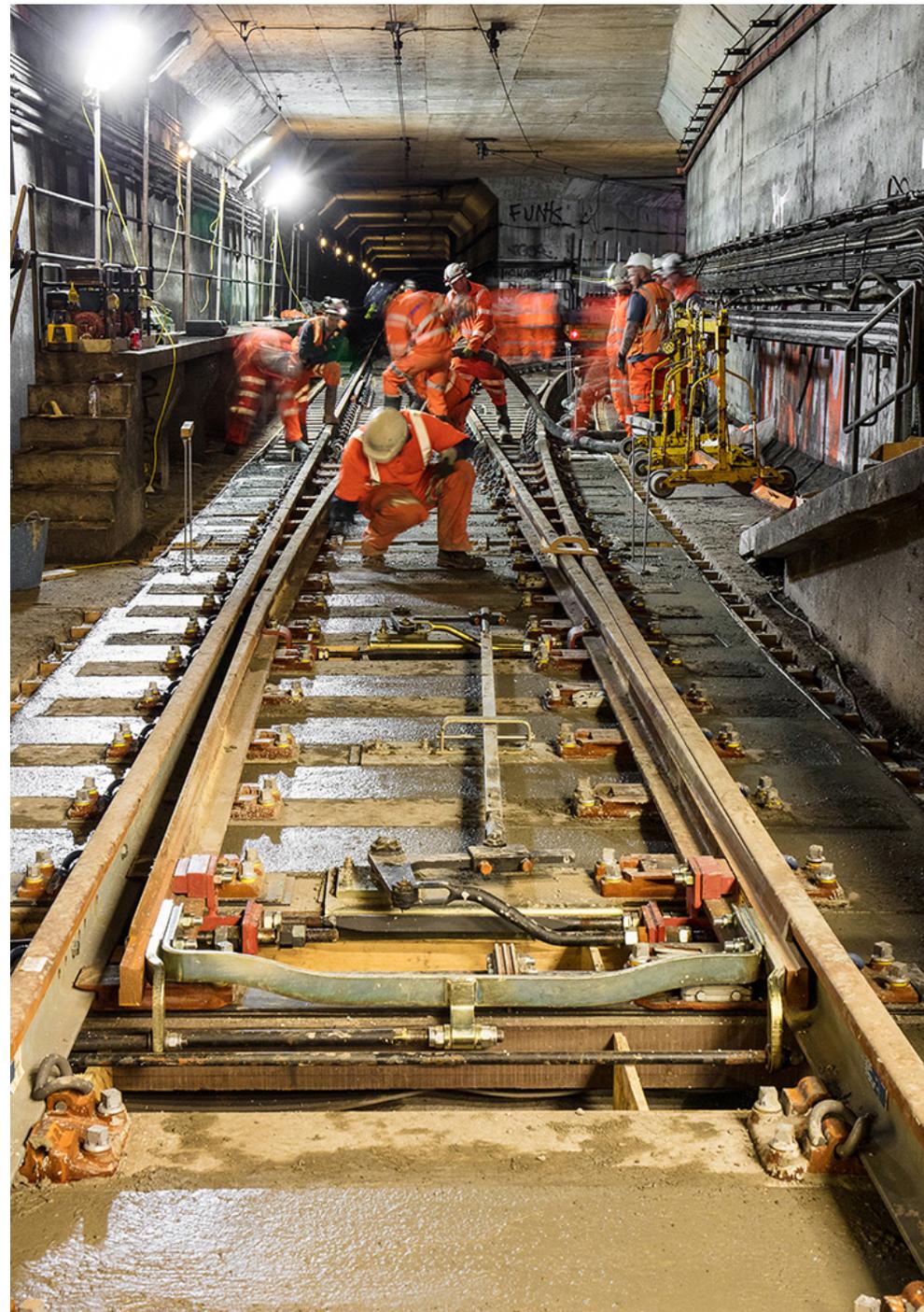
6.05 The Nexus Asset Renewal Programme is a programme worth £352 million to bring Nexus' asset base back to the appropriate condition to operate a reliable railway. The programme is at an advanced stage with over £300m of projects delivered; and affirms Nexus' capability and competence at overseeing complex rail engineering programmes.



6.06 The current status of ARP is:

- 35 of 60 Stations refurbished or work underway
- 86 Metro carriages refurbished
- 59km of track renewed or refurbished
- 24 sets of points renewed
- 25 sets of sets of points refurbished
- 50 sets of points motors replaced
- 6.5km of track drainage installed
- 31km of cable troughing refurbished
- 85km of signalling cable replaced
- 22 bridges repaired, and 7 bridges removed
- 27 escalators replaced
- 12 lifts replaced
- Metro train wash installed
- Wheel lathe installed
- New Tamper purchased
- 2km of earthworks repaired
- Ballast retention and stabilisation
- 17km of overhead line replaced

6.07 Nexus is either a promoter or key stakeholder in many of the schemes included in our programme and as the Passenger Transport Executive reporting to the Joint Transport Committee, demonstrates that the region can access the expertise to competently oversee devolved funding programmes.



Northern Spire Bridge, Sunderland

6.08 The Northern Spire Bridge was a £117.6 million project completed in 2018, led and commissioned by Sunderland City Council, to construct a new bridge over the Wear linking the A1231 Wessington Way with the B1405 European Way/Pallion New Road as part of wider plans to improve the road network between the A19 and Sunderland city centre, and the Port of Sunderland. The project brought together specialist partners from the private and public sector from across Europe. The UK Government contributed £82.5 million through the Sunderland and South Tyneside City Deal, with Sunderland City Council investing £35.1 million in the project.



TCF Tranche 1

6.09 Our successful bid for Tranche 1 funding, which awarded £10 million to the North East city region, is delivering schemes within five sustainable transport packages. Delivery of Tranche 1 is being managed by the North East Transport Strategy Unit and is progressing well, with a number of schemes now either complete or approaching completion.

6.10 Work has begun on all schemes in the Cycling to Employment Links package, with two of the schemes on schedule to complete before the end of November.

6.11 With regards to the Public Transport Reliability Upgrades package, the A185 Intelligent Transport scheme is expected to be finished in November 2019 and Follingsby Lane will commence in January 2020. The Durham UTMC measures scheme is progressing.

6.12 Work has started on site for all schemes within the Cycling Links to Sunderland City Centre package. Two of the schemes are expected to be complete by the end of 2019 with the remaining two on course to complete by the end of 2019/20. Sunderland City Council has identified £400k of match funding to help fund any overspend within the Cycle Links to Sunderland City Centre package.

6.13 The Broadway to Brunton scheme, which is part of the Cycling to Newcastle package, is substantially complete on site. The full TCF allocation is expected to be spent. The High-Level Bridge scheme is continuing through the design process.

6.14 The Barras Bridge scheme is partially complete and construction will be completed between January and March 2020, once the busy Christmas period has passed.

Programme and Project Plan

In this section we:

Set out our project plan for delivering the programme in accordance with the TCF guidance;

Develop a programme of schemes for Tranche 2 funding that is highly deliverable; and

Outline the key aspects of deliverability which have been central to the selection of schemes that comprise our transformative programme.

6.15 In order to manage and deliver programmes effectively it is necessary to establish a robust project plan which captures individual scheme activities, milestones, document submissions, approval processes and monitoring and evaluation periods. The TCF project plan (detailed in **Appendix N**) has been developed to focus on the deliverability of the individual schemes. Key milestones for the larger value schemes can be found in the **Table 46**.

6.16 Since the June submission the timescales for the two rail projects have been discussed during DfT co-development meetings to provide assurance that the schemes are deliverable within DfT timescales. Furthermore, in order to increase the robustness of their project plan Northumberland have commissioned Morgan Sindall to review the constructability of the options being considered and to develop a detailed construction programme.

6.17 Once design and construction is under way the Programme Delivery Manager will carry out a monthly review of the project plans with scheme promoters feeding in progress and identifying any key risks which could impact on the delivery of the scheme. Furthermore, the critical path activities for the delivery of the schemes (between 2020-2023) will be reviewed and monitoring on a weekly basis to ensure any delays are addressed and mitigated. This process provides a regular health check and assurance that the programme is being proactively managed.

Table 46 Key milestones

Milestone	Forecast Date
DfT decision on funding	31 March 2020
North Shields Interchange (NT02):	
Developed design complete	01 February 2021
Technical design complete	29 September 2021
Construction complete	01 March 2023
Metro Flow (NX03)	
Design complete	3 September 2021
Construction complete	3 October 2022
Northumberland Line (NO01)	
Design complete	29 October 2021
Construction complete	26 September 2022
Newcastle Central Gateway (NE02)	
Design complete	30 June 2020
Construction complete	28 February 2023

6.18 Dependencies have been considered and are detailed in **Table 47**.

Table 47 Dependencies

<p>Air quality public consultation 2019</p>	<p>Newcastle, Gateshead and North Tyneside councils have collaborated to develop proposals to improve air quality. The first stage consultation closed in May 2019, which received 19,211 responses. As a result of the initial consultation and further assessment, the authorities have considered comments and have decided to re-consult with a CAZ C. This means that non-compliant lorries, buses, coaches, vans, and taxis will incur a daily fee to enter Newcastle city centre- but private cars will not in 2021. In addition, the councils are also proposing to include traffic management measures and a maintenance scheme on the Tyne bridge.</p> <p>The second stage consultation will run from Oct 2019 for 6 weeks. The Air Quality proposals can be expected to have an impact on travel habits and public transport patronage in the region. The dependency will be closely monitored as the AQ proposals and TCF schemes are progressed.</p>
<p>New Metro fleet</p>	<p>TCF Tranche 2 programme analysis needs to account for the new fleet of Metro trains, due to be phased in on the network between 2021 and 2024</p>
<p>Rail Network Upgrades</p>	<p>Tranche 2 programme will consider any major works planned to the region's rail network during the delivery period to ensure works are coordinated to minimise disruption. Scheme promoters will continue to engage with Network Rail to minimise disruption.</p> <p>For example, Central Gateway 2 scheme has considered all currently known Network Rail projects and has been designed to ensure there are no conflicts between our proposals and the longer-term schemes, including the potential for lengthening of platforms 11/12 and HS2.</p>
<p>Highway Works</p>	<p>The Programme accounts for any major works planned to the region's highways network during the delivery period to ensure works are coordinated to minimise disruption. This includes:</p> <ul style="list-style-type: none"> – Strategic Road Network, Delivery of Road Investment Strategy 1 and 2 projects especially on the A1, A19 and A69 works, – Major Road Network, there are several schemes in the region that have been shortlisted by TfN and we will need to react to.

Highway Works	<p>Scheme promoters will continue to consider planned Highway works as their TCF schemes are delivered. For example, North Tyneside confirm each of the schemes can be delivered independently of all the other regional schemes including Highways England schemes programme up to 2023.</p> <p>In addition, the South Shields to Sunderland Strategic Bus Corridor will see investment in highway junctions to support bus services and therefore will be programmed / coordinated through our Network Management responsibilities to mitigate impact to Highway works. Furthermore, the South Shields to Newcastle Strategic Bus Corridor which includes a series of highway improvements including the Level Crossing Closure scheme and junction improvements throughout the route will have a link to Highway Works and Network Rail Works. STC will coordinate and programme any Highway works through the Network Management responsibilities and early engagement with Network Rail will continue as part of the Level Crossing Closure element.</p>
Northumberland Line- Network Rail infrastructure upgrades and maintenance regime	<p>Network Rail own the assets and therefore perform an asset protection function. Work will be undertaken in collaboration with Network Rail and will take account of proposed railway infrastructure improvements, such as updates to signalling and proposed level crossing closures. All proposed works on the asset will be subject to Network Rail assurance.</p>
Northumberland Line- Rail freight requirements	<p>The line is currently an existing freight line and provision for current and future freight aspirations will need to be maintained. Freight operators are seen as a key stakeholder and regular consultation will be held to ensure that future freight requirements are understood.</p>
Northumberland Line- Tyne and Wear Metro	<p>The heavy rail infrastructure runs parallel to the Metro infrastructure between Northumberland Park and Benton North Junction. There will be a shared station at Northumberland Park.</p>
Dependencies between TCF Schemes	<p>We will avoid conflicts between major or geographically close schemes. For example, coordination of Northumberland Line and Metro Flow blockades will be proactively managed. Furthermore, promoters will continue to engage with each other during the risk reduction process to reduce the likelihood of a schemes impacting one another.</p> <p>In addition, we will also ensure the bus priority / ITS measures in South Tyneside consider the dates for Metro Flow blockade.</p>

Governance and Programme Management

In this section we

Detail the region's governance, programme management structure and assurance arrangements which are in place to support in delivering an effective TCF Tranche 2 programme; and

Outline the communications and engagement strategy for the programme.

6.19 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 TCF programme, and documentation and guidance has already been updated to reflect the particular requirements of devolved TCF funding and the latest governance arrangements in the North East. This governance structure and assurance process has successfully delivered our Local Growth Fund monies held by the North East Local Enterprise Partnership (NELEP). Fundamental to decision making for devolved funding from TCF is the new political arrangements in the region with two combined authorities and transport matters decided across the two combined authority areas by a Joint Transport Committee.

6.20 The Joint Transport Committee is comprised of seven senior elected members, three from the North of Tyne Combined Authority area and four from the remaining North East Combined Authority area. Strategic decisions about transport policies and spending are delegated to the Joint Transport Committee by the two combined authorities. This ensures that strategic decisions about transport policies and proposals are made at a pan-regional level that incorporates the views and requirements of the functional transport geography across the whole region, avoiding a split of responsibilities between the two combined authority areas.

6.21 The Joint Transport Committee is advised on a day to day basis by the Transport North East Strategy Unit, the group of officers that develop plans and strategies and delivers programmes on behalf of the JTC. The North East Transport Strategy Board provides high level advice about decisions and papers prepared by Transport North East Strategy Unit for the Joint Transport Committee to consider.

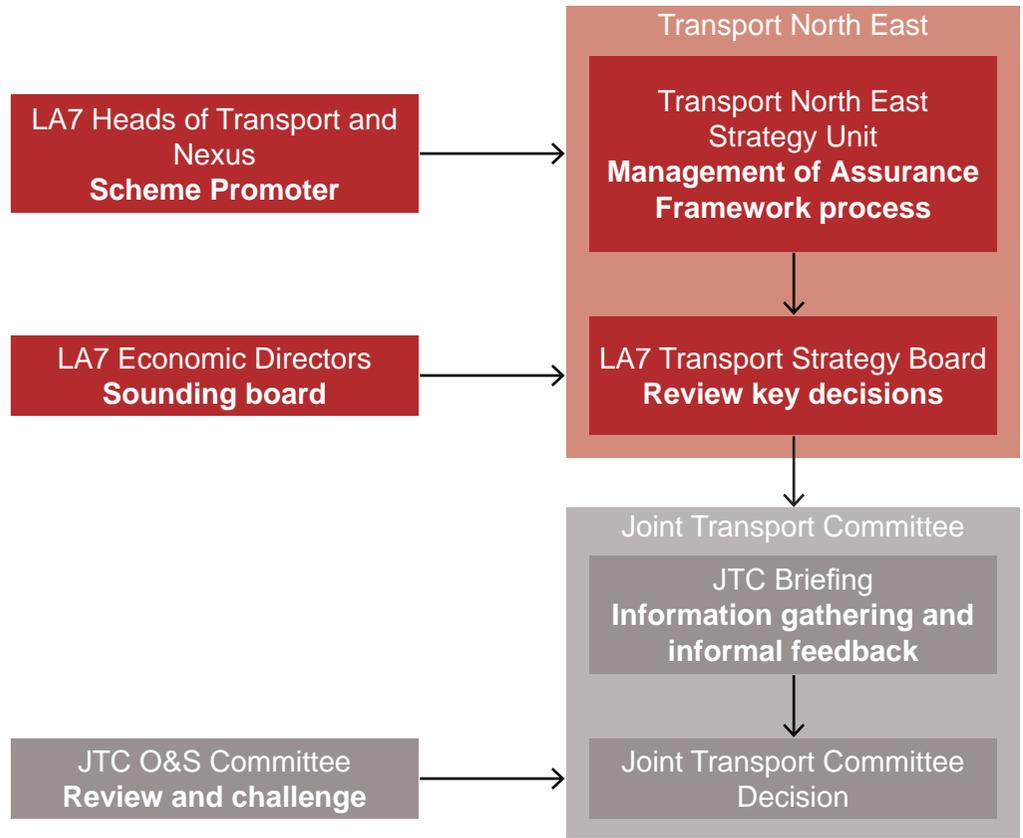
6.22 The Transport North East structure is overseen by a Managing Director, Transport North East (Tobyn Hughes) and a Transport Strategy Director (Philip Meikle).

6.23 Our Tranche 2 TCF programme envisages that funding for schemes not “retained” by DfT will be £199 million in the preferred high cost scenario, and in the range of £157-184 million for the other scenarios presented in this SOBC. We assume that this funding will be devolved to the North East region and the process to deliver the scheme outputs will rest with the region. The assurance framework we have in place, described below is capable of meeting the challenge of delivering a devolved programme of this scale.

6.24 The North East region has nominated a Senior Responsible Owner (SRO) for the devolved programme. The SRO will be Tobyn Hughes (Managing Director, Transport North East). This role provides executive oversight for all transport delivery projects in the region as well as operational oversight of Nexus, the Passenger Transport Executive and owner/operator of the Tyne and Wear Metro.

6.25 Our proposed Assurance Framework (detailed in **Appendix O**) provides for the staged release of funding in line with the progress made by scheme developers, from scheme design and site preparation through to ultimate delivery of the scheme on the ground. This Assurance Framework requires that funding release is signed off at key stages –this sign off is provided by our North East Joint Transport Committee (JTC), taking on board the advice of the Transport Strategy Board and Transport North East Strategy Unit. The position of the JTC, the Transport Strategy Board and the Transport North East Strategy Unit within the assurance framework process for this TCF programme is set out in **Figure 58**.

Figure 56 Governance structure



6.26 To provide a further check and balance, our assurance framework requires that at key decision-making gateways the business cases developed by scheme promoters and checked by the Transport North East Strategy Unit will always be the subject of a further independent review from an experienced transport consultant. This independent review process will provide the Joint Transport Committee and the Department for Transport with additional assurance regarding the strength of case for investing in each scheme within the programme as it progresses through the design, tendering and delivery phases.

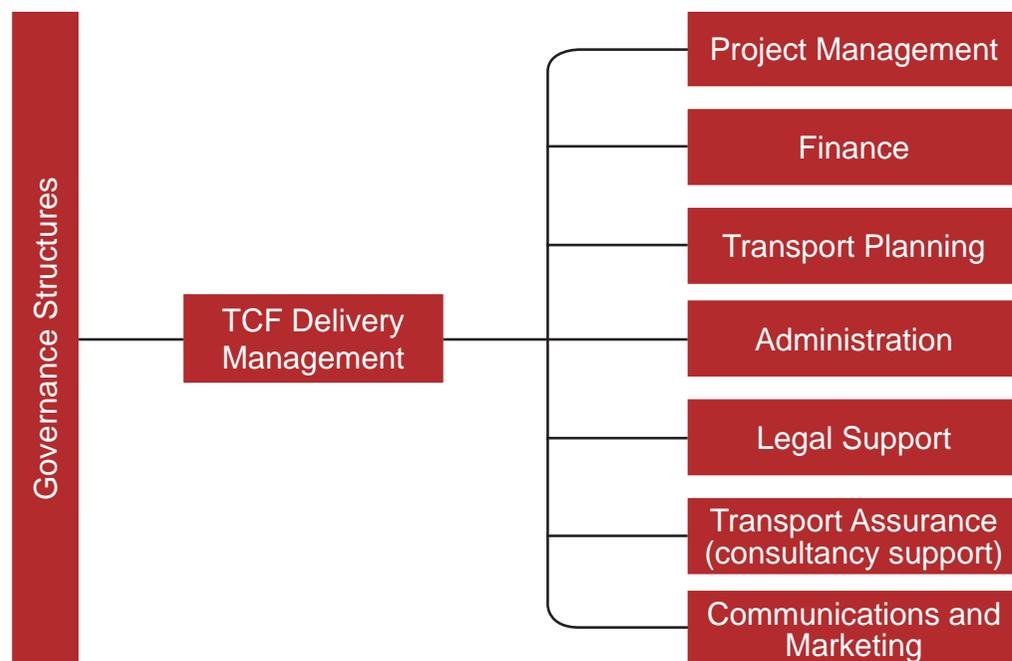
6.27 While major spending decisions will be made by the JTC itself, the sign-off of interim progress through the Gateways may be delegated to the SRO. The thresholds for any such delegations will be agreed by the Committee once the scale of funding available to the region is confirmed.

6.28 The spending decisions and delivered outputs/outcomes of the TCF programme will be subject to independent scrutiny from our Joint Transport Committee Overview and Scrutiny Committee. This Committee will review decisions and make recommendations for how the enactment of our Assurance Framework can be delivered to meet regional needs and comply with the Government’s grant conditions.

6.29 In order to support the SRO, manage the devolved decision-making processes and deliver the region’s Assurance Framework, a Programme Delivery team will be established. This team will manage a programme comprised wholly of transport schemes, therefore it will sit wholly within the Transport North East Strategy Unit.

6.30 The proposed resource structure for this team is set out in **Figure 59** below. Resources will be delivered through full-time and part-time roles, recruited so that workloads can flex up and down according to the demands on the team at different stages of the programme. The resources will be supported by a technical consultant that will undertake transport assurance tasks throughout the three-year programme. Roles in the structure will be assimilated into existing local government roles in the region wherever possible, to maximise efficiency and flexibility. We have estimated that the cost of retaining these resources to manage the delivery of our devolved funding in the North East, as the requirement for these resources relates directly to the delivery of this TCF programme, its costs have been assimilated within our capital bid.

Figure 57 Transport North East Programme Delivery Team



6.31 The multi-disciplinary Programme Delivery team will cover a range of tasks associated with delivering the programme of schemes in accordance with the Assurance Framework. This includes:

- the provision of transport assurance as individual projects passes through each stage of the Assurance Framework, ensuring that all capital investments remain within the scope of the TCF programme, and within the scope of the outcomes set for that investment;
- production and updating of grant funding agreements between the Joint Transport Committee and scheme promoters responsible for delivering each scheme;
- maintenance of detailed financial records for the programme;
- provision of legal advice as required by the programme;
- monitoring scheme delivery through the achievement of KPIs;

- issuing and monitoring Quarterly Monitoring Returns, which will cover spend profile, milestones, scheme progress and KPIs;
- the co-ordination of communications and marketing activity across the whole programme, coordinating the necessary communications activities and marketing plans for individual schemes in that programme;
- production of regular progress reports for DfT, both combined authorities, the seven local highway authorities and the local transport authority (Nexus);
- preparation of reports about spending decisions that require ratification from the Transport Strategy Board and approval from the Joint transport Committee; and
- management of relationships with transport officers and other stakeholders delivering all aspects of the programme, maintaining the community created during the bid phase that will ensure the key regional and Government requirements for TCF are understood and embedded.

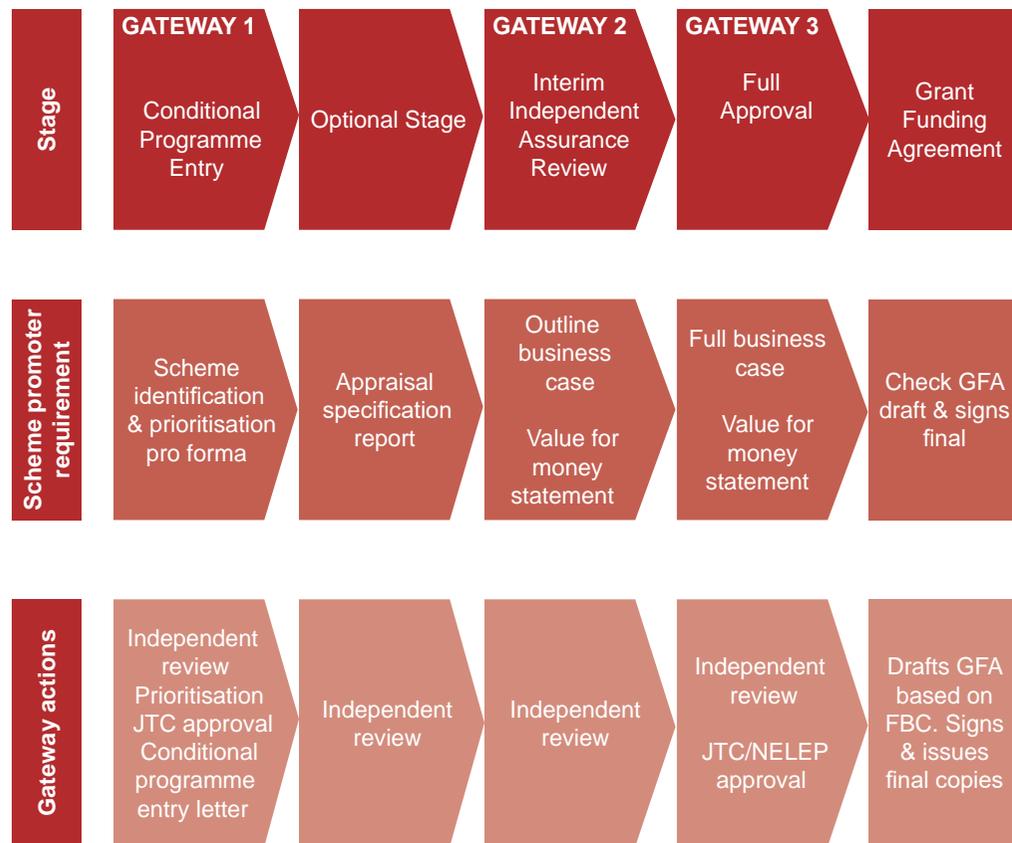
Programme Assurance

6.32 The funding devolved to the region through TCF for capital transport investment is likely to be considerable – our capital bid envisages that sum of £199 million will be devolved to the region in our preferred scenario. The presence of a comprehensive, consistent and reliable Assurance Framework to guide the delivery of that programme is therefore essential.

6.33 The North East region is fortunate to have a well-established and ratified Transport Assurance Framework in place that has guided to delivery of our devolved £270 million Local Growth Fund for the last five years. That Assurance Framework is flexible enough to consider, analyse and award funding to schemes across a wide range of disciplines – transport, buildings, education, utilities, etc. It therefore provides an ideal start point for a TCF Assurance Framework.

6.34 The heart of our 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 TCF programme and delivering the outcomes that have been ascribed to that investment. This process is summarised in **Figure 60** below.

Figure 58 Assurance framework process



6.35 The framework allows projects at various stages of development to enter the programme and gain ascending levels of approval from JTC as they are developed in growing detail. All projects must be capable of passing Gateway 1 requirements to be included in the programme. At each gateway, assurance checks are undertaken

to ensure that the project complies with the requirements of the programme and delivers the outcomes in a manner that matches the requirements placed on the scheme. Independent scrutiny is vital to this process and has been allowed for specifically in our governance proposals.

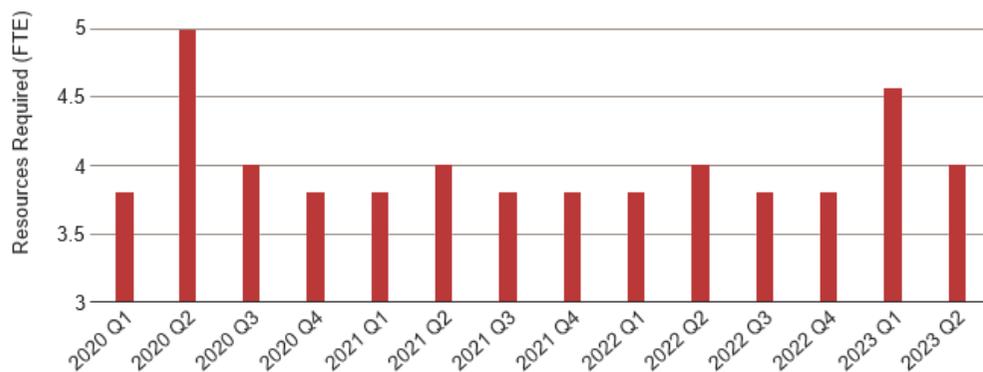
6.36 For the Tranche 2 programme, the sifting exercise means that the schemes are likely to comply with the requirements of Gateway 1 shown on the above figure. This will be confirmed prior to schemes moving on to Gateways 2 and 3 that lead towards the completion of a grant funding agreement.

6.37 However, it is possible that some schemes may eventually not proceed through this TCF Tranche 2 programme – for instance because they can be funded by another source that emerges unexpectedly, or because they are unable to be delivered within the window of TCF funding. Other schemes may have a lower call on TCF funding that originally envisaged, as their designs progress through the assurance gateways. In such circumstances, resources will be freed for other schemes not yet in the Tranche 2 programme to be considered for inclusion. In those circumstances, those potential investments will begin at Gateway 1 to ensure that they exhibit the basic requirements to “fit” with TCF requirements.

6.38 Compliance with the Assurance Framework will be monitored by the Transport North East Strategy Unit. The resource plan for the Unit that will be deployed to manage the assurance framework has been devised with flexibility built in, so that the peaks and troughs of workload can be accommodated. In particular, the commencement of this programme is likely to require a peak in resources as the detailed administration of the Assurance Framework is set up and all schemes pass through the first appropriate gateway. A further peak in workload is likely to arise at the end of the three-year programme (2023 Quarter 1) when the programme is closing and final reporting to DfT is being completed.

6.39 The profile of workload over the three-year delivery programme for Tranche 2 is illustrated in **Figure 61** below.

Figure 59 Proposed resource requirements for the TCF delivery programme



6.40 Finally, we have assumed that for large “retained” schemes with a TCF ask of £40 million or greater, the DfT will enact its own assurance process based on TAG and those schemes will not be subject to our North East Transport Assurance Framework.

Communications and Stakeholder Management

6.41 A Stakeholder Engagement Strategy (SES) has been developed for the programme (**Appendix E**). The document sets out details on a preferred approach to engagement, acknowledges the key stakeholders and details the plans going forward in line with programme development. The strategy will also:

- Ensure that the aims and objectives of the Transforming Cities Fund are well understood by local stakeholders, including political stakeholders, and promote the credentials of our bid as responding to these aims and objectives;
- Facilitate effective and proactive engagement with stakeholders to promote advocacy and to help minimise risks to delivery;
- Outline how the Communications Manager will liaise closely with communications teams of individual partners to provide updates on

delivery issues and risks to internal and external stakeholders as appropriate;

- Identify the programme stakeholder mapping and analysis process

6.42 Examples of key stakeholders include but are not limited to:

- The North of Tyne mayor and local authority leaders;
- MPs and MEPs from the region;
- portfolio holders for transport and economic development;
- leaders of opposition and minor parties within the region;
- LEP board members;
- representative business organisations;
- special interest groups in the transport arena; and
- transport operators and delivery partners, including Network Rail.

6.43 The strategy also sets out the appropriate terminology to be used in communications, which is important in the region due to the unique governance arrangements between the two combined authorities and the Joint Transport Committee. The plan details the press releases and web pages that will be provided to support the submission of our SOBC.

6.44 A communications officer resource will be available to the Programme Delivery team within the Transport North East Strategy Unit. This resource will manage and co-ordinate delivery of the Stakeholder Engagement Plan.

6.45 We will continue to engage with internal stakeholders through formal avenues, including Heads of Transport Group, Economic Directors, the Transport Strategy Board and the Joint Transport Committee. We will continue to work closely with our delivery partners, the seven Local Highway Authorities and Nexus, in respect of developing the programme in detail and into the delivery phase.

6.46 To date, lines of communication and relationships have been built through programme-level and thematic package-level meetings and workshops attended by local authorities, bus operators, Metro representatives and other stakeholders relevant to that meeting. This has ensured ongoing dialogue with key stakeholders around risks and opportunities. We will continue to look for ways to engage and communicate with key partners.

6.47 The successful implementation of the strategy provides a huge opportunity to deliver a consistent approach to communication. We will explore the possibility of establishing a steering group to deal with implementation of communication strategy or tapping into existing networks.

6.48 Our key messages will ensure that the region has the best chances of meeting its core objectives and make every day travel more sustainable.

Risk Management Strategy

In this section we

Set out the risk management process which we have adopted for the programme;

Explore the risks associated with programme delivery and programme development phases; and

Explain the terminology used in the risk register.

6.49 All projects and programmes are subject to risk and opportunity. The objective of the risk management strategy is to minimise the impact of risks at a programme level, whilst allowing maximum advantage to be taken of any opportunities. The earlier that risk management is applied to a project or programme, the more opportunity there is to influence the outcome.

6.50 Identification of risks is the first stage in the risk management process. We used different techniques to identify risks, for example brainstorming, reviewing common risks from similar projects and discussions with stakeholders. The identification phase of risk management was able to support in populating and collating relevant risks to input into the risk register.

6.51 The primary output of the risk management strategy and process is the Risk Register. The Risk Register identifies and records risks, identifies potential mitigation to eliminate or reduce risk and allocates or transfers risk to the relevant parties that are best able to deal with them. The risks have been identified by scheme promoters, local authorities and consultants and compiled into the Risk Register by the Project Management team.

6.52 The terminology used within the Risk Register is detailed below:

- Probability of risk is the term used to define the chance that the risk will occur. This has been categorised as high, medium or low.
- Impact of risk is an estimate of the potential losses associated with the identified risk. This has been categorised as high, medium or low.
- The risk rating has been calculated using the probability and impact matrix which is a common project management tool which helps prioritise and manage risks. In using the probability and impact matrix, it is determined whether the risk would be classified as low (green), medium (yellow), or high (red) by considering two distinct factors: the overall probability of the occurrence, as well as the presumed impact if it did occur.
- The Risk Event is the possibility that an unforeseen event will negatively affect the project or programme.
- The Risk Mitigation is defined as taking steps to reduce adverse effects. The ownership of risks has been identified within the risk register.

6.53 The TCF Delivery Manager will have day to day responsibility for managing risks at a programme level and will escalate any issues to the SRO. In addition to the programme level Risk Register, scheme promoters have undertaken an examination of risks on an individual scheme level. For schemes which have been developed to an OBC a detailed analysis of risks has been undertaken. For other schemes a more high- level analysis of risks has been prepared, however it will be necessary for scheme promoters to produce a risk register to meet the requirements of the Assurance Framework.

6.54 The TCF Delivery Manager for the programme will chair risk meetings with scheme promoters, every two months, during detailed design and delivery phases to help maximise opportunities and minimise threats. Furthermore, the scheduled meetings will help recognise if the assigned mitigation is appropriate or whether additional levels of support is required. A robust risk management process will help reduce the likelihood of an overspend and minimise delays to individual schemes / programme.

6.55 Finally, both the programme and project level risk registers will be proactively managed and treated as live documents throughout the project, and will be regularly reviewed and updated.

Key Risks to Delivery

6.56 The key risks to delivering schemes are very wide- ranging owing to differing complexity in the types of schemes this programme will deliver. Risk registers have been developed to capture programme level risks (**Appendix P**) and scheme level risks (**Appendix Q**).

6.57 The scheme level risks have been developed by the individual promoter and is the responsibility for each promoter to maintain a risk register and proactively manage and mitigate the scheme level risks. The risk register captures risks in the design development stages and on-site construction phases. In most cases, promoters have engaged with delivery partners and stakeholders at least on an informal level to determine the base risks. An example of the scheme level risks is as follows:

- Land acquisition
- Legal issues
- Third party funding
- Consultation / objections
- Planning permissions

6.58 For the more developed higher value schemes, risk management has been addressed in individual scheme business cases. Nexus, for example has an established Risk Management Strategy, developed by its in- house project management office and managed in accordance with standard Nexus and industry procedures. Risks and associated actions were compiled through a project risk workshop, which includes all related stakeholders contributing to the identification and management of the risks. The risk register will then be reviewed and challenged as part of the Stage Gate approval process.

6.59 The risk management process being followed for Northumberland line complies with the risk management process defined in Network Rail's GRIP standard, the Common Safety Method (CSM) required under European and UK Law and Highways Design Standards and processes, (Road Safety Audit Stage 1 for Preliminary Design).

6.60 The programme level Risk Register has been developed and will be reviewed with scheme promoters during regular risk reduction meetings throughout detailed design and the delivery phase. This task has involved scheme promoters feeding into the development of the programme level Risk Register. Examples of the programme level risks are as follows:

- Clean Air Zone- the risk is associated with the change in flows due to the implementation of a CAZ C and a maintenance scheme on the Tyne Bridge. The mitigation is to develop a sensitivity test and to carry out early engagement with Air Quality Colleagues from Newcastle, Gateshead and North Tyneside to assess the impact of the TCF schemes.
- Resources- the risk is associated with the practicalities of resourcing a high volume of schemes within a short timescale. Proposed mitigation is for scheme promoters to carry out early engagement with contractors and coordinate with other authorities delivering similar schemes.
- Network Planning- potential unknown dependencies between projects which are being delivered in parallel. Mitigation involves dependencies being mapped out during detailed design and continuously coordinate with other scheme promoters.
- Funding envelope- Risk of DfT funding envelope being fixed. Mitigation is for schemes promoters to provide accurate cost estimates for SOBC submission and to proactively manage costs during delivery phase.
- Delivery timescales- risk that contractors fail to deliver to agreed timescales. Mitigation is to ensure a realistic project plan is developed and to monitor contractor progress.

6.61 It is assumed that the TCF funding envelope made available to the region will be fixed and should any schemes in the programme experience cost overruns, it will be the responsibility of the Programme Delivery team and scheme promoters to source additional match funding or reduce costs in other ways, through redesign or reducing project scope.

6.62 Through the co-development process DfT will be kept informed of project risk and any changes to the proposed programme and alternatives will be sought to deliver a programme that is impactful.

Monitoring and Evaluation

In this section we:

Set out our programme-level monitoring and evaluation plan to ensure our overarching objectives are met.

Introduction

6.63 Evaluation and Monitoring is an important part of the delivery of projects and programmes. This plan has been developed in accordance with the guidance issued by the Department for Transport⁸⁵ and the HM Treasury Magenta Book.⁸⁶

6.64 As identified in the management case and **Appendix O** through the assurance framework, schemes will be required to conduct monitoring in accordance with the Department for Transport's Monitoring and Evaluation Framework for Local Authority Major Schemes' (2012).

6.65 At a programme level we will complement the monitoring and evaluation undertaken locally through a targeted set of indicators identifying whether the outcomes and crucially impacts have been realised.

6.66 The proceeding section identifies how the region has explored the data sources required, the resources needed to undertake the monitoring and evaluation at a scheme and programme level and a robust methodology to report findings and act on regional insight.

6.67 The region has a rich data collection and analysis resource, within the Transport Strategy Unit and its affiliated organisations, including the Local Authorities, Nexus, Transport Accident and Data Unit (TADU) and our Urban Traffic Management Control centres (UTMCs).

⁸⁵ Department for Transport, (2019); Transforming Cities Fund, Monitoring and Evaluation Guidance, available at, https://gallery.mailchimp.com/a48e5036bdadd8d6146783324/files/954554ff-0764-4ebd-8d04-47bcd1b6b2b/TCF_Evaluation_Guidance.pdf (last accessed 6th November 2019)

⁸⁶ HM Treasury (2011). Magenta Book, available at, <https://www.gov.uk/government/publications/the-magenta-book> (last accessed 6th November 2019)

6.68 Our comprehensive and rigorous transport monitoring system enables much of the monitoring and evaluation of the TCF programme to be undertaken within existing resources. The regional Traffic and Accident Data Unit (TADU) monitors traffic movements across a network of 100 counting sites in the region and analyses accident data. Our UTMC Centres also produces detailed data about traffic delays and conditions in real-time, an information that will be greatly enriched by the investment in our ITS Package.

6.69 Nexus undertakes constant monitoring of public transport use and reliability across all modes, including bus, and undertakes around 500,000 journey interviews with public transport users every year. These surveys establish journey patterns and usage trends. They also monitor satisfaction with public transport amongst users and non-users of public transport.

6.70 These existing structures will be supplemented with new count sites where appropriate, so that the impact of individual schemes within our programme can be monitored and the overall programme level evaluation can be conducted

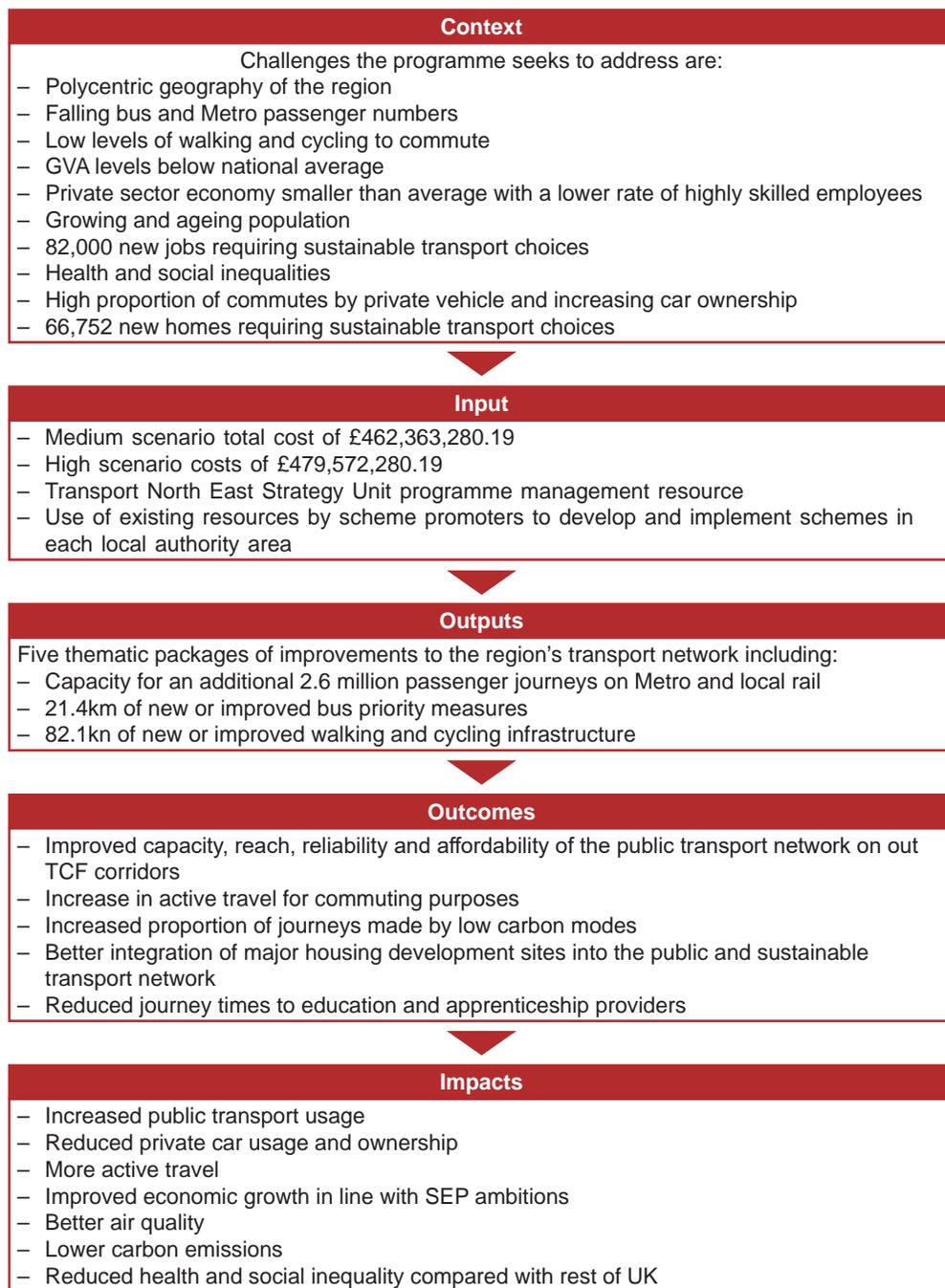
What are we looking to monitor and when?

6.71 As we look to make a significant impact to the way people view and use public sustainable transport it is worth reflecting on the measures of success for the programme, alongside the data sources we will use to monitor progress against these measures. This is summarised in **Figure 62**.

Figure 60 Monitoring and Evaluation Measures

Programme Objectives	Measures of Success	Evaluation and Monitoring Mechanism
Improving capacity, reach, reliability and affordability of the public transport network, with a particular focus on identified congested corridors into employment centres, to encourage increased patronage.	<ol style="list-style-type: none"> 1. Increase the proportion of households that can reach employment within 60 minutes by public or sustainable transport. 2. a) Increase Metro patronage by 3% by 2030 b) Increase daytime frequency of Metro services by 20% network-wide. 3. Improve bus punctuality to 95% for services on corridors where investment is focussed. 4. Increase local rail patronage by at least 5% by 2023. 	<ol style="list-style-type: none"> 1. Report Accessibility analysis baseline and proposed. 2. Nexus Annual Report, DfT Light Rail and Tram Statistics; Metro 2019 and 2024 timetables. 3. AVL data, UTMC monitoring. 4. ORR Rail Statistics - Station Usage Estimates Data.
Deliver new and improved cycling and walking links that are affordable, accessible and sustainable between some of the most deprived neighbourhoods in the city region and centres of employment, which are well integrated with the wider transport network encouraging mobility.	<ol style="list-style-type: none"> 5. Increase percentage of adults cycling for travel at least three days per week. 6. Increase percentage of adults walking for travel at least three days per week. 7. Reduce inequality in life expectancy compared to national average. 8. Increase affordable travel distance by income quintile. 	<ol style="list-style-type: none"> 5/6. Sport England; Physical Activity dataset; Indices of Multiple Deprivation 2019. 7. Fingertips PHE. 8. DfT National Travel Survey.
Ensure that capital investment delivered by this programme makes provision for the introduction of Future Mobility Services.	<ol style="list-style-type: none"> 9. Create a conducive environment for the development, trial and introduction of Future Mobility Services. 10. Deliver efficiency improvements to the public and sustainable transport network including enhanced information services. 	<ol style="list-style-type: none"> 9/10. UTMC monitoring, Delivery of ITS package.
Reduce carbon emissions from local transport by increasing the volume and proportion of journeys made by low carbon, sustainable modes. Improving the safety of our network. Contribute to achieving a reduction in NO2 emissions in the identified exceedance areas by 2023.	<ol style="list-style-type: none"> 11. Reduce the number of private car trips along our identified congestion corridors, contributing to increased modal share of public and sustainable transport. 12. Fewer pedestrians and cyclists killed or seriously injured in the region. 	<ol style="list-style-type: none"> 11/12. 2021 and 2031 census travel to work statistics; DfT and TADU data counts.
Extend the reach of our public and sustainable transport network to support and enable the delivery of major housing development sites across the city region.	<ol style="list-style-type: none"> 13. Deliver improved strategic sustainable transport links (a regular bus service, a rail/Metro service or a segregated walking/cycling link) to at least 30,000 new housing units in the region. 	<ol style="list-style-type: none"> 13. Local Plan monitoring and infrastructure delivery.
Reduce journey times to further and higher education providers from some of the most deprived neighbourhoods in the city region.	<ol style="list-style-type: none"> 14. Increase the number of house-holding in England's top 10% most deprived areas that can access further or higher education within 60 minutes travel time. 	<ol style="list-style-type: none"> 14. Accessibility analysis baseline and proposed; indices of Multiple Deprivation 2019.

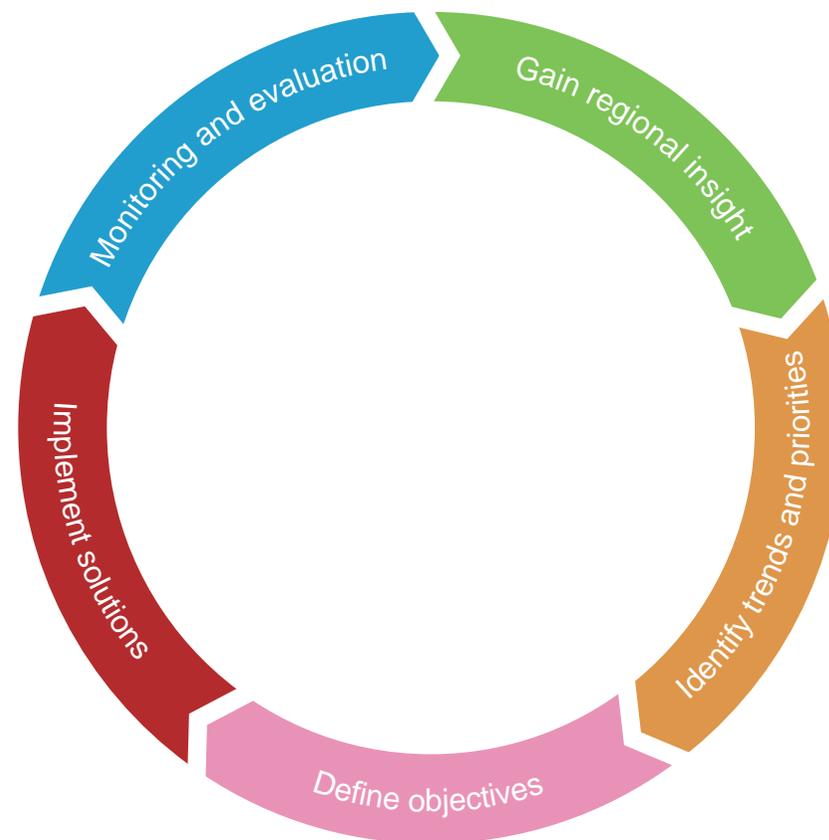
6.72 The process by which our programme will meet its intended objectives, is summarised in the following Logic Map in **Figure 63**. This sets out the programme's context and input through to its long-term impacts.

Figure 61 Theory of change logic map

6.73 The fundamental impacts link neatly to the indicators set out and surround an uplift in public transport patronage, consequential reductions in car use, supporting the economy, health and social outlook for the region.

Our Approach to Monitoring and Evaluation

6.74 Monitoring and evaluation allows us to gain a vital insight into the challenges facing the region and identify trends and priorities, which then feed into future projects. This is demonstrated in the diagram below which uses Rationale, Objectives, Appraisal, Monitoring, Evaluation and Feedback, or ROAMEF policy cycle principles:

Figure 62 Monitoring and evaluation benefits cycle

6.75 The expected outcomes will not only be judged at a programme level but will additionally support the development of the monitoring and evaluation strategy for the North East's forthcoming Transport Plan, evidence work for the North East LEP in the monitoring of the Strategic Economic Plan and inform future investment decisions in the region.

Programme Level Monitoring and Evaluation

6.76 For public transport schemes, Nexus, rail operators and bus operators all have comprehensive monitoring processes in place that assess journey times and patronage. These rich resources of data will be used to glean meaningful insight into the effectiveness of our interventions. These existing monitoring sources will form the basis of evaluating the impacts of bus and rail schemes.

6.77 The impact of this programme will be to enrich these sources by bringing together an overarching system of monitoring and evaluation across the region. Much of this data is already being collected, and has been for some years, makes possible a counterfactual 'before and after' approach to evaluating this programme.

6.78 There are also proposals for new data sources to be collected. The TNESU Programme Delivery resource will allow for monitoring of these data streams against programme objectives during the implementation period. Our ITS package will allow for additional UTMC monitoring to take place in order to measure congestion and its impact on bus journey times. New cycle counters will be installed where appropriate; the data generated by these counters will be assembled by our existing central data monitoring unit, TADU. Many of our indicators will be monitored beyond the implementation period, with central TNESU resources being used to collate and monitor data and produce reports.

6.79 The sources of data we plan to monitor will complement existing well-functioning data streams. Where baseline datasets exist, we have noted this below:

- Nexus Annual Report (Baseline 2019 and Future Patronage, Satisfaction and Punctuality Analysis 2023/4 and beyond);
- Nexus Metro timetables (Baseline 2019 and Future 2023);
- Transport Focus (Baseline satisfaction scores):
- Bus AVL data from operators (Agreements in place Baseline 2019 and future year 2023/4)
- UTMC monitoring (baseline exists but will be expanded by programme)
- DfT, Traveltime measures (Baseline 2018, future year 2023 and beyond)
- TADU counts (baseline exists but will be expanded by programme)
- DfT Light Rail and Tram Statistics (Baseline 2019 and Future year 2023/4);
- ORR Rail Statistics (Baseline 2019 and Future year 2023/4 and beyond);
- Travel to Work census statistics (Baseline: 2011, mid-year 2021 and future year 2031);
- PHE and Sport England datasets (Baseline 2019 and Future year 2023/4 and beyond);
- Indices of Multiple Deprivation (Baseline 2015 and 2019 future years 2023 and 2027);
- Local Plan Monitoring Data (Annual Monitoring Reports and updated Infrastructure Delivery Plans / SHLAA's);
- DfT National Travel Survey (Affordable Travel distance, baseline 2018 and future year 2023/4 and 2028/9)

- For Insight only Economy Data, courtesy of the North East LEP and ONS data
- Air Quality Monitoring, Defra / Jaqu and Local Authority, AQMA Monitoring reports,

Developing and testing counterfactuals

6.80 It's important to consider counterfactual scenarios to understand impacts that may be attained should this level of investment not materialise. At a scheme level, before and after scenarios can be derived around elements such as patronage levels, modal shift, air quality satisfaction and activity levels etc.

6.81 Given the programme nature of the SOBC, a theoretical approach has been adopted. Our Impact of Do-Nothing section in the strategic case highlights the likely direction of travel without investment. The headlines from this section can be merged with our analysis of the future proofing assessment to deliver the following theoretical counterfactual approach. This is summarised as,

- Economic Growth, occurs at a slower rate and the productivity gap widens (Baseline 2019- Future year 2023/4);
- The demand for personal mobility increases with single car use for commuting increasing (2019-2023/4);
- Passenger numbers on public transport will fall (2019-2023/4);
- Reliability and Punctuality levels on Public Transport will fall (2019-`2023);

- Development will happen at a slower pace and in unsustainable locations (measured as developments occurring outside of the accessibility thresholds defined in the submission);
- Cycle and Walking rates will grow at a slower rate (2019-2023/4);
- Deprivation levels will increase (2019-2023); and
- Active travel rates will slow (2019-2023).

6.82 Programme monitoring will consider these scenarios against the objectives to understand the role the investment has played in delivering increased mobility and sustainable connectivity.

Scheme Monitoring and Evaluation Requirements – Benefits realisation

6.83 At an individual project level, scheme promoters are responsible for monitoring and evaluating the outputs, outcomes and impacts of the schemes within their local authority. This is an important element of the assurance framework (available in **Appendix O**) which promoters are required to comply with before receiving funding. Scheme promoters have anticipated this requirement and have built monitoring proposals into their schemes where appropriate. The programme-level approach detailed here could additionally identify where synergies between multiple schemes could give rise to additional benefits over and above the individual benefits attributable to individual schemes.

Roles and Responsibilities

6.84 The following roles and responsibilities will be assumed for the programme monitoring. This follows the same reporting lines as the wider programme delivery and the development of the Transport Plan.

Table 48 Roles and responsibilities

Role	Responsibility
Joint Transport Committee (JTC)	Monitor progress with regular reporting.
JTC Scrutiny Committee	Scrutiny around decisions taken.
Transport Strategy Board	Review key decisions and note progress.
Transport Strategy Unit	Responsible owner for the collation of scheme monitoring and evaluation through the Assurance Framework process and for the development and publishing of an overarching Monitoring and Evaluation Strategy.
Nexus	Data provider, analytical function and data user.
TCF Scheme Promoters	Responsible for data collection and reporting into the Transport Strategy Unit and users of data insight.
Bus Operators / NE Bus	Provision of AVL data, local agreement is in place and users of data insight.
Tyne and Wear UTMC	Provision of regional ITS data.
North East LEP	Provision of the Economy Data to enable insights to be drawn and user of regional TCF monitoring and evaluation to inform SEP/LIS monitoring.
TADU	Operation of accident, traffic and pedestrian / cycle monitoring in Tyne and Wear and delivering regional insight data to the Transport Strategy Unit.

Gaining Regional Insight and Reporting

6.85 Outcomes and Impacts monitoring will be deployed and will be developed into an Insights report which will be hosted along with data sources on the LEP/Strategy Unit's Data Hub [↗](#).

6.86 Regular reporting will take place in accordance with the indicators above to demonstrate compliance, with the most substantial insight reporting taking place 5 years post operation. This will be undertaken by the Transport Strategy Unit with budget assumed.

6.87 The staged reporting will take place, upon completion in 2023 and five-years post completion in 2027. Travel to work data will not be available until after the 2031 census to judge full impact of modal shift, therefore a further assessment may be undertaken in this year to complement modal patronage data sets which will be available for earlier than that.

6.88 Transport North East Strategy Unit and its partners will work with the DfT to consider any additional longer-term evaluation to further understand the benefits arising from the Transforming Cities Fund programme, subject to availability of resources.

SUMMARY



7 Summary

7.01 This Strategic Outline Business Case explains how our TCF Tranche 2 programme will have a transformational impact on the North East's economy and environment by opening up new job opportunities, widening labour markets, improving access to skills and training, and encouraging modal shift from cars to sustainable transport. The document has examined the core challenges facing the North East and has identified opportunities for transformative investment in our public and sustainable transport network.

7.02 Our vision for the North East's transport network is to achieve:

“More sustainable connectivity and more mobility, making sustainable transport the natural choice for people moving around our city region, banishing congestion and its polluting effects and improving air quality and public health.”

7.03 Our programme delivers capital investment solutions that tackle the North East's transport challenges, with an increase in the coverage, speed and frequency of public transport and a step change in the quality and scale of cycling and walking infrastructure. This has resulting benefits for the wider societal challenges we face in the region.

7.04 Economically, the North East continues to fall behind the rest of the country, but this investment in our transport network will facilitate new jobs, increase access to work and educational opportunities, and contribute to closing the gap and rebalancing growth. Our programme contributes to the longer-term mitigation of the poor air quality hotspots

that blight our area. It will also tackle the pervasive health and income inequalities across the region and facilitates much of the significant housing growth that is planned by our local authorities, delivering access improvements and encouraging an essential modal shift to public and sustainable transport. In short, this bid provides the platform for a transformational effect on the region's economic, social and environmental assets, by delivering projects that improve, the quality, capacity, frequency, safety and geographical reach of our public and sustainable transport network.

7.05 Through this fund we will deliver:

- Improved capacity for commuting trips, improved access to employment centres and sustainable links to development sites;
- Reduced carbon emissions by increasing the volume and proportion of journeys made by low carbon, sustainable modes, bringing about improvements in air quality across the region with a focus on areas that are in exceedance of target levels;
- Extended reach of our public and sustainable transport network, supporting housing delivery;
- Wide social and economic benefit for the community through transport investment;
- A future-proofed transport network in line with the Future of Mobility Grand Challenge, utilising new technologies not previously seen in the North East to reduce journey times and improve customer experience; and
- Increased use of public and sustainable transport through increased customer satisfaction levels.

7.06 This business case has demonstrated that the region is committed to achieving delivering these interlinked goals. To that end we have committed up to £73.7m of match funding for the project. The Economic Case in this document reveals that the programme will deliver over £800m in economic benefits, with the value of those benefits within the preferred programme exceeding the Government's investment costs by a factor of 2.96.

7.07 The North East has a track record in managing substantial funds including our Local Growth Fund and has a strong and well-tested Transport Assurance Framework in place that will ensure we deliver the schemes in this programme on time and to budget, maximizing the achievement of objectives and performance indicators. Risks have been identified at both a programme and scheme level and mitigated by a series of actions that are either already in place or will be put in place once funding is released.

7.08 The North East's TCF programme will be the biggest single investment in sustainable transport and public transport for a generation and will deliver significant and lasting benefits that we have demonstrated to be resilient to a range of transport futures. It is a programme that is justifiably worthy of full support and funding. We stand ready, willing and able to deliver it before 2023.



**INDUSTRIAL
STRATEGY**

TRANSFORMING CITIES FUND



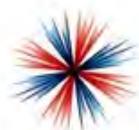
**NORTH
OF TYNE
COMBINED
AUTHORITY**

Transforming Cities Fund

Tranche 2

APPENDICES





REFERENCE	APPENDIX TITLE
Appendix A	Letters of support
Appendix B	IPPR strategic economic narrative
Appendix C	Housing and employment analysis
Appendix D	Maps of thematic packages and corridors
Appendix E	Stakeholder engagement strategy and communications plan
Appendix F	Walking and cycling principles- strategic
Appendix G	Health impact assessment
Appendix H	Programme of schemes
Appendix I	Appraisal summary tables
Appendix J	Whole life costs
Appendix K	Procurement strategy
Appendix L	Scheme cost breakdown
Appendix M	Match funding sources
Appendix N	Project delivery plan
Appendix O	Assurance framework
Appendix P	Programme risk register
Appendix Q	Scheme risk

Letters of Support

There are a wide range of stakeholders affected by the TCF Programme and therefore we have set out a detailed stakeholder engagement strategy (Appendix E) to ensure relevant parties are engaged with at key stages of the programme. The Stakeholder Engagement Strategy (SES) outlines the importance and purpose of engagement, key stakeholders and the method of engagement.

As part of this process we have invited stakeholders to provide letters of support (attached) to demonstrate how the programme will impact the region. Examples of key stakeholders we have requested support from include, but not limited to:

- North East Local Enterprise Partnership
- Public Health England
- Transport Operators
- Local Universities
- Local Businesses
- Property Developers

Our existing surveys provide knowledge on travel patterns throughout the region and this detail has helped shape the TCF schemes. For example, the air quality consultation undertaken by Newcastle City, Gateshead and North Tyneside Councils received over 19,000 responses has provided a rich source of data.

In order to ensure a robust TCF programme, we retested the thematic packages through an online survey which was available to all residents in the region between 28th Aug 2019 to 11th Sept 2019. We received 573 responses which demonstrates a requirement for positive changes in our regional transport network.

Furthermore, the programme has received positive press releases over the past 6 months:

New Metro stations mooted under major upgrade of network South Tyneside

A major upgrade to the Metro in South Tyneside could pave the way for new stations in Jarrow and Hebburn after regional leaders backed the plans.

North East's £377m transport funding bid confirmed - but leaders say there is more to come

The huge bid to overhaul the North East's transport services has been confirmed

Mr Mike Scott
Transport North East Strategy Unit
Second Floor, Gateshead Civic Centre
Regent Street
Gateshead
NE8 1HH

4th November 2019

Dear Mr Scott

Transforming Cities Fund letter of support

The North East Local Enterprise Partnership (LEP) would like to express full support for the North East's bid to deliver its programme of public transport and sustainable transport schemes, through the Government's Transforming Cities Fund.

Investment in public and sustainable transport is identified in the North East Strategic Economic Plan (SEP) as an essential element in supporting the delivery of more and better jobs across the region.

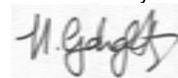
The region's bid is based around five package packages:

- Package 1 – Transforming Bus Corridors
- Package 2 – Transforming Cycling and Walking Corridors
- Package 3 – Transforming City Centre Gateways
- Package 4 – Transforming Park and Ride
- Package 5 – Delivery Metro and Local Rail Strategy

These measures will improve productivity and spread prosperity, harnessing the use of new technology to support growth in the economy by linking people to jobs. Equally the measures will also help to unlock housing growth and improve air quality. The bid will build on the existing progress in developing a vibrant low-carbon economy and will help support business growth, provide easier access to training, apprenticeship and education opportunities and create new opportunities that enhance the quality of life for our residents and will help to re-balance the national economy.

The North East LEP looks forward to the North East Joint Transport Committee's bid being delivered and seeing the much-needed transport and economic benefits that it will bring to the North East region.

Yours sincerely



Helen Golightly
Chief Executive of the North East LEP



Mike Scott
TCF Project Lead
Transport North East Strategy Unit

Barry White
Chief Executive
Transport for the North
2nd Floor, 4 Piccadilly Place
Manchester
M1 3BN

18 November 2019

Dear Mike,

Transport for the North (TfN) would like to express full support for the North East's bid to deliver its programme of public transport and sustainable transport schemes, through the Government's Transforming Cities Fund (TCF).

Under the Local Transport Act 2008, amended by the Cities and Local Government Devolution Act 2016, TfN has been established as the first Sub-National Transport Body, with the purpose of developing and implementing a transport strategy and programmes for the North. TfN's aim is to plan and ensure the development of new infrastructure and the delivery of the improvements needed to truly connect the whole of the North with resilient, reliable, efficient transport connectivity, driving economic growth and supporting the creation of a Northern Powerhouse.

TfN's main function to date has been to develop a long-term transport strategy for the North of England that will help to rebalance the UK economy and drive economic growth. This has been done in the form of the Strategic Transport Plan, published in February 2019 – a robust blueprint to guide investment over the next 30 years which represents unprecedented collaboration with Partners across the North, including in the North East, and a statutory plan the Government of the time have to consider when implementing policy.

The people of the North are at the heart of this Strategic Transport Plan. An effective, efficient Northern transport network is a fundamental part of everyday life – connecting people to jobs, health, education and leisure opportunities, connecting businesses to each other and employees, and allowing the efficient movement of goods and services. A transport system that is fit-for-purpose with strong North-South and East-West connections will be the backbone of a strong economy for both the North and the UK.

TfN's vision is of "a thriving North of England, where world class transport supports sustainable economic growth, excellent quality of life and improved opportunities for all."

Supporting this vision are four pan-Northern transport objectives, which have informed the development of the Strategic Transport Plan and TfN's work programmes, and align to support the objectives of Partners:

- Transforming economic performance.
- Increasing efficiency, reliability, integration, and resilience in the transport system.
- Improving inclusivity, health, and access to opportunities for all.
- Promoting and enhancing the built, historic, and natural environment.

These objectives also align closely with the five foundations of productivity set out in the Government's Industrial Strategy.

The Northern Powerhouse Independent Economic Review, published by TfN in 2016, said that with the right investment in transport, skills, education, and business growth, we could grow the economy by an extra £100 billion on top of business as usual growth, and support an extra 850,000 jobs by 2050. For the North East, this could result in an additional £11 billion in GVA compared with business as usual by 2050.

We are very clear that TfN is not just about the largest cities in the North. The Strategic Transport Plan, approved in February 2019, supports transformational growth across all parts of the North. TfN's remit is focused on the identification and recommendation of pan-Northern strategic transport interventions, generally longer distance trips between other economic centres. However, there will undoubtedly need to be complementary and supporting investment at a local as well as a pan-Northern level to ensure that a 'whole journey' and 'total network' approach to improving transport is followed. This means targeting short trips that could be taken on public transport, cycling or walking, thereby reducing localised congestion, improving the environment, and supporting an improved transport system at a local and pan-Northern level. That is why the North East's bid for TCF funding is so important.

Taking a 'whole journey' approach will not only support transformational economic growth and a carbon reduction, it will have significant social benefits, by reducing severance and connecting local communities with employment and other services in local areas and across the North.

Of particular importance in encouraging a mode shift towards rail and sustainable transport options, will be the need to ensure effective connections to new and existing rail stations by all modes, and the provision of adequate access facilities, such as parking and drop-off/pick up provision, electric charging points, bus facilities and secure cycle parking. How local rail stations are managed can also aid integration and will also be a key part of future rail franchises.

Further development of core bus networks, using new engine technology to ensure that the bus fleet is as green as possible, working towards a zero carbon public transport network across the North, and incorporating the latest techniques in providing bus priority in congested networks, will all be essential for providing effective and efficient access to urban centres.

TfN supports the delivery of a real step-change in the quality of cycling infrastructure and wants to ensure that the Strategic Transport Plan and Investment Programme provide a design opportunity for Delivery Partners, and Local Transport and Planning Authorities, to future-proof enhanced and new rail and road infrastructure for cycling and walking. As set out in the National Planning Policy Framework, sustainable transport can have the added benefit of making developments in communities across the North more feasible and appealing.

TfN fully endorses the National Infrastructure Commission's proposals for a significant uplift in funding from 2025 onwards for devolved cities and non-urban local transport. This is why TfN fully supports the TCF programme compiled for the North East as part of the inclusive and sustainable growth agenda through:

- A £407m bid for public transport, walking, cycling and public realm schemes to be delivered between 2020 and 2023.
- Significant economic and environmental benefits to our region, resulting in more people using sustainable transport modes – the economic benefits are more than double the programme costs, demonstrating high value for public money.
- A £110m investment for buses, which will deliver infrastructure and technology to get bus services moving faster and more reliably, attracting new passengers.
- Two rail schemes that will enhance frequency and reliability on the Metro and introduce passenger trains in South East Northumberland - part of a longer term regional plan for rail.
- A future-proofed programme that is ready to meet transport challenges we will face in 20 years' time as well as today, which has demonstrable public support.

Complementary to these schemes, TfN's Investment Programme, setting out the interventions required between now and 2050 to deliver transformational growth, and building on existing commitments, includes the following which together could truly be transformational:

- Full delivery of the TransPennine and Northern rail franchise commitments
- Trans Pennine Route Upgrade
- Northern Transpennine improvements to the A66 and the A1(M)
- Northumberland Line re-instatement
- Sunderland Station improvements
- Northallerton – Newcastle capacity enhancements
- Newcastle Station platform lengthening
- A19 Moor Farm junction
- A1/A19 Seaton Burn Junction
- Blyth Relief Road
- Sunderland Strategic Transport Corridor

- Leeds – Newcastle Corridor (major upgrade through Northern Powerhouse Rail via East Coast Main Line to include provision for HS2 services running north to Scotland)
- Durham Coast Line upgrade and service enhancement

Co-ordinating the delivery of early interventions that enhance resilience and enable the delivery of higher capacity services for rail users in the North alongside longer-term strategic interventions is a primary focus for Transport for the North. In the longer-term though, in terms of improving the railways, major programmes such as HS2 and Northern Powerhouse Rail will be essential. They will not just support connectivity between some of the larger cities in the North, but allow us to use the North's existing rail network in ways we haven't been able to, including many of the local ambitions in the North East.

Whilst TfN, and this Strategic Transport Plan, is focused on pan-Northern transport interventions, there is an equally important job to be done at local level to enhance mobility within local functional economic geographies, particularly within the city regions, and ensure that the value of pan-Northern investments is maximised through carefully coordinated and integrated local transport investment. This has been explicitly recognised by the National Infrastructure Commission in the National Infrastructure Assessment.

The Commission's proposals for a significant uplift in funding from 2025 onwards for Devolved Cities and Non-Urban local transport, and potentially also National Parks, is strongly endorsed by TfN, and will go some way to closing the current gap between the need for local transport investment and the money that is made available to pay for it, including through TCF.

I trust that the Government recognises the economic, social and environmental benefits of investment in improving the North East's transport networks, and look forward to working with Partners in supporting the proposals contained within the bid and the continued growth of the North East.

Best wishes,



Barry White

Chief Executive, Transport for the North



Public Health England

Protecting and improving the nation's health

North East Centre
2nd Floor, Waterfront 4
Goldcrest Way, Newburn
Newcastle upon Tyne
NE15 8NY

T 0300 303 8596 (Option 2)

www.gov.uk/phe

5 November 2019

Mr Mike Scott
TCF Project Lead
Transport North East Strategy Unit

Dear Mr Scott,

Public Health England (PHE) would like to express full support for the North East's bid to deliver its programme of public transport and sustainable transport schemes, through the Government's Transforming Cities Fund.

PHE is committed to improving the nation's health and wellbeing and reducing health inequalities

PHE's remit includes healthy places (planning, transport and green spaces); physical activity; childhood obesity, environmental hazards (noise and air quality), mental health and health inequalities.

Work to develop skills and promote joint working between spatial planning, transport and health is continuing through PHE's Healthy Places Programme. PHE is working with DHSC, DEFRA, MHCLG, DfT and Sport England and other departments and agencies to support improvements in transport infrastructure, physical activity and air quality.

Transportation plays an important role in supporting daily activities. Active travel (cycling, walking and use of public transport) can increase physical activity levels and improve physical and mental wellbeing. Walking and cycling for just ten minutes a day can contribute towards the 150 minutes of physical activity for adults per week. We know that there are stark inequalities in physical activity (Marmot, 2010).

Prioritisation of active travel can also reduce over reliance on motorised transport, contributing to improved air quality and a reduction in road injuries

Therefore, there is a need to consider health inequalities more consistently and getting people cycling and walking can be one of the most effective ways to get everyone active every day (PHE, 2014).

PHE fully supports the TCF programme compiled for the North East. In particular we support the 'Transforming Cycling and Walking Corridors' scheme as it will bring strong benefits to the health and wellbeing of the local communities.

We look forward to the North East Joint Transport Committee's bid being delivered and seeing the much-needed transport and economic benefits that it will bring to the North East region.

Yours sincerely

Professor Peter Kelly BSc, PhD, FSS, FFPH
Centre Director
PHE North East
UK PHR F0157

Dear Mr Scott,

The North East England Chamber of Commerce would like to express full support for the North East's bid to deliver its programme of public transport and sustainable transport schemes, through the Government's Transforming Cities Fund.

Our Chamber is the largest business organisation in the North East of England, representing 3,000 businesses of all sizes and sectors.

Creating a Connected North East is a key campaign for the Chamber, transport connections around the region crucial for creating economic growth in the North East. Businesses need to be able to connect reliably with their customers, markets and employees.

Investment in the North East's transport infrastructure will help people to access new job opportunities and for businesses to grow their presence across the North East and the UK. The Chamber have recently released a report highlighting how transport connections in the North East can also help to facilitate international trade through improved access to ports and airports in the region.

Better links can also help to encourage tourism and visitors to the region which benefits the economy through visitor spend. Transport also plays a key role in housing policy; improved connections can enable people to live and work in different areas of the region. Ensuring that people are easily able to access more sustainable modes of transport is also essential in reducing the environmental impact of travel in the region.

The North East England Chamber of Commerce fully supports the TCF programme compiled for the North East. In particular, we support the Metro and local rail strategy and transforming bus corridors schemes.

The Northumberland line scheme will help to better connect Northumberland to key employment sites in North Tyneside such as Cobalt business park on then onwards to Newcastle. From Central station passengers would be able to connect to the Metro, bus services and national rail services providing connections across the North East and the UK. This will help to encourage more sustainable travel from Northumberland across the rest of the region which will help to reduce congestion on major roads as well as helping to increase access to job opportunities and encouraging investment in Northumberland including the business park in Ashington with the AkzoNobel plant.

Investment in the North East's bus network is crucial in order to encourage people to use buses. Bus services are important in connecting people to the whole of the region and for first and last mile journeys to key stations and transport hubs in the North East. Congestion

needs to be reduced in order to allow for buses to offer a more reliable and more frequent bus services

The Metro flow scheme will help to increase reliability and frequency on the network which is urgently needed to prevent delays and to encourage people to use more sustainable modes to travel across the North East. This is especially important with the clean air proposals around Newcastle city centre and wider air quality and environmental concerns becoming more pressing for businesses.

The North East England Chamber of Commerce looks forward to the North East Joint Transport Committee's bid being delivered and seeing the much-needed transport and economic benefits that it will bring to the North East region.

Your sincerely,



[James Ramsbotham, Chief Executive of the North East England Chamber of Commerce]

Mike Scott
TCF Project Lead
Transport North East Strategy Unit
mike.scott@northeastca.gov.uk

30th October 2019

Dear Mike,

The purpose of this letter is to express NE1's strongest support for the North East's bid to deliver its programme of public transport and sustainable transport schemes, through the Government's Transforming Cities Fund.

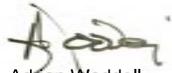
As the Newcastle city centre BID Company we are at the forefront of helping, with partners, strengthen and grow the scale, scope and quality of the city's offer – and by extension – the appeal of the wider city region. We operate across sectors to deliver a project and events programme in the city that helps drive ambition and also shows a return to some 1,400 businesses NE1 represents.

Transport is the essential component that stitches together the city and the region's offer. It is essential that people can move around easily in a convenient and cost effective way. Our recent work, for example, with businesses and Newcastle City Council around plans for Clean Air Zones has highlighted a very strong appetite across business sectors and communities for cleaner, more efficient ways of travelling. As a region we must continue to grow and improve our transport networks, striving to be amongst the best in Europe in this regard. Businesses, families, students and other visitors all want to see it; as a city and city region we need to be able to provide it.

NE1 fully supports the TCF programme compiled for the North East. There are five thematic packages contained, all of which interlink to varying degrees. The ability to bring people quickly and easily into the city centre (ideally without using a car) is paramount in helping attract people and investment.

We very much look forward to the North East Joint Transport Committee's bid being delivered and seeing the much-needed transport and economic benefits that will flow from it in our region.

Yours sincerely



Adrian Waddell
Chief Executive
adrian.waddell@newcastlene1td.com



Dear Mr Scott,

Sunderland Business Improvement District would like to express full support for the North East's bid to deliver its programme of public transport and sustainable transport schemes, through the Government's Transforming Cities Fund.

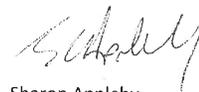
The Business Improvement District works in the city centre of Sunderland with the businesses that are based there. We have 3 priorities for our 5 year term and they are City Pride, City Promotion and City Voice. One of our main aims is to bring people into the city centre, from Sunderland and further afield. Which then improves the city centre and delivers customers for the businesses.

Transport is important to this organisation because if people can't easily access the area then we will not improve the city centre. The transport solutions need to provide great customer experiences. Options on journey type, time and frequency are crucial.

Sunderland Business Improvement District fully supports the TCF programme compiled for the North East.

Sunderland Business Improvement District looks forward to the North East Joint Transport Committee's bid being delivered and seeing the much-needed transport and economic benefits that it will bring to the North East region.

Your sincerely



Sharon Appleby

Head of Business Operations



Mike Scott,
Transforming Cities Fund Project Lead,
Transport North East Strategy Unit,
Second Floor,
Gateshead Civic Centre,
Regent Street,
Gateshead, NE8 1HH.

6th November 2019

Dear Mr Scott,

Re: North East Transforming Cities Fund Tranche 2 Bid

On behalf of both intu Eldon Square and intu Metrocentre ('intu'), I would like to express our full support for the North East's bid to deliver a programme of public transport and sustainable transport schemes through Tranche 2 of the Government's Transforming Cities Fund.

intu provides the North East with a diverse range of exciting retail and leisure opportunities, attracting some 58 million visits per annum across our two centres. We play a significant role in the local economy, contributing £601.8 million and supporting nearly 20,000 jobs (circa. 12% of all jobs in the region) in 2018. intu have also invested heavily into our North East locations, including new leisure developments – Qube at intu Metrocentre (£17M) and Grey's Quarter at intu Eldon Square (£25M) – both opened in 2016 bringing new job opportunities and a growth in footfall, especially for the evening economy of the region.

Operating our centres in a sustainable manner is an integral part of intu's corporate social responsibility ethos; this includes the provision of a diverse and sustainable mix of transport modes and facilities, which is itself a vital element in ensuring the continued attraction and success of our centres. Sustainable modes of transport are extremely vital to our operations and sustaining our centre's footfall – 80% of staff and visitors travel by non-car means to intu Eldon Square, with equivalent figures of 50% of staff and 26% of visitors at intu Metrocentre.

Nevertheless, we do recognise that whilst traffic generated by our centres' operations form part of the problem, we are also an integral part of any future solution. Therefore, we very much welcome this opportunity to support what we believe is an important and timely bid, helping deliver a step-change in our region's transport systems and a shift towards greater decarbonisation. The suite of projects and initiatives contained with the North East's TCF bid will move our region forward, bringing economic benefits through improved connectivity, delivering environmental benefits and opening up new opportunities for everyone.

In terms of our commitment, intu have been working very closely with the bid team on plans for a secure cycle parking facility at intu Eldon Square. Providing such a facility for staff working at the centre has long been an aspiration of ours; the opportunity provided by the TCF bid to not only meet this internal requirement but to allow us to expand its scope and work with partners to develop proposals for a civic facility, which will be of wider benefit to those working and visiting Newcastle City Centre, is something we are very happy to see included.

Other schemes which enhance the reach and capacity of our local rail networks are of significant value; in advance of the new metro train fleet arriving in the region the TCF programme must ensure we have a reliable network once again. The importance of the local bus services must not be overlooked either, and we welcome the proposed enhancements to bus corridors and Park & Ride schemes, which all combined will provide a range of attractive options for travelling across our towns and cities. Especially at a time when our region is under pressure to deliver on air quality mitigation measures.

Another key area of interest for intu's CEO are those measures which improve mental health and well-being, so it is very encouraging to see the raft of initiatives designed to help promote greater uptake of active travel. Whilst cycling currently forms a low proportion of our overall travel to work figures, we believe there is untapped potential for encouraging more cycling to work, should the proposed routes and facilities be implemented by this bid.

intu looks forward to the North East Joint Transport Committee's bid being delivered and seeing the much-needed transport and economic benefits it will bring to the North East region.

Wishing you and the team every success in this bid and look forward to working closely with the region to deliver on this exciting opportunity.

Your sincerely,

Gavin Prior
Centre Director (North East), intu Properties



Cobalt More Information & Management Centre
Cobalt Central, 4 Silver Fox Way
Cobalt Business Park
Newcastle upon Tyne
NE27 0QJ

Tel: 0191 257 6457
www.cobaltpark.co.uk
lynne@cobaltpark.co.uk

6th November 2019

Mike Scott
TCF Project Lead, Transport North East Strategy Unit
Second Floor,
Gateshead Civic Centre,
Regent Street,
Gateshead,
NE8 1HH

Emailed to: mike.scott@northeastca.gov.uk

Dear Mr Scott,

North East Region's Bid – Transforming Cities Fund

Highbridge Properties Plc would like to express full support for the North East's bid to deliver its programme of public transport and sustainable transport schemes, through the Government's Transforming Cities Fund.

As developers of Cobalt Business Park & Indigo Park, North Tyneside and Jade Business Park, Durham and we support fully supports the TCF programme compiled for the North East. We believe the measures proposed would provide important links across our staff demographics for our staff already employed at Cobalt Business Park, North Tyneside.

During the 20 years since the first members of staff started work on the park, we have built over 1.6 million square feet of Grade A office space, three state of the art Data Centres, a 144-bed hotel, spa and pub and parade of shops. Employment at Cobalt has grown steadily to approximately 12,000, these staff are employed by major companies such as Proctor and Gamble, EE, Santander, DXC and public bodies Northumbria NHS and North Tyneside Council who have demonstrated their commitment to the park by signing 15-year leases without break. Two companies have purchased their building which demonstrates confidence and commitment to the park and the region. 10 major employers have since leased a second building or additional space on Cobalt Park. Accenture who moved on site in 2012 with initially 200 staff now employ 1,200 across three buildings on Cobalt.

Sage plc have recently announced a full relocation of 2,000 staff from their existing site in Newcastle to Cobalt due to move in October 2020.

This growth of employment has been achieved through a combination of the provision of high-quality office space, the availability of suitably qualified staff in the area and the effort that



www.morecobalt.co.uk



Cobalt More Information & Management Centre
Cobalt Central, 4 Silver Fox Way
Cobalt Business Park
Newcastle upon Tyne
NE27 0QJ

Tel: 0191 257 6457
www.cobaltpark.co.uk
lynne@cobaltpark.co.uk

combined local authority, Liftshare, Nexus, the bus companies and Highbridge have put in to enhance both the public transport network and other sustainable means of travelling to work. These initiatives, including the introduction and active promotion of convenient new cycling facilities locally and several new bus routes, such as the flagship 19 and 309/310 services, have helped to make the jobs available at Cobalt accessible to the many people in the surrounding areas who do not have access to a car.

As Cobalt continues to develop it is expected the number of staff working there will increase to over 18,000. We are in regular discussions with both existing and potential new occupiers who are looking for additional space. However, this increase in employment will only be achieved if current and potential occupiers continue to be able to attract staff to fill vacancies as they occur.

Providing the proposed new rail route and possible metro expansion, the enhanced transport options between Ashington and Cobalt will:

- Help to increase the number of jobs available at Cobalt,
- Improve access to employment for staff based in a number of local communities.
- Assist with recruiting and retaining staff
- Increase the mode share of public transport (and thus reduce congestion) by providing more staff currently working at Cobalt with an improved journey time service. This will prove to be an effective and popular alternative to single car use for several commuters.
- Wider recruitment area due to reduced journey time and affordable travel costs.

We are convinced of the importance of providing potential employees from key Northumberland communities with easy access to employment.

The other combined package of measures detailed in the bid will enable the on-site travel team to actively promote alternatives to single car use through our on-site MoreCobalt team, **CobaltSmartMovers** and www.mrecobalt.co.uk channels.

The highly successful annual jobs fair held on site now in its fourth year in partnership with North Tyneside Council offers Cobalt occupiers the opportunity to showcase the range of opportunities including apprenticeships, graduate, full and part time positions.

Further HR support is also offered with school work experience, Army leavers and Get into Cobalt/Get into Digital schemes.

Highbridge Properties Plc looks forward to the North East Joint Transport Committee's bid being delivered and seeing the much-needed transport and economic benefits that it will bring to the North East region.



www.morecobalt.co.uk





Cobalt More Information & Management Centre
Cobalt Central, 4 River Fox Way
Cobalt Business Park
Newcastle upon Tyne
NE37 9QJ

Tel: 0191 257 6457
www.cobaltpark.co.uk
lynn@cobaltpark.co.uk

I very much hope that this bid can be successfully delivered.

Yours sincerely,

For and on behalf of Highbridge Business Park Ltd

Lynn Cramman
Cobalt Development Manager

cc: Garry Ward Highbridge Business Park Ltd



www.morecobalt.co.uk



Anna Weeks
Room 35
Central Station Offices
Newcastle Station
Neville Street
Newcastle
NE1 5DL

Telephone: 07976 712190

Email: anna.weeks@northernrailway.co.uk

30th October, 19

Dear Mr Scott,

Northern would like to express its full and strong support for the North East's bid to deliver its programme of public transport and sustainable transport schemes, through the Government's Transforming Cities Fund.

Northern plays a vital role in the North of England by connecting tens of thousands of people to work, leisure, education and more every day. The Northern franchise now and in the future is committed to delivering transformation of the railways in the North, through a £1 billion investment in the largest rail network outside London. This includes improved customer facilities, more security on stations with extended opening hours and services becoming faster and more frequent. The introduction of new ticket vending machines and smart tickets has made it easier for customers to travel with us. In the North East, a new station will be in operation at Horden in 2020 and newly refurbished trains will be unrecognisable to the ones you see today. There are 2 more services to Whitby commencing in December, 19 and we have already seen service uplifts to Bishop Auckland and Hexham and Carlisle, with more to come on the Durham Coast, through Sunderland. We are committed to achieving the biggest transformation in rail travel in the North for a generation. This is an exciting prospect for everyone – our customers, staff and other stakeholders.

With this in mind, the provision of frequent, faster and new transport links (including, bus, rail, cycling and walking) for communities is key in the redevelopment of areas, helping to drive economic growth through connections to jobs, improved environmental quality and social mobility. Creating new transport gateways provides facilities that attract people to travel by rail and bus.

Northern fully supports the TCF programme compiled for the North East. In particular we support the Transforming City Centre Gateways in Newcastle and Sunderland Stations. As major stations on the Northern network, improving the facilities and environment in these areas will provide the much needed investment to kick start redevelopment in these areas. Stations are often the first impression visitors get of cities and we would welcome investment to these stations, supporting our own plans to improve the customer experience at these stations. A key project as part of the TCF programme compiled for the North East that we support is The Northumberland Line scheme. Having provided a

www.northernrailway.co.uk

ARRIVA RAIL NORTH LIMITED

1 ADMIRAL WAY, DOXFORD INTERNATIONAL BUSINESS PARK, SUNDERLAND, TYNE AND WEAR, SR3 3XP

Company No. 04337712

trial train to Bedlington earlier this year with the Secretary of State for Transport, we strongly believe that opening of this line will support growth both in Ashington and Newcastle and also the communities served in-between, with much of the rail infrastructure already in place. Transport links within Northumberland are limited currently. This line will open up the North of the Region to jobs, economic growth and further investment. The rail line will support an increase in driver and conductor roles in Newcastle alone by 25%.

Northern looks forward to the North East Joint Transport Committee's bid being delivered and seeing the much-needed transport and economic benefits that it will bring to the North East region.

Yours sincerely



Anna Weeks
Regional Director – North East
Northern



Dear Mr Scott,

Grand Central would like to express full support for the North East's bid to deliver its programme of public transport and sustainable transport schemes, through the Government's Transforming Cities Fund.

Grand Central operates Intercity rail services between Sunderland and Kings Cross which also service Hartlepool and Eaglescliffe.

As well as being a transport operator ourselves, local transport within the North East is important to Grand Central as it provides the vital "last mile" links from our stations to the communities we serve.

Grand Central fully supports the Transforming Cities Fund programme compiled for the North East. In particular, we support the Transforming City Centre Gateways schemes focused on Sunderland Station and its carparks because Sunderland Station is the most important point of access to our services and the long-distance connectivity they provide for the local community. Sunderland Station also urgently needs improvement. We also support the schemes focused on local bus and Metro transport links.

Grand Central looks forward to the North East Joint Transport Committee's bid being delivered and seeing the much-needed transport and economic benefits that it will bring to the North East region.

Yours sincerely



Richard McClean, Managing Director Grand Central Rail.

Return to:
Mike Scott
TCF Project Lead, Transport North East Strategy Unit
mike.scott@northeastca.gov.uk



Grand Central Railway Company Limited,
3rd Floor, Northern House,
Rougier Street, York, YO1 6HZ

01904 461370
01904 466066
admin@grandcentralrail.com
grandcentralrail.com

Registered office: 1 Admiral Way, Doxford International Business Park, Sunderland, SR3 3XP
Registered in England no.03979826



Mike Scott
TCF Project Lead, Transport North East Strategy Unit
North East Combined Authority

11 November 2019

Dear Mr Scott,

LNER would like to express full support for the North East's bid to deliver its programme of public transport and sustainable transport schemes, through the Government's Transforming Cities Fund (TCF).

London North Eastern Railway (LNER) connects great towns and cities of industry, creativity and culture, moving over 420,000 customers a week on a route that stretches over 900 miles from London to Inverness and Aberdeen. We are central to the East Coast's economy and communities, employing around 3,000 people and joining together an area that delivers over 40% of the UK's GDP. We are working to support the East Coast every day, from introducing the Azuma and new services, partnering with key businesses and charities, and using the latest technologies to improve journeys and reduce emissions.

Good transport links across the North East are vital to our organisation, as they allow access to the East Coast route – enabling more people to benefit from low-carbon, high quality, long-distance travel between the North East and Scotland, and the North East and London.

LNER fully supports the TCF programme compiled for the North East. We particularly support improvements that would enable easier access to the stations we manage and serve, such as the Newcastle Central Gateway, Durham Rail Station Access, and Sunderland Central Station and Station Car Park projects. We also support the improvements across the Metro network and the reintroduction of passenger rail services on the Northumberland Line, and those projects that improve walking and cycling to railway stations.

Should this bid be successful, LNER looks forward to working with the North East Joint Transport Committee to deliver the projects and see the transport and economic benefits that they would bring to the North East region.

Yours sincerely,

David Horne
Managing Director

13 November 2019

Mike Scott
Transforming Cities Fund Project Lead
North East Regional Transport Team
2nd floor NE Pavilion
Gateshead Civic Centre
Regent Street
Gateshead NE8 1HH

Dear Mike

Tranche 2 Transforming Cities Fund: Support for the package of bus priority and enhancement measures

I am writing on behalf of Arriva Northumbria Ltd and Arriva Durham County Ltd regarding the North East Region's bid to Government for capital investment in the region through the Transforming Cities Funding. We fully support the Region's calls for increased investment in the region's public transport.

Arriva Northumbria Ltd and Arriva Durham County Ltd operate 250 buses, carrying over 25 million passengers per year and employing over 700 staff, from depots in the Region for which the Transforming Cities Bid, being submitted by the North East Joint Transport Committee, applies.

We believe that investment in bus priority measures and facilities for bus passengers is necessary to achieve modal shift, which is essential given increasing levels of congestion and poor air quality in the area covered by the bid. Our bus services into Newcastle-upon-Tyne and Durham City Centres have seen increases in journey times of up to 15% over the last 7 years, with a consequent increase of over 6% in the bus fleet required to operate on these services.

The consequences of these congestion impacts are well documented:

- less attractive journey times
- increased operating costs putting pressure on fares
- consequent reduction in travel by bus
- encouraging yet worse congestion.

It is therefore vital that this opportunity is seized to reverse this trend and action taken to enable bus services to fully play their part in achieving the modal shift which is necessary to delivering sustainable economic development in the Region.

Arriva North East
1 Admiral Way
Doxford International
Business Park
Sunderland SR3 3XP

Tel +44 (0)191 520 4000

www.arriva.co.uk



Increasing car ownership and new housing developments requiring longer commuting distances in the journey to work areas in the Region, and to Newcastle in particular, will see congestion increase and the above cycle of increased congestion will continue unless measures are introduced to reduce bus journey times and to facilitate access by frequent bus services into new housing developments. Given the predominance of bus services in local public transport passenger numbers, it is essential that sufficient transformational action is taken to speed up bus services and overcome the negative and unpredictable effects of the congestion which they currently face.

We specifically support the following measures within the bid:

- **The Intelligent Traffic Signals Package**, providing traffic signal upgrades at 160 junctions, and 165 pedestrian crossings, is particularly important. We believe that this offers the potential to improve bus reliability and journey speeds, which is so essential, by prioritising buses through these junctions. The improved real-time information about buses which this can facilitate will also encourage the use of bus services. Arriva has committed to the local authorities that all resource savings achieved as a result of bus priority measures will be reinvested in the local bus network
- We believe that the **A188/A189 Bus Corridor proposal** will have a transformational impact on travel to the major employment areas at Quorum, Balliol and Gosforth Business Parks. Reductions in journey times will enable Arriva to introduce new links from parts of Northumberland, especially from Ashington where unemployment is above the national average, to these employment areas.
- **The proposed replacement of Durham Bus Station** will transform the travel experience into and from the city, and thereby help to improve the image and attractiveness of travel by bus into the city. Arriva will provide dedicated supervision and passenger assistance within this new facility to complement this investment.
- **The proposed bus lanes in Durham in Gilesgate and Shincliffe** are also utterly vital. Arriva has already invested in additional resource on each of these corridors (two extra vehicles operating all day long, with consequent additional driver resources – in October 2018 and in October 2019, at a cost in excess of £200,000 per annum) to improve punctuality in the face of seriously increased traffic levels on these corridors. However, journey times for passengers have increased, and these bus priority measures are essential to offer passengers faster journey times to encourage the necessary modal shift.
- We fully support the **provision of bus only links around the Tyne Bridge**, which will be an essential part of Air Quality improvement measures. Arriva will operate buses to Euro VI emissions standards to contribute to the air quality improvement targets.
- **The proposed Public Transport Priority Improvements on Percy Street included in the Transforming Newcastle City Centre proposals** will help to reduce the delays caused by the bottlenecks around the Haymarket and Eldon Square Bus Stations. There are over 230,000 bus departures per annum from these two adjacent bus stations, and over 6 million passenger journeys on Arriva services alone (excluding those on the services of Go North East and Stagecoach) which start or finish at these bus stations. Access and egress to these bus stations is subject to major delay and congestion.



AECOM study into bus priority measures required on major bus corridors

We very much welcome, and we are contributing to, the AECOM study into bus priority requirements on the major corridors in the North East City Region, which commenced in July 2019. We believe that actions highlighted by this study should be accelerated, that the following are of critical importance:

- Additional bus priority measures on the Great North Road in Newcastle and North Tyneside on which up to 50 buses per hour operate in each direction. The Arriva services alone which operate on this corridor carry 8.5 million passengers per annum, 5.5 million of whom travel to and from Newcastle and North Tyneside. The opportunity and the need exists for additional bus lanes to be introduced to accompany the enhancements which will be provided by the proposed ITS Package.
- Additional bus priority measures on the major A1058 Coast Road between Newcastle and North Tyneside, itself a DEFRA identified site of Nitrogen Dioxide exceedance. Nearly 60 buses per hour operate along the Coast Road, approximately 40% of which are Arriva buses. Arriva carries 2.4 million passengers per year on these services.

Major concerns about the Northumberland Line Passenger Services Proposal

Whilst welcoming the bus proposals referred to above, we are extremely concerned about the impact of the proposed Northumberland Line on the viability of the bus network in Northumberland and between Northumberland and Newcastle.

We understand that assessments in the Strategic Outline Business Case indicate an abstraction of £10.4 million from bus services at the level of train operation incorporated in the TCF Bid and that rises to £16 million with the ultimate aspirational frequencies.

The following levels of service already operate between South East Northumberland and Newcastle City Centre (all operated by high quality buses with wi-fi, high back seats, etc., as a result of major new bus investment in recent years):

- Ashington - up to 8 buses per hour
- Bedlington - up to 7 buses per hour
- Cramlington - up to 16 buses per hour
- Blyth - up to 22 buses per hour

Abstraction of passengers by the proposed Northumberland rail line will see these routes become less viable. It will not be possible to maintain the attractive frequencies which exist at present given the patronage reduction on these services, thereby encouraging more people to use cars.

In addition to this abstraction, bus services in the Northumberland network and between Northumberland and Newcastle will be subjected additional delay and unpredictability of journey times as a result of having to cross 7 level crossings with a much greater frequency of trains.

To avoid a deterioration in the Northumberland bus network as a result of the restoration of passenger trains between Ashington, Blyth and Newcastle, and the greater level crossing delays, with the counter-productive consequences referred to above, major bus priority measures, as we have proposed to the local authorities, need to be introduced.



Conclusion

In conclusion, we support this bid for investment in public transport in the region.

We remain extremely keen to work with the authorities on developing the bus priority proposals which we have already submitted for consideration and believe even more can be developed in relatively short timescales. This includes compensatory and complementary bus priority measures in South East Northumberland, which will ensure that the anticipated benefits from passenger trains in the Northumberland Line proposal are not undermined to a much greater extent than has hitherto been estimated, as a result of the consequent degradation of the quality and frequency of bus services.

Yours sincerely

N R Knox
Area Managing Director
Arriva Northumbria Ltd and Arriva Durham County Ltd



19th November 2019

Mike Scott
Transforming Cities Fund Project Lead
North East Regional Transport Team
2nd floor NE Pavilion
Gateshead Civic Centre,
Regent Street
Gateshead
NE8 1HH

Dear Mike

I am writing on behalf of the Confederation of Passenger Transport in conjunction with North East bus operators, to express our support for the North East Region's bid to Government for capital investment in bus priority measures and facilities for bus passengers contained within the Transforming Cities Fund bid.

We support the need for transformational public transport investment in the Region, which has seen few new bus priority measures in recent times while congestion and air quality have deteriorated.

Buses are the most efficient use of road space. Buses are also by far the largest provider of public transport journeys in the Region, so measures which provide greater priority and additionally helps tackle congestion are essential and overdue, and they will enable bus operators to deliver even better journeys for passengers and make public transport a viable choice for more users.

We are also pleased that, since the last submission, bus operators have been jointly able to work with the Regional Transport Team and Local Authority partners on bus priority initiatives that can be delivered through Intelligent Traffic Signals (ITS) schemes through the AECOM study providing traffic signal upgrades at 160 junctions, and 165 pedestrian crossings. Key to their success will be the traffic control strategies and the delegation of intervention/change powers from each Local Authority to the regional Tyne and Wear Urban Traffic Management Control (UTMC) facility.

We are pleased to see the schemes in South Tyneside and Sunderland have recognised the need to improve current journey times at potential hotspots, whilst also providing a platform for the future namely the Park and Ride site at Follingsby, coupled with bus only roads to help serve the newly created IAMP.

We believe that local bus services, delivered in collaboration with a supportive partnership approach from Local Authorities, can provide many wider benefits to all public transport schemes across the region. To that end, we also hope that a balanced portfolio of bus initiatives, positioned alongside the other schemes in the bid, will enable multi-modal integration, encouraging significant modal shift and a decline in car use contributing towards improving air quality in the region.

Confederation of Passenger Transport UK
Fifth Floor (South), Chancery House, 53-64 Chancery Lane, London, WC2A 1QS
Telephone: 020 7240 3131 Facsimile: 020 7240 6565 Email: admin@cpt-uk.org Website: www.cpt-uk.org

A company limited by guarantee No. 1182437 England Registered office as above



Whilst modal shift from car is important, successful bid awards should not focus on initiatives encouraging significant modal shift between public transport modes without a balanced approach or support for other public transport modes.

We believe that investment in public transport infrastructure to achieve modal shift is essential given increasing levels of congestion and poor air quality in the area covered by the bid. The consequences of congestion impacts are less attractive journey times and increased operating costs, thereby putting pressure on fares, both of which reduce travel by bus, and encourage yet worse congestion. It is therefore vital that this opportunity is seized to reverse this trend and action taken to enable bus services to fully play their part in achieving the modal shift which is necessary to delivering sustainable economic development in the Region.

Increasing car ownership and new housing developments requiring longer commuting distances in the journey to work areas in the Region, and to Newcastle in particular, will see congestion increase and the above cycle of increased congestion continue unless measures are introduced to reduce journey times and to facilitate access by frequent bus services into new housing developments. Given the predominance of bus services in local public transport passenger numbers, it is essential that sufficient transformational action is taken to speed up bus services and overcome the negative and unpredictable effects of the congestion which they currently face.

We would recommend an additional two major corridors should be modelled, fast tracked and progressed using local funding resources or additional financial support from government:

Bus priority measures on the Great North Road in Newcastle and North Tyneside on which up to 50 buses per hour operate in each direction would be an important addition. The opportunity and the need exists for additional bus lanes to be introduced to accompany the enhancements which will be provided by the proposed ITS Package.

Bus priority measures on the major A1058 Coast Road between Newcastle and North Tyneside, itself a DEFRA identified site of Nitrogen Dioxide exceedance. Nearly 60 buses per hour operate along the Coast Road.

To avoid a deterioration in the Northumberland bus network as a result of the restoration of passenger trains between Ashington, Blyth and Newcastle, and the greater level crossing delays, with counter-productive consequences, major bus priority measures, as have been proposed to the local authorities, need to be introduced.

Bus operators are investing in newer, low emission vehicles and bus operators of all sizes have joined to form 'NE Bus' providing a powerful partnership with a consistent and impactful message of the powerful role of 'bus' to the regional economy.

As part of this partnership, the three major bus operators have committing to the re-investment of resources back into the local bus network saved as a result of improved journey speeds and reliability. This would be undertaken in partnership with Nexus and the relevant Local Authority by way of enhanced timetables, new services, reduced fares and/or the commercialisation of supported services. Each case will be worked through on its individual merits following full and final details of each scheme, appropriate modelling and agreeing target traffic speeds.

In summary, the prospect of such transport investment in the region is warmly welcomed and supported so that, in partnership, we are able to make public transport even better and deliver



more sustainable low carbon journeys which support the prosperity, growth and improvement of the North East economy.

Yours Sincerely

Graham Vidler
Chief Executive

Mike Scott
Transforming Cities Fund Project Lead
North East Regional Transport Team
2nd floor NE Pavilion,
Gateshead Civic Centre,
Regent Street
Gateshead
NE8 1HH

117 Queen Street
Gateshead
Tyne and Wear
NE8 2UA

Tel: 0191 420 50 50
Web: gonortheast.co.uk

Email: martijn.gilbert@gonortheast.co.uk

13th November 2019

Tranche 2 Transforming Cities Fund – support letter for bus based schemes

Dear Mike,

I am writing on behalf of bus operator, Go North East, to express our support for the North East City Region's bid to Government for capital investment through the Transforming Cities Fund in relation the 'Transforming bus corridors' schemes set out in the bid.

Buses are the most efficient use of road space and the largest provider of public transport journeys, so anything that gives them greater priority and additionally helps tackle congestion is welcomed and will enable us to deliver even better journeys for passengers and make public transport a viable choice for more users.

Schemes like these have the potential to support buses to provide more dependable and attractive journeys, mitigate the cost impact of rising congestion, and support our own investment in vehicles, technology and route developments in order to offer more sustainable services, in turn better connecting communities and delivering air quality improvements.

It is pleasing that, since the last submission, bus operators have been jointly able to work with the Regional Transport Team and Local Authority partners on bus priority initiatives that can be delivered through Intelligent Traffic Signals (ITS) schemes. Key to their success will be the traffic control strategies and the delegation of intervention/change powers from each Local Authority to the regional Tyne and Wear Urban Traffic Management Control (UTMC) facility. This, we believe, will be an essential key component.

We believe that local bus services, delivered in collaboration with a supportive partnership approach from Local Authorities, can provide many wider benefits to all public transport schemes across the region. To that end, we also hope that a balanced portfolio of bus initiatives, positioned alongside the other schemes in the bid, will enable multi-modal integration, supporting inward/onward journeys, and contribute to an increase in the overall number of public transport journeys in the region, mitigating movement between transport modes.

[Continued]

As part of the bid we are committing to continue to ramp up investments in new, low emission, vehicles supported by high standards of service delivery and impactful marketing. We envisage our annual capital programme being in the region of £12m in assets which can be deployed in areas supported by these schemes. Furthermore, we are committing the re-investment back into the local bus network of resources saved as a result of improved journey speeds and reliability. This would be undertaken in partnership with Nexus and the relevant Local Authority by way of enhanced timetables, new services, reduced fares and/or the commercialisation of supported services. Each case will be worked through on its individual merits following full and final details of each scheme, appropriate modelling and agreeing target traffic speeds.

In summary, the prospect of such transport investment in the region is warmly welcomed and supported so that, in partnership, we are able to make public transport even better and deliver more sustainable low carbon journeys which support the prosperity, growth and improvement of the North East economy.

Yours sincerely,



Martijn Gilbert
Managing Director
Go North East

Head Office
Wheatshaf
Sunderland
SR5 1AQ

T: 0191 567 5251
F: 0191 566 0202

stagecoachbus.com



Mike Scott
Transforming Cities Fund Project Lead
North East Regional Transport Team
2nd floor NE Pavilion,
Gateshead Civic Centre,
Regent Street
Gateshead
NE8 1HH

23 October 2019

Dear Mike,

Tranche 2 Transforming Cities Fund

I am writing on behalf of Stagecoach North East to express our support in principle for the North East City Region's draft bid to Government for capital investment in the region through the Transforming Cities Funding.

In particular we are pleased that some of the schemes we have identified over the years, in need of intervention have been progressed to ensure bus services offer a safe and reliable journey time.

We are pleased to see the schemes in South Tyneside and Sunderland have recognised the need to improve current journey times at potential hotspots, whilst also providing a platform for the future namely the Park and Rice site at Follingsby, coupled with bus only roads to help serve the newly created IAMP.

We are also pleased to see the commitment to work together to improve current journey speeds in Newcastle with Intelligent Traffic Signals and a range of other smaller measures, this will allow us to reinvest that additional resource we currently use to combat congestion in widening the network. This would allow for new services to be created to Business Parks and large employers with no risk to the public purse.

In summary any investment is welcomed so that in partnership we are able to present a sustainable and co-ordinated network to ensure the North East is a vibrant, bubbling, economic hub that people want to live, work and visit.

Yours sincerely

Steve Walker
Managing Director
Stagecoach North East

Busways Travel Services Limited trading as Stagecoach North East
Registered Office: One Stockport Exchange, 20 Railway Road, Stockport SK1 3SW (Registered in England & Wales No. 2295227)

Cleveland Transit Limited trading as Stagecoach North East
Registered Office: One Stockport Exchange, 20 Railway Road, Stockport SK1 3SW (Registered in England & Wales No. 2546698)

7th Floor, Piccadilly Gate
Store Street, Manchester M1 2WD

0300 123 0860
info@transportfocus.org.uk
www.transportfocus.org.uk

Mike Scott
TCF Project Lead, Transport North East Strategy Unit

Via email to mike.scott@northeastca.gov.uk

15 November 2019

Dear Mr Scott,

Transport Focus would like to express full support for the North East's bid to deliver its programme of public transport and sustainable transport schemes, through the Government's Transforming Cities Fund.

Transport Focus is the independent public body set up by Government to protect the interests of Britain's rail passengers, England's bus and tram passengers outside London, and coach passengers in England on scheduled domestic services. Since March 2015 we have also represented the interests of users of the strategic road network in England. We are an independent body funded by the Department for Transport (DfT).

Improving journeys for users across the North East is important. Delivering more reliable, punctual and value for money journeys, across all public transport modes, will not only address the priorities for improvement of existing users, but also tackle the perceptions of those that do not use public transport and encourage modal shift where practicable.

Transport Focus fully supports the TCF programme compiled for the North East. In particular we support plans to transform bus corridors. Improvements to bus priority measures will allow bus journey speeds to improve and therefore enhance punctuality and journey times for current and future users.

This will address two of the top three priorities for improvement identified by recent bus passenger research (Bus Passenger Priorities for Improvement 2019) carried out by Transport Focus. In addition, the development of a more reliable and predictable bus corridor will also address similar priorities identified by non-users of buses in the same research report.

Transport Focus looks forward to the North East Joint Transport Committee's bid being delivered and seeing the much-needed transport and economic benefits that it will bring to the North East region.

Your sincerely,

David Sidebottom
Director

Mike Scott
TCF Project Lead
Transport North East Strategy Unit

27th November 2019

Dear Mr Scott,

North East Transforming Cities Fund bid

Newcastle International Airport Limited (NIAL) would like to express full support for the North East's bid to deliver its programme of public transport and sustainable transport schemes, through the Government's Transforming Cities Fund.

Newcastle International Airport is an essential part of the North East's network of transport infrastructure, offering the national and international connections needed by the region to drive forward the region's economy.

Having reliable, efficient, and safe transport access to the Airport is critical for the current functioning of the Airport, but also supporting future growth.

NIAL supports the TCF programme compiled for the North East. In particular, we support the aspirations of this Programme to transform the way people travel around the North East.

NIAL looks forward to the North East Joint Transport Committee's bid being delivered and seeing the much-needed transport and economic benefits that it will bring to the North East region.

Yours Sincerely



Graeme Mason

Planning and Corporate Affairs Director

Newcastle International Airport
Woolsington
Newcastle upon Tyne
NE13 8BZ

Tel: +44 (0) 871 882 1121
Fax: +44 (0) 191 271 6080
www.newcastleinternational.co.uk

Registered No. 2077766 England
Registered Office: As Above

Our ref: 19/11/07 – NE TCF
Your ref:

Mike Scott
Transport North East Strategy Unit
Second Floor
Gateshead Civic Centre
Regent Street
Gateshead
NE8 1HH

Highways England
Lateral
8 City Walk
Leeds
LS11 9AT

Direct Line: 07760 990450

08 November 2019

Dear Mike,

North East Transforming Cities Fund (TCF) Bid

I am pleased to confirm the support of Highways England for the North East's bid to deliver its programme of public transport and sustainable transport schemes, through the Government's Transforming Cities Fund.

Highways England is the strategic highway company appointed by the Secretary of State for Transport under the provisions of the Infrastructure Act 2015 as the highway authority, traffic authority and street authority for the Strategic Road Network (SRN).

The SRN within the North East accommodates a high number of journeys which are local in nature. The TCF programme compiled for the North East includes for the provision of improved public transport (rail & bus) and sustainable transport infrastructure. The compiled programme aims to provide attractive alternatives to that of a single occupancy car for undertaking local trips. As such, given Highways England's responsibility for the SRN, we are particularly supportive of those measures which would provide the public with an alternative to making their trips via sustainable means as opposed to utilising the SRN by car. As such, we support the following packages:-

1. Delivering Metro and Local Rail Strategy
2. Transforming Bus Corridors
3. Transforming Cycling and Walking Corridors
4. Transforming Park and Ride

Given the above, Highways England supports the North East Joint Transport Committee's bid and looks forward to it being delivered and seeing the much-needed benefits that it will bring to the North East region.

Yours sincerely,



Mark Goodwill
Spatial Planning Manager
Yorkshire & North East
Email: mark.goodwill@highwaysengland.co.uk



7th November 2019

Dear Mr Scott,

Transforming Cities Fund Bid

Sustrans would like to express full support for the North East's bid to deliver its programme of public transport and sustainable transport schemes, through the Government's Transforming Cities Fund.

We are excited that the Intu Cycle Storage scheme, to be delivered in partnership with Sustrans, has a prominent position within the high, medium and low programmes.

Sustrans looks forward to the North East Joint Transport Committee's bid being delivered and seeing the much-needed transport and economic benefits that it will bring to the North East region.

Sustrans is the charity making it easier for people to walk and cycle.

We are engineers and educators, experts and advocates. We connect people and places, create liveable neighbourhoods, transform the school run and deliver a happier, healthier commute.

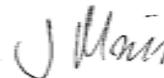
Sustrans works in partnership, bringing people together to find the right solutions. We make the case for walking and cycling by using robust evidence and showing what can be done.

We are grounded in communities and believe that grassroots support combined with political leadership drives real change, fast.

We believe that the Transforming Walking and Cycling Corridors thematic package can deliver a step change in the modal share of cycling and walking across the region.

Thank you again for sharing your ideas and application with Sustrans. I wish you the best of luck with the application.

Yours sincerely,



Jonah Morris
Partnerships Manager (North East and Cumbria)





Mike Scott
Transforming Cities Fund Project Lead
North East Regional Transport Team
2nd floor NE Pavilion, Gateshead Civic Centre,
Regent Street
Gateshead
NE8 1HH

6 November 2019

Dear Mike,

I am writing on behalf of Living Streets to express our support for the North East's bid to deliver its programme of public transport and sustainable transport schemes, through the Government's Transforming Cities Fund.

As the UK charity for everyday walking, we support the City Region's ambition to encourage active and sustainable travel and improve connectivity. We want to create safe and attractive places for people of all ages and abilities to walk – to work, education, or to socialise. We have a long history of partnership working across the North East, delivering projects that have engaged schools, communities and workplaces in walking more and creating streets that are great for walking.

We particularly welcome the inclusion of significant investment in improving walking links, for example on routes into and around Durham and Newcastle city centres. We also strongly support Newcastle City Council's plans to take a community engagement approach to improving walking access metro stations and bus interchanges. Our experience shows that local people know a place best and therefore are well placed to inform improvements.

We look forward to working with the North East Joint Transport Committee and other stakeholders to deliver the vision and would welcome the opportunity in particular to work with the local authorities to ensure walking infrastructure is of high quality and informed by the needs of local people.

Yours sincerely,

Jennifer Wiles
Regional Director (North)

4th Floor, MEA House, Ellison Place, Newcastle upon Tyne, NE1 8XS
0191 447 8765 NEandYorks@livingstreets.org.uk livingstreets.org.uk

Living Streets (The Pedestrians Association) is a Registered Charity No. 1108448 (England and Wales) and 50039808 (Scotland).
Company Limited by Guarantee (England & Wales), Company Registration No. 5368409, America House, 2 America Square, London, EC3N 2LU

Eliminating barriers; Enabling access; Promoting participation



Charity Number 1156622

20th November 2019

Mike Scott
Nexus House
33 St James Boulevard
Newcastle upon Tyne
NE1 4AX

Dear Mike

Newcastle Disability Forum fully supports the Transforming Cities Bid which will improve transport across our region. The area desperately needs improvements to both rail and bus services to help drive our economy. We note this bid will improve access to jobs, training, help support social inclusion, reduce the risk of isolation and promote wellbeing and equality. This can only help the groups that we aim to support on a daily basis.

The Forum represents people with disabilities, many of whom are vulnerable. For them planning a journey is a major issue. Dealing with disruptions and changes to transport plans on a regular basis deters lots of our clients from seeking work, training opportunities and social outings.

We welcome anything that will increase local public transport provision and improve technology as that will help people plan journeys and have confidence in the transport provision. The Forum fully supports this bid and really hopes it is successful. Please give all the schemes your full consideration as the benefits it will bring will be a real boost to a region that is sometimes forgotten.

Yours sincerely,

Alison Blackburn
Chair
Newcastle Disability Forum

Dene Centre, Castles Farm Road, Gosforth, Newcastle upon Tyne NE3 1PH
Tel : 0191 284 0480 - enquiries@ndf.org.uk - www.ndf.org.uk



TYNE AND WEAR



Helping everyone to Explore the North
and striving to promote, strengthen
and protect the Tyne Valley Railway



Public Transport Users Group

Dear Mr Scott,

Tyne & Wear Public Transport Users Group would like to express full support for the North East's bid to deliver its programme of public transport and sustainable transport schemes, through the Government's Transforming Cities Fund.

We are an organisation campaigning for better, integrated public transport and support improvements to Tyne & Wear Metro, which is the backbone of public transport in Tyne and Wear, rail links from South East Northumberland and bus priority measurements.

Transport is important to this organisation because otherwise people could not commute to work and school and business could not get goods around the country. Good roads and, particularly, good public transport is vital. Without good public transport, the road system would not cope and congestion and air pollution would increase.

TWPTUG fully supports the TCF programme compiled for the North East. In particular we support the Metro Flow scheme, the Northumberland Line Scheme, the bus priority measures and traffic signal upgrades and the new Park & Ride sites because these measures, in their entirety, would give a massive improvement to public transport in Tyne and Wear and South East Northumberland. The Metro frequency could then be increased, the towns of Ashington, Blyth and Bedlington would be linked by rail to Newcastle for the first time for nearly sixty years. The bus priority measures and signal improvements should assist bus travel and punctuality.

TWPTUG looks forward to the North East Joint Transport Committee's bid being delivered and seeing the much-needed transport and economic benefits that it will bring to the North East region.

Yours sincerely

Richard Rook
General Secretary
TWPTUG

Mike Scott
TCF Project Lead
Transport North East Strategy Unit
Second Floor
Gateshead Civic Centre
Regent Street
Gateshead
NE8 1HH

6 November 2019

Dear Mike,

Transforming Cities Fund

I am writing on behalf of the Tyne Valley Community Rail Partnership in support of the North East's bid to the Government's Transforming Cities Fund.

The Tyne Valley Community Rail Partnership seeks to promote passenger services on the Carlisle – Newcastle rail line for the social, economic and environmental benefit of residents and visitors, and to support the social well-being of the communities served by the railway. It works with a range of partners for specific improvements at stations and to train services, encourages regeneration, sustainable development and social inclusion along the corridor served by the railway and promotes integrated transport links to the railway, including bus, cycling and walking, and to encourage good links to the national rail network at Carlisle and Newcastle.

We are eager to see the Tyne Valley railway capture a greater share of passenger traffic overall, but specifically into Tyneside which is the destination for many residents of communities served by the line. Achieving this aim will bring important congestion and air quality benefits for people living and working in Tyneside. Passengers are looking for easy transfer to other modes of transport at Newcastle Central Station along with convenient connections to their ultimate destinations. Thus they will welcome the Newcastle Central Gateway and Northumberland Line initiatives.

We look forward to the schemes in the bid being delivered, along with the much-needed transport and economic benefits that it will bring to the North East region.

Yours sincerely

Malcolm Chainey
Chair, Tyne Valley Community Rail Partnership

Phone: 07976 015120
Email: chair@tvcrp.org.uk

Registered Office:
Community Rail Partnership Office, Station Yard, Hexham, NE46 1EU
Registered in England No 05132845



-----Original Message-----

From: William Ions <billionsnle@yahoo.co.uk>

Sent: 24 October 2019 08:12

To: Mike Scott mike.scott@northeastca.gov.uk

Subject: Transforming Cities Bid

Dear Mr Scott,

Elders Council of Newcastle would like to express full support for the North East's bid to deliver its programme of public transport and sustainable transport schemes, through the Government's Transforming Cities Fund. Elders Council seeks to reflect the views of Older People in the City of Newcastle. Transport is important to this organisation because it is important for older people to be able to get around the City. Elders Council fully supports the TCF programme compiled for the North East. In particular we support Transforming City Centre Gateways and Transforming Park and Ride because they will make public transport more attractive. Elders Council looks forward to the North East Joint Transport Committee's bid being delivered and seeing the much-needed transport and economic benefits that it will bring to the North East region.

Your sincerely Bill Ions Co-Ordinator Transport Working Group, Elders Council of Newcastle



Dear Andrew

Transport for New Homes strongly supports your bid to the Transforming Cities Fund for funding for a package of investments to improve public transport links to housing schemes across the North East region.

Transport for New Homes is a project of the Foundation for Integrated Transport (FIT). FIT is a registered charity (number 1156363).

We have researched and advocated to the Government and others the need for improved public transport to new housing and the barriers to its achievement through policy, procedures and funding.

We reported on this last year. Full details of [this report](#) and our other work are on [our website](#). You will see from this that our research included visits to Newcastle Great Park and Wynyard Park, Teesside.

One of our trustees, Stephen Joseph, has had extensive discussions with the Department for Transport (Isobel Pastor) and the Ministry of Housing, Communities and Local Government.

We are also in close touch with the Committee on Climate Change. Travel to and from new homes has a very significant impact on the climate.

We have a wide range of supporting organisations and individuals. We arrange open meetings for supporters on selected topics and would be pleased to extend invitations to these meetings to you and others. These meetings have been in London, but the next one is likely to be in Manchester. It will, like the others, be in the early evening.

You or colleagues in the Combined Authority, or people with whom you are discussing your bid, would also be welcome to meet members of our team individually in London.

We hope your bid is successful.

Yours sincerely

Alastair Hanton

Trustee, Foundation for Integrated Transport

**www.transportfornewhomes.org.uk • info@transportfornewhomes.org.uk
c/o Foundation for Integrated Transport, 70 Cowcross St, London, EC1M 6EJ**



Our ref PJDC

Mr Scott
NECA
Second Floor
Gateshead Civic Centre
Regent Street
Gateshead
NE8 1HH

30 October 2019

Dear Mr Scott,

Re: Transforming Cities Fund – NE Regional Bid 2019

I refer to the above and on behalf of Persimmon Homes would like to express full and unequivocal support for the North East's bid to deliver its programme of public transport and sustainable transport schemes, through the Government's Transforming Cities Fund.

Persimmon are the largest builder in the NE Region operating out of 3 regional offices in addition to which our Group HQ is situated in the heart of the Region at Newcastle Great Park.

As Group Planning and Strategic Land Director ensuring a strong supply of sustainable sites is crucial to our businesses success. A key part of this is to ensure our investment is in the right places, where people want to live close by local services and facilities with available onward connection, via public transport, to employment and town centres.

High quality and frequent public transport plays a leading role in this investment with the vast majority of current and future sites located within or close by the key corridors as shown within the Bid. Our teams work hard alongside all regional stakeholders to create deliverable solutions, devise green travel initiatives and invest significant time and effort towards a common goal. A clear example of this is the delivery of a new Metro Station as part of our Murton development in North Tyneside.

I am a member of the LEP Housing Board and the Regional Chairman of the HBF which alongside my daytime job allows me work alongside partners to make things happen which is what this bid is all about.

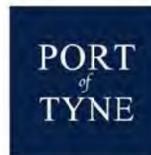
On behalf of Persimmon I look forward to the North East Joint Transport Committee's bid being delivered and seeing the much-needed transport and economic benefits that it will bring to the North East region.

Yours sincerely

Peter Jordan
Group Planning and Strategic Land Director - Persimmon Homes

Persimmon Homes North East is a trading division of Persimmon Homes Limited
Registered Office: Persimmon House, Fulford, York YO19 4RE
Registered in England No. 4108747. A subsidiary of Persimmon plc

PERSIMMON PLC
2 Esh Plaza
Sir Bobby Robson Way
Newcastle Great Park
NE13 9BA
Tel: 0191 2389950
Main Fax: 0191 2389994



7 November 2019

Mr Mike Scott
TCF Project Lead
Transport North East Strategy Unit
North East Combined Authority
Gateshead Civic Centre,
Gateshead, NE8 1HH

Dear Mr Scott

Transforming Cities Fund

I am writing to confirm the Port of Tyne's support for the North East's bid to deliver a programme of public transport and sustainable transport schemes through the Government's Transforming Cities Fund.

The Port of Tyne is one of the North East's largest gateways, adding some £621m GVA to the regional economy in 2018. Improved connectivity which will facilitate the movement of goods and passengers is clearly central to our business and transformational improvements to the North's transport connectivity are critical to achieving a competitive environment that can drive our region's economic growth.

We believe that this bid will deliver significant improvements to sustainable transport networks across our region which will drive economic growth through improved connectivity. The Port of Tyne is therefore fully supportive of the bid and we welcome the much needed benefits that it will bring to the North East.

Yours sincerely

Matthew Beeton
Chief Executive Officer

CONVENTIONAL
& BULK CARGO

CAR TERMINALS

CRUISE & FERRIES

LOGISTICS

ESTATES



PORT OF TYNE HEAD OFFICE MARITIME HOUSE TYNE DOCK SOUTH SHIELDS TYNE & WEAR NE34 9PT
T: +44 (0) 191 455 2671 F: +44 (0) 191 455 4687 WWW.PORTOFTYNE.CO.UK

PORT OF TYNE IS A TRADING NAME OF PORT OF TYNE AUTHORITY

By email: mike.scott@nrtheastca.gov.uk

4 November 2019

Mike Scott
TCF Project Lead
Transport North East Strategy Unit

Dear Mr Scott

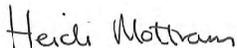
Northumbrian Water would like to express support for the North East's bid to deliver its programme of public transport and sustainable transport schemes, through the Government's Transforming Cities Fund.

Northumbrian Water provides water and sewerage services to 2.7 million people in the North East of England and employs more than 2,200 people in the region.

Transport is important to Northumbrian Water as we have employees based across the North East who need to access our sites in multiple locations. Similarly, these investments will benefit our substantial regional supply chain – at present 52p out of every £1 we spend is with suppliers based in our operating area, emphasising the importance we place on contributing to the economic wellbeing of our region.

Northumbrian Water supports the TCF programme compiled for the North East. We look forward to the North East Joint Transport Committee's bid being delivered and seeing the much-needed transport and economic benefits that it will bring to the North East region.

Yours sincerely



Heidi Mottram CBE
Chief Executive

25 October 2019

Mr Mike Scott
TCF Transport lead
Second Floor, Gateshead Civic Centre,
Regent Street,
Gateshead,
NE8 1HH

Dear Mr Scott,

We at Sage Gateshead would like to express full support for the North East's bid to deliver its programme of public transport and sustainable transport schemes, through the Government's Transforming Cities Fund.

Sage Gateshead is operated by the charity North Music Trust and we have been offering the people of the northern region the opportunity to learn and experience music in an iconic building located on the Gateshead bank of the River Tyne since December 2004.

Transport provision is important to our audiences as many of them are either young families with limited budgets or elderly with limited transport options, or located in rural communities, or in outlying areas with poor public transport provision. We are keen to support measures to reduce environmental impacts and to encourage audience members to use public transport which, at present, is not widely available to those attending events at our venue. Our offer is available to all sections of the community, from babies and toddlers right through to our Silver Programme (for people aged 50 and above). Many of our retired participants tell us that they benefit greatly from the social interaction brought to them through their attendance at Sage Gateshead music classes and performances, and, for many, their ability to take advantage of these opportunities is limited by either an inability to drive or to use existing public transport provision either because of ill health or because it does not operate in the areas they live - or it is withdrawn early in the evening, which makes it difficult for them to enjoy the performance and fearful that they will be unable to get home safely.

Sage Gateshead fully supports the TCF programme compiled for the North East. In particular we support transformation of the city centre gateways, transformation of the park and ride facilities and delivery of metro and local rail strategies, because each of these measures will improve accessibility for members of the public, who presently cannot travel easily to Gateshead and whose life experiences are presently constrained by the limited transport options available to them, as well as offering viable alternatives to members of the public who presently have to travel to our venue using their own cars.

NMT is registered in England as a charity, number 1087445 and as a company limited by guarantee, number 4044936.



St Mary's Square
Gateshead Quays
Gateshead, NEB 2 JR
Telephone +44 (0) 191 443 4666
Tickets +44 (0) 191 443 4661
www.sagegateshead.com
CHAIR: Lord Falconer of Thoroton

Cont/d....



Sage Gateshead looks forward to the North East Joint Transport Committee's bid being delivered and seeing the much-needed transport and economic benefits that it will bring to the North East region.

Your sincerely

A handwritten signature in black ink, appearing to read 'A. Pogson', with a horizontal line underneath.

Abigail Pogson
Managing Director

Regent Street,
Gateshead,
NE8 1HH

22 October 2019

Dear Mr Scott,

Transforming Cities Fund Bid 2019

The Institution of Civil Engineers in the North East (ICE NE) would like to express support for the North East's bid to deliver its programme of public transport and sustainable transport schemes, through the Government's Transforming Cities Fund.

The ICE is a professional body and a membership organisation with over 2100 members across the North East region, and more than 93,000 world-wide. Our members are expert in their respective fields, and in 2017 a group of northern members produced an important policy document "Delivering a Northern Infrastructure Strategy". Whilst this covered a much broader geography (Northern Powerhouse area) and wider range of infrastructure than is included in the current TCF bid, it highlighted the need for many of the elements included in your programme – investment in sustainable modes, a step-change in the quality of public transport, targeted investment in major road and rail infrastructure. In 2018 North East members working in transport produced a document "Transport for the North East – a way forward". Their recommendations contained a number of the elements of the current TCF bid, and specifically highlighted the need for a range of Metro improvements, and re-opening the Northumberland Rail Line, both of which we particularly support.

In 2019 ICE produced a State of the Nation report looking at the interface between housing and infrastructure. That report explores strategic policy interventions at a national level, but it also highlights



the importance of investment in integrated, reliable, affordable public transport and improved public realm – both key elements of the current TCF bid which we are happy to support.

From the above examples you can see that the “transport expert” views within our organisation are well-aligned with the aspirations articulated in your bid, and in a professional context we fully support what you are trying to do through the TCF programme.

In addition to the professional expertise of our members, they are also users of transport networks, and in that context the proposed programme of investment is important to them. Congestion and lack of resilient public transport options currently impact on their business and leisure trips. With the urgent need to decarbonise transport it is essential that low-carbon options are brought on-stream as quickly as possible. Increasing metro frequency, providing more opportunities for integrated journeys, cycling and walking will all go some way towards that.

ICE NE fully supports the TCF programme compiled for the North East, and we look forward to the North East Joint Transport Committee’s bid being delivered and seeing the much-needed transport and economic benefits that it will bring to the North East region.

Yours sincerely



Penny Marshall

**Regional Director, North East, Yorkshire and Humber
Institution of Civil Engineers**
Penny.marshall@ice.org.uk



Inspiring the extraordinary

Vice-Chancellor and Warden

SC/DB

7 November 2019

Mr Mike Scott
TCF Project lead
Transport North East Strategy Unit
Second Floor
Gateshead Civic Centre
Regent Street
Gateshead
NE8 1HH

Dear Mr Scott,

Letter of Support for Transport North East: Transforming Cities Fund (TCF) Bid

Durham University would like to express its support for the North East’s bid to deliver a comprehensive programme of public transport and sustainable transport schemes, through the Government’s Transforming Cities Fund.

Ensuring appropriate transport for our students, staff and visitors is vital as we enter into a period of significant growth. Improved public transport routes across the region will also support our ambition to widen participation and support enhanced collaborative working.

Durham University fully supports the TCF programme compiled for the North East. In particular we support the development of a Durham bus priority corridor, Durham bus station, Durham walking / cycling improvements and expansion of the Durham Park and Ride scheme. All of these improvements will support the economic development of the city and forthcoming strategic developments such as Aykley Heads. They will also support mobility and access across the city for staff, students and visitors across the Durham University estate and the wider city.

Durham University looks forward to the North East Joint Transport Committee’s bid being delivered and seeing the much-needed transport and economic benefits that it will bring to the North East region.

Yours sincerely,



**Professor Stuart Corbridge
Vice-Chancellor and Warden**

Durham University The Palatine Centre Stockton Road Durham DH1 3LE
Telephone +44 (0)191 334 5214
Executive Officer Denise Baker
E-mail denise.baker@durham.ac.uk
www.durham.ac.uk





Transport North East Strategy Unit
Second Floor
Gateshead Civic Centre
Regent Street
Gateshead
NE8 1HH

06 November 2019

Dear Mr. Scott

Gateshead College would like to express full support for the North East's bid to deliver its programme of public transport and sustainable transport schemes, through the Government's Transforming Cities Fund.

In 2018/2019 Gateshead College student achievement rates saw us ranked as the top performing college in the country firmly putting the North East on the map. The success of our students is the single most important thing to us at the college. We put everything we've got into ensuring each and every one of them have the skills and qualifications they need to get into work, progress in work and have a rewarding career and this ranking is testament to that. To say that the North East is home to the best performing college in the country is a great message for everyone, for students, our employees, for businesses located here but also those looking for somewhere to invest; it is very positive news for the region.

Transport is important to Gateshead College because the majority of our students rely on public transport to attend college. An investment to transform our regions transport infrastructure will provide more access for students to attend college, opening up more opportunities to help people get on in life and be rewarded for their hard work.

Gateshead College fully supports the TCF programme compiled for the North East. In particular we support the transformation of bus corridors, specifically Gateshead Interchange bus lane, A195 bus lane, A188/A189 bus corridor and improvements to Metro flow because this will speed up urban buses and make rail services more reliable.

Gateshead College looks forward to the North East Joint Transport Committee's bid being delivered and seeing the much-needed transport and economic benefits that it will bring to the North East region

Yours sincerely,

Judith Doyle CBE
Principal and Group Chief Executive

Judith Doyle CBE
Principal and Chief Executive

Baltic Campus

Quarryfield Road
Baltic Business Quarter
Gateshead NE8 3BE

Tel: 0191 490 0300

Email: info@gateshead.ac.uk

www.gateshead.ac.uk

How can we help?

Course Information

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Employers

0191 490 2246

0191 490 4627

0191 490 2258



Education & Skills
Funding Agency

**Sent by email to:
Mike Scott
TCF Project Lead
Transport North East Strategy Unit**

mike.scott@northeastca.gov.uk

14 November 2019

Dear Mr Scott,

NCG would like to express full support for the North East's bid to deliver its programme of public transport and sustainable transport schemes, through the Government's Transforming Cities Fund.

NCG is one of the leading providers of education, training and employability across the UK. The group consists of seven colleges, with around 2,000 staff and work with thousands of learners, apprentices and employers each year. Two of these colleges, Newcastle College and Newcastle Sixth Form College are based in the North East region.

Transport is important to this organisation because students travel from all over the region to attend both colleges, situated at the heart of the region's capital city. It is essential that our campus is accessible to all and a safe, reliable and affordable public transport system is vital.

NCG fully supports the TCF programme compiled for the North East. In particular we support the 407m bid for public transport, walking, cycling and public realm schemes to be delivered between 2020 and 2023 and the £110m investment for buses because it would ensure that our future students would have safer, more efficient and environmentally friendly ways of accessing education training

NCG looks forward to the North East Joint Transport Committee's bid being delivered and seeing the much-needed transport and economic benefits that it will bring to the North East region.

Yours sincerely



Liz Bromley
CEO, NCG



LIZ BROMLEY
CHIEF EXECUTIVE



TONY LEWIN
Principal

Our ref: TL/DP

6 November 2019

For the attention of Mike Scott
TCF Project Lead
Transport North East Strategy Unit

Dear Mr Scott

Newcastle College would like to express full support for the North East's bid to deliver its programme of public transport and sustainable transport schemes, through the Government's Transforming Cities Fund.

Newcastle College is a further and higher education college in the heart of the North East. We help more than 16,000 students prepare for their future careers each year and offer hundreds of vocational courses and apprenticeships across our main campus and specialist academies. Our priority is making sure our students are taught the right skills for the job and that's why our courses are developed in collaboration with local employers. Our students benefit from first-class facilities, tutors with real industry experience and opportunities to work with employers and industry experts, plus an award-winning student support team, to help everyone get the best out of their time with us.

Transport is important to our organisation because it is essential that our campus is accessible to all and that our learners are able to reach us. We have a campus in the heart of the city centre and satellite sites around the North East, meaning a safe, reliable and affordable public transport system is vital. Additionally, Newcastle College trains the next generation of future engineers in Rail, Aviation and Civil Engineering through its Transport Academy, which was awarded the Queen's Anniversary Prize for Vocational Education in 2018. The Transport Academy offers training for those leaving school up to degree level and investment into a sustainable transport infrastructure for the region will safeguard the future careers of these students.

Newcastle College fully supports the TCF programme compiled for the North East. In particular we support the 407m bid for public transport, walking, cycling and public realm schemes to be delivered between 2020 and 2023 and the £110m investment for buses because it would ensure that our future students would have safer, more efficient and environmentally friendly ways of accessing education training.

OUR VALUES: Valuing Our People – Ownership – Being Open and Honest

www.ncgrp.co.uk

NCG
Rye Hill Campus, Scotswood Road,
Newcastle upon Tyne, NE4 7SA

T +44 (0)191 200 4800
E enquiries@ncl-coll.ac.uk

Rye Hill Campus, Scotswood Road, Newcastle upon Tyne NE4 7SA Tel: (0191) 200 4000 Fax: (0191) 200 4517 Minicom: (0191) 272 3304



Newcastle College a division of NCG
www.newcastlecollege.co.uk
enquiries@ncl-coll.ac.uk

Newcastle College looks forward to the North East Joint Transport Committee's bid being delivered and seeing the much-needed transport and economic benefits that it will bring to the North East region.

Yours sincerely



Tony Lewin
Principal

CPD:amp



Mr Mike Scott
TCF Project Lead, Transport North East Strategy
Unit

mike.scott@northeastca.gov.uk

7 November 2019

Dear Mr Scott

Professor C P Day MA, MD, PhD, FMedSci
Vice-Chancellor and President

Executive Office
Newcastle University
King's Gate
Newcastle upon Tyne
NE1 7RU United Kingdom

Transforming Cities Fund North East Bid

Newcastle University would like to express full support for the North East's bid to deliver its programme of public transport and sustainable transport schemes through the Government's Transforming Cities Fund. We have been involved in the development of the proposals and are confident that the programme will drive economic benefits through improved connectivity, deliver environmental benefits, and open up new accessibility opportunities for our students, staff and the wider population.

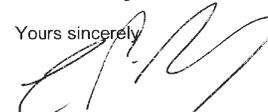
The University has two distinct interests in fully supporting the North East's TCF bid. First, we see the absolute benefits in proposed transformational change in public transport delivery for the region, which will enable better access and connectivity, foster widening participation in access to the University and education, and deliver a lower carbon transport system for the North East. Secondly, as a major research institution on future transport, we welcome the ambition to bring new technologies, digital connectivity and future innovation to the transport systems of the North East and we assure you we will play a major role in helping the region deliver on these ambitions.

An integrated and sustainable transport system is critically important to our organisation. We are the fourth largest employer in the region with the majority of our staff living in the locality. We are also concerned that all our current and future students have the best possible sustainable transport options to access the University. To put this into context, we have 18,000 students requiring access to sustainable travel options on a daily basis. For both staff and students, the proposed Metro flow scheme, improving frequency and reliability, is a key priority.

As a University, we are committed to long-term sustainability and have recently declared a climate emergency, so we particularly welcome the focus on sustainable transport, including the proposed investment in cycling and walking networks. We work with partners across the region and recognise the vital importance of connecting urban and rural areas, so we also welcome the Northumberland Line scheme, which will reintroduce passenger rail services from four stations in South East Northumberland and North Tyneside to central Newcastle.

Newcastle University looks forward to the North East Joint Transport Committee's bid being delivered and seeing the much-needed transport and economic benefits that it will bring to the North East region.

Yours sincerely



Professor Chris Day
Vice-Chancellor and President

Tel: +44 (0) 191 208 6064
Chris.Day@ncl.ac.uk



Mike Scott
TCF Project Lead
Transport North East Strategy Unit

22nd October 2019

Dear Mr Scott

Northumberland College would like to express full support for the North East's bid to deliver its programme of public transport and sustainable transport schemes, through the Government's Transforming Cities Fund.

Northumberland College is a further education college in Northumberland. We have campuses located in Ashington (South East Northumberland), Kirkley Hall, land-based provision at Ponteland and small campuses at Berwick, Blyth and Hexham.

Transport is important to this organisation because students from across the county and region rely on public transport to access their education.

Northumberland College fully supports the TCF programme compiled for the North East. In particular we support expansion of the Northumberland Line.

Northumberland College looks forward to the North East Joint Transport Committee's bid being delivered and seeing the much-needed transport and economic benefits that it will bring to the North East region.

Your sincerely

Nigel Harrett
Principal
Northumberland College



Vice-Chancellor's Office
Northumbria University
Sutherland Building
College Street
Newcastle upon Tyne
NE1 8ST, UK

T: +44 (0)191 227 4002
F: +44 (0)191 227 4417
W: northumbria.ac.uk

8 November 2019

Mr M Scott
Project Lead/Transport North East Strategy Unit

Dear Mr Scott,

On behalf of Northumbria University, I would like to express full support for the North East's bid to deliver a transformative and ambitious programme of public transport and sustainable transport schemes, through the Government's Transforming Cities Fund.

Northumbria University employs 3,000 staff and has 30,000 students, the majority of whom live in and travel around Newcastle and the North East. It is vitally important to us as an institution that our staff and students are able to travel to and from work efficiently and sustainably. Furthermore, our University Strategy 2018-23 states our commitment to optimising our contribution to the UN Sustainable Development Goals through our research, teaching, campus and operations. Our Environmental Sustainability Policy considers the impact our activities have on the wider environment and aims to minimise this impact. We encourage the use of sustainable travel options by staff in order to reduce the environmental impact of commuting.

Northumbria University fully supports the Transforming Cities Fund bid for the North East. Transforming the way people travel around the North East will unlock access to jobs, training and opportunity, which will have a positive impact for the whole economy. The five thematic packages together will make a step change in travel, and in particular sustainable and environmentally friendly travel, across the North East.

Northumbria University looks forward to the North East Joint Transport Committee's bid being delivered and seeing the much-needed transport and economic benefits that it will bring to the North East region.

Your sincerely

Professor Andrew Wathey CBE FRHistS FSA FRSA
Vice-Chancellor and Chief Executive


northumberland.ac.uk

Kirkley Hall Campus
Ponteland,
Northumberland
NE20 0AQ

Ashington Campus
College Road, Ashington
Northumberland
NE63 9RG

Berwick Campus
Adams Drive, Spittal
Berwick Upon Tweed
TD15 2JF

Education
Partnership
NorthEast

Northumbria University is the trading name of University of Northumbria at Newcastle



**University of
Sunderland**

UNIVERSITY EXECUTIVE

4th FLOOR
EDINBURGH BUILDING
CITY CAMPUS
CHESTER ROAD
SUNDERLAND SR1 3SD
UNITED KINGDOM

TEL: 0171 515 3493
FAX: 019 515 2456
www.sunderland.ac.uk

Mike Scott
TCF Project Lead, Transport North East Strategy Unit
mike.scott@northeastca.gov.uk

24 October 2019

Dear Mr Scott

PUBLIC TRANSPORT AND SUSTAINABLE TRANSPORT SCHEMES IN THE NORTH-EAST OF ENGLAND

On behalf of the University of Sunderland, I would like to express full support for the north-east of England's bid to deliver its programme of public transport and sustainable transport schemes, through the Government's Transforming Cities Fund (TCF).

Viable and sustainable transport is vital to the University of Sunderland. Not only will it enable more students to come here, it will also allow them to move around the region more effectively.

As a university, we are educating students in a wide range of subjects including those with considerable placement requirements in disciplines such as medicine, nursing, pharmacy, education, social work, and engineering and computer science. Ease of access to placements is very important if students are to fulfil their programme requirements and qualify to practise in areas that are vital to the future of the region in social, economic and wellbeing terms.

It is also important to note that nearly 90% of our students are commuters i.e. they do not live in student accommodation. Many of these students are also from widening participation backgrounds, with many the first-in-family to attend university. Thus, good public and sustainable transport is absolutely vital if we are to continue with our mission to offer a university place to all those who have the talent to benefit from it. If transport becomes a 'blocker', then that is fundamentally unjust and unfair.

The University of Sunderland fully supports the TCF programme compiled for the north-east of England. In particular, we support enhancements to the Metro system, and its reliability, given that so many of our students and staff come to the University this way (we have stations – University and St Peter's – that are directly adjacent to our two campuses in Sunderland). We also support bus improvements, both locally and regionally, as that too would improve access to the University.



**University of
Sunderland**

The University of Sunderland looks forward to the North East Joint Transport Committee's bid being delivered and seeing the much-needed transport and economic benefits that it will bring to this part of England.

*Yours sincerely
David Bell*

SIR DAVID BELL KCB
Vice-Chancellor and Chief Executive
vice.chancellor@sunderland.ac.uk

APPENDIX

IPPR Strategic Economic Narrative



TRANSFORMING CITIES FUND: A COMPELLING ECONOMIC NARRATIVE

1. Introduction

Overview

Our objective with this document is to add value to the region's TCF proposal by developing a compelling economic narrative to frame the North East's TCF bid, which:

1. "Elevates" the economic/transport analysis so that it resonates with a range of stakeholders – primarily DfT;
2. Support the region to put forward High, Medium and Low cost packages to achieve the maximum settlement for the area by linking to DfT's objectives – primarily productivity, but also sustainability and access to work, apprenticeships and skills labour market outcomes
3. Also touches upon arguments for health, air quality and quality of life
4. Fits with local and regional strategies – especially the Local Industrial Strategy (LIS), which is also government facing
5. Secures commitment from local and regional stakeholders – especially Heads of Transport and the North East Economic Directors' Group – and reconciles the district perspectives with the region-wide vision for a transformative transport programme.
6. Provides an overall framework for the Strategic Outline Business case (SOBC) being developed to support the North East's TCF bid.

To undertake this task we have conducted in-depth research into the region's economy. We have interviewed senior stakeholders; reviewed the economic strategies of the region; and conducted new economic analysis. This document first summarises the existing local strategies, before setting out a narrative for the region to draw on in their TCF bid.

Approach

To prepare this narrative, we interviewed expert stakeholders in the North East of England whose detailed knowledge of the region has helped us to address key questions and develop a rich picture of the potential impact of the programme. While we have drawn extensively on learning from all these interviews, the views and arguments presented in this text should not be attributed to any individual interviewee.

Our interviewees included:

- Richard Baker, Head of Strategy and Policy, North East Local Enterprise Partnership (NELEP)
- Andrew Hodgson, Chair, North East Local Enterprise Partnership (NELEP)
- Greg McClymont, Transport and Cities Lead, National Infrastructure Commission
- Eugene Milne, Director of Public Health, Newcastle City Council
- Tom Smyth, Deputy Area Director, BEIS Yorkshire, Humber and the North East
- Jonathan Walker, Assistant Director – Policy, North East England Chamber of Commerce

We draw reference to key regional documents (such as the Strategic Economic Plan for the North East) and texts reporting on published and progressing work within the region (for example, documents produced by NELEP as part of the ongoing development of the North East Local Industrial Strategy and review of productivity). IPPR North's catalogue of reports on

economic and social issues in the North of England and the relevant policy and scholarly literature also provided useful background information.

2. Economic context and existing local strategies

The North East of England has significant assets and potential to build on its recent economic progress. Time and again it has proven its resilience, and the capacity to seize opportunities for progress. Diverse initiatives have driven this success, chief among them the region's Strategic Economic Plan (SEP). This has already catalysed a major positive change in the North East economy and alongside the Local Industrial Strategy it will be at the heart of future development. The schemes outlined in this bid are fully congruent with the 2019 SEP and will contribute to its success by connecting the North East's city centres and suburbs as well as the significant assets, Enterprise Zones, universities and ports. This is discussed in more detail below.

The North East has demonstrated its potential for economic prosperity through embracing change, welcoming new industries and adapting established ones, learning new skills and continuing a rich tradition of innovation. Future transport investment can help to consolidate and expand the progress made in the region. Yet despite the opportunities and the new employment created, recent analysis by Nexus suggests that public transport use is declining (Nexus, 2017), and DfT estimates suggest that transport connectivity is slightly below the England average.

The North East is missing an important opportunity to make travel more sustainable, with benefits for carbon reduction, air quality, health and the potential offer to skilled workers who can help the region to build on its economic successes. Over-reliance on car travel damages the local and global environment and creates congestion, making public transport unattractive to potential users and damaging productivity through delays and unreliability.

People are more likely to start using public transport and to become 'loyal users' when it is punctual, with frequent services, convenient transfers, and accessible, reliable and up-to-date on-board service information (Van Lieron, Badami & El-Geneidy, 2018). These schemes offer new connections between key sites: an increase in metro and bus services; and improved punctuality. All of these factors can help to reduce reliance on private cars.

Investment from the Transforming Cities Fund will complement and integrate with several other ambitious programmes for economic development.

Across the North East, GVA has grown steadily over the past decade but different parts of the region have seen very different trajectories during this period. Newcastle, North Tyneside and Sunderland have all seen healthy growth, as have Northumberland and County Durham. By contrast Gateshead and South Tyneside have seen more modest economic outcomes over the same period. The proposed programme includes schemes that both improve internal links for these parts of the region, and facilitate swift, affordable and sustainable transit to the cities.

In the coming year, the North East economy will face additional challenges associated with the UK's planned withdrawal from the EU. Economic analysis suggests that the impacts of Brexit will be particularly hard-felt in this region in the short-term at least. At the time of writing, no official figures have been released forecasting the potential impact of the October 2019 proposal for a Withdrawal Agreement ('Brexit Deal'). However, a House of Commons Library Briefing released in December 2018 indicates that regional GVA in the North East would be hit harder by any post-EU trade scenario than regional GVA in most other English regions or

devolved nations. The impact of leaving without a deal ('WTO rules') would be particularly severe, potentially leaving the North East's economic output more than ten per cent lower over fifteen years than would be the case if the UK remained in the EU. A Free Trade Agreement (FTA) with the EU would also be especially problematic for this region, with GVA after fifteen years potentially standing at around 6.5 per cent lower than would have been the case under EU membership. Membership of the EEA or a Deal similar to the 2018 Chequers one would have a smaller, but still marked, impact.

Trade impact on economic output (GVA) of regions/countries of the UK					
% difference in GVA level in 15 years compared with staying in the EU					
	No deal	FTA	EEA	Chequers	Chequers minus
North East	-10.5	-6.5	-1.5	-0.4	-2.1
North West	-9.4	-5.8	-1.4	-0.5	-2.2
Yorkshire and the Humber	-8.5	-5.4	-1.3	-0.3	-2.1
East Midlands	-8.5	-5.1	-1.4	-0.4	-1.9
West Midlands	-9.6	-5.7	-1.5	-0.4	-2.0
East of England	-8.4	-5.3	-1.3	-0.4	-2.0
London	-6.0	-4.0	-0.9	-1.0	-2.5
South East	-7.8	-5.0	-1.2	-0.7	-2.1
South West	-7.6	-4.7	-1.4	-0.4	-1.9
Wales	-8.1	-4.9	-1.2	-0.1	-1.8
Scotland	-8.0	-4.8	-1.0	0.0	-2.0
Northern Ireland	-9.1	-5.6	-1.6	-0.2	-1.9

Notes: A description of all scenarios is provided earlier in this briefing paper.
GVA is Gross Value Added, which is very closely related to GDP
This does not include other factors such as migration or regulatory effects modelled elsewhere in the Government's analysis
Source: HM Government, *EU Exit: Long-term economic analysis Technical Reference Paper*, Nov 2018, table 7.A

(Harari, 2018)

Earlier government figures estimated an even greater impact on regional GVA in the North East, which was forecast to fall below its likely level were the UK to stay in the EU by:

- 3 per cent if the UK remains in the Single Market
- 11 per cent if the UK agrees a free trade agreement with the EU
- 16 per cent under a No Deal scenario

(NELEP Brexit Group, 2018)

Independent analysis also suggests that the North East economy is particularly exposed to the potential negative impacts of Brexit. Work by the City REDI unit at Birmingham University suggests that exposure of regional GDP in Northumberland, Tyne and Wear is high across sectors:

- 22 per cent of GVA for primary industries
- 35.5 per cent of GVA for manufacturing
- 3.1 per cent of GVA for construction
- 8.4 per cent for services

- 12.2 per cent across the economy

(Chen et al, 2018)

The North East economy's major presence in exporting to the EU is well-known and longstanding. The proportion of goods exports (by value) accounted for by exports to the EU is the highest for any English region (at 61 per cent).

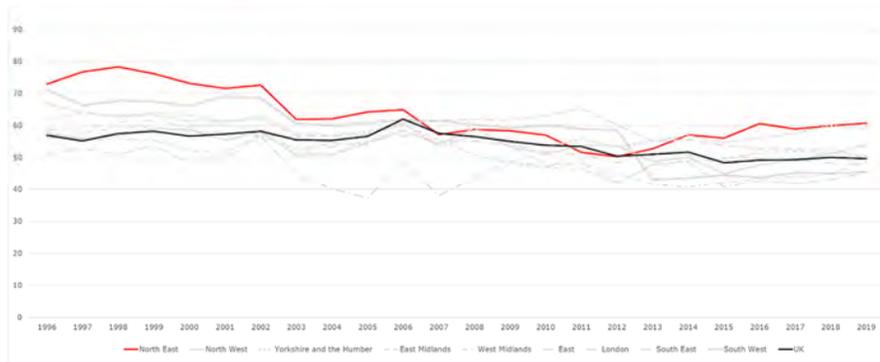


Figure 1: Proportion of goods export value accounted for by exports to EU countries, English regions and UK average (HM Revenue and Customs, 2019)

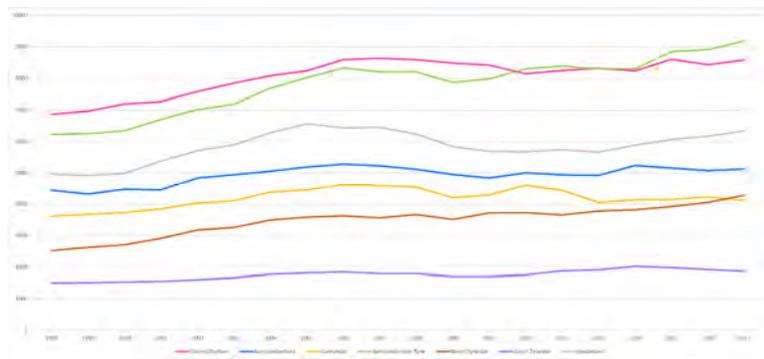


Figure 2: Regional gross value added (balanced), North East local authorities: chained volume measures in 2016 pounds, 1998 to 2017. (ONS 2019a)

The North East lags the English average for productivity; output per hour worked was £30 in 2017, compared to £34.20 across the country as a whole. As a result, the North East economy lacks some of the 'headroom' that supports increased wages and living standards. However, productivity *growth* in the North East is comparatively healthy, standing at 4 per cent over the post-recession period (2010-2017). The national rate for this period is 2 per cent (ONS, 2019b). North East productivity now outperforms the East and West Midlands, Yorkshire and the Humber, Wales and Northern Ireland.

This productivity growth has taken place at different rates across the North East. Productivity in Sunderland has grown at a rate above the regional average, bringing output for hour in this sub-region to just over £1 below the English average. Growth in Northumberland has also been strong, albeit from a lower starting point. The growth rate in Tyneside and County Durham has been less marked, although both still outperform the English growth rate (Figure 3).

A lack of investment in infrastructure, including transport, has been cited as one of the factors that underlies relatively poor economic performance in the North East over several decades. Analysis suggests that per capita transport investment in the North East has lagged both the UK average and that allocated to 'leading' economic regions such as London. Planned per capita expenditure is *seven times* lower in the North East (at £519) than in London (where the figure is £3,636) (Raikes, 2019).

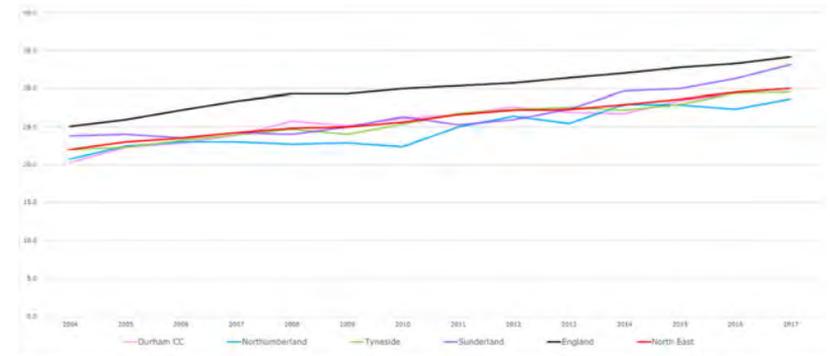


Figure 3: Nominal (unsmoothed) GVA per hour worked (£), North East NUTS 3 subregions, 2004 – 2017. (ONS 2019a)

The North East Strategic Economic Plan

The first Strategic Economic Plan for the North East was produced in 2014 (NELEP, 2014). Two major revisions, published in 2017 and early 2019 (NELEP, 2019a), have refreshed the Plan and provide the region with a framework for economic growth that is responsive and relevant to a rapidly-changing national and global context.

The overall aim of the SEP is to boost the North East economy by creating 100,000 more jobs by 2024 than there were in 2014, 70 per cent of which will be 'better jobs' (i.e. jobs in professional, managerial and technical roles); this is well on the way to being met. 'Supplementary aims focus on the need to reduce gaps between North East economic performance with that of the rest of England excluding London. This will involve halving the

gap in private sector density, closing the gap in employment rate among working-age people, halving the gap in economic activity for the same age group, and - vitally - halving the gap in regional productivity. Thus the SEP aims and those of Transforming Cities Fund investment are closely aligned. The SEP also includes a commitment to ongoing robust evaluation and learning from findings as they emerge.

Four areas of strategic importance are identified as crucial to the region's potential: digital, advanced manufacturing, health and life sciences (in particular in response to an ageing population) and energy. These are supported by four service sectors, including transport; the others are education, financial, professional and business services, and construction. Delivery programmes for the SEP include investment and infrastructure and transport connectivity, alongside business growth, innovation, skills, employment, inclusion and progression. The schemes outlined in the bid offer strong opportunities for all of these sectors and activities.

Transport connectivity is identified as one of five programmes for delivery that will support the SEP to achieve its aims. The SEP states an ambition for 'improved, greener and more sustainable transport options, including public transport, cycling and walking'. The vision is for simple and affordable travel with high-quality infrastructure that links fast and reliable local journeys with good connections to national and international networks. The SEP to date has established a strong investment pipeline and aims to continue to deliver improvements and innovations.

At present, the single largest source of energy consumption in the North East is road transport. However, public transport use is relatively high, and the region can build on a strong base. In 2016/17, 180 million journeys were made in the North East by metro and bus, and the Tyne and Wear Metro is the largest light rail system in the UK outside London (NELEP, 2019a). More frequent and more punctual train and bus services, and the development of the key 'Northumberland Line', will encourage people to use these sustainable options to reach employment and leisure opportunities.

The SEP identifies access to regional, national and international travel as a further priority. This bid facilitates sustainable travel to key hubs, both within existing networks and planned initiatives such as Northern Powerhouse Rail and HS2: these latter both represent important opportunities *but* the North East needs investment to link the region effectively to these. For example:

- **Access to the East Coast Mainline and East/West rail connections in Newcastle** is facilitated by many schemes. The 'Cities and Airport' corridor, which supports access within and into Newcastle City Centre, is vital: for example, NE01 (Transforming Newcastle City Centre) and NE02 (Newcastle Central Station - Station Gateway). Schemes that improve access to the Metro, again within this corridor, also effectively support use of mainline rail, e.g. Park and Ride enhancements NX02 (Park and Ride Enhancements, Nexus), NX04 (Strategic Park and Ride Sites - Follingsby Park and Ride Links to Callerton Parkway), and NE08 (Newcastle Streets For People). NT10 (Healthy bus and Metro) and ST04 (Healthier Metro Stations) will be especially important. Similarly the North and South corridor, which links parts of Northumberland and North Tyneside to Newcastle, improves access to services from Newcastle Central Station.
- **Access to the East Coast Mainline in Durham** is facilitated by many of the schemes: improved pedestrian transfer through the rail station access improvements, e.g. DU04 (Durham rail station access improvements) means that people arriving in the city by

bus or car can more easily reach this service. The wider elements of the River Wear corridor that improve access to Durham City Centre also contribute.

- **Access to the East Coast Mainline, East/West rail connections and local east coast rail services including links to Teesside** are facilitated by several of the Sunderland schemes within this part of the River Wear corridor. Redevelopment of the Central Station (SU03 (Sunderland Central Station redevelopment) (Sunderland Central Station Improvements) will make these services substantially more attractive for a range of commuters, including those using Grand Central trains and connecting to the ECML at Newcastle. In addition park and ride plans such as SU07 (Holmeside / Sunderland station car park) will open up access.

Figures from Sustrans suggest that people in the North East feel positively about cycling as a mode of transport and are ready to build on the 9 million journeys made by bike in Newcastle in 2016/17 (which took the equivalent of nearly 7,000 cars off the city's roads). For example:

- 52 per cent of people in the city would like to start cycling or could cycle more than they do now
- 65 per cent of people think Newcastle would be a better place to live and work if more people cycled.
- 56 per cent of people would find protected roadside cycle lanes useful to help them cycle more
- 74 per cent of residents support building more protected roadside cycle lanes. (Sustrans, 2017)
- 25 per cent of men and 12 per cent of women cycle once a week (the UK average is 4 per cent) (Cycling UK, 2019)

The reduction in road congestion associated with greater public transport use and improvements to bus services can also help make freight transportation within the North East more productive and efficient: this is important for key sectors including advanced manufacturing and pharmaceuticals and for its three ports. Across the North East, 51m tonnes of freight are lifted by vehicles, 5.3m tonnes are handled by North East ports and 5,482 handled by Newcastle Airport (SEP). 15,000 people are employed in transport and logistics in the region, in 1,100 organisations (SEP).

Local Industrial Strategy

The Local Industrial Strategy, currently in development, will form a bridge between the 2019 SEP and the national Industrial Strategy. It will work seamlessly with the SEP, focussing on productivity and economic growth within the region. In the challenging context of the UK's withdrawal from the European Union, it will focus making the most of the region's strengths and potential, as well as boosting confidence to innovate and grow.

A key task for the Local Industrial Strategy is to support the North East economy to 'look outwards' towards other regions in the North of England, the rest of the UK, and internationally. Historically this has been a vital source of prosperity for the North East. Now, the region needs strong and dynamic links that make the most of the opportunities of the Industrial Strategy nationally and forge its post-Brexit global role. This programme of work will

link the region's internal assets to the national and international economy, connecting people and places to new opportunities.

Some of this key connectivity will be through links to major national rail networks, as discussed in the previous paragraph. In addition:

- *The Northumberland Line (NO01 (Northumberland Line))* links the dynamic employment and innovation opportunities of Blyth with Newcastle City Centre and the ECML, and also with key housing sites (e.g. around Northumberland Park) and areas that can benefit from new employment.
- *Improved metro frequency (NX03 (Twin tracking of Metro line between Pelaw and Bede/Metro capacity enhancement))* on the Pelaw-Tyne Dock section and across the system supports vital links between city centre businesses and key export sites.
- *Links to advanced manufacturing sites* (discussed below) support the development of an outward-looking economy.

Within the North East, the LEP has worked to ensure that the Local Industrial Strategy is grounded in a robust evidence base. This includes a review of the region's productivity position and potential, and of its assets for economic growth. The programme of work set out in this bid offers a vital opportunity to make the most of these identified opportunities. The combination of this ambitious programme of work with an effective SEP and LIS offer a test-bed to demonstrate the economic and social value of sustainable and low-carbon transport infrastructure within a region. In addition, evaluations and learning can build on an excellent baseline of data.

Regional opportunities

As a partner of Transport for the North, NELEP can influence the wider Northern agenda to link regional plans with wider Northern connectivity. The North East's airport and seaports welcome millions of passengers and manage millions of tonnes of freight, supporting our exports, tourism and education economy. They need to grow, and to do so sustainably. The North East can also capitalise on its natural assets. Skilled workers can be attracted to the region for the quality of life that it offers, but they will not come without great transport that links that quality of life to jobs – and careers. Similarly the culture and tourism offer of the region is rich, but must be easily accessible for residents and visitors.

The schemes in this bid complement ongoing developments in the North East; these furnish it with a base of skills, awareness and experience for delivery, and public awareness. For example:

- The Local Growth Fund transport programme: this funding supports projects that help to achieve the SEP objectives of improved productivity, growth, and employment. These included transformative transport schemes, including key corridors on the A1058, the A1056, the A189 and the A19 (linking key strategic employment sites), traffic flow improvements, and sustainable transport initiatives such as cycle schemes in 6 of 7 Local Authorities. 13 transport projects were funded (NELEP, 2019b). These provide a strong presence for sustainable transport within the area and a base to build on as these programmes provide new opportunities to use roads sustainably and to increase cycling and walking.

- The Local Sustainable Transport Fund capital programme: this is a smaller-scale investment programme that includes real-time traffic information; cycling schemes and routes; and a proposed scooter hire scheme for jobseekers (NELEP, 2019c).

3. The compelling economic narrative

Introduction and overview

This programme of work is an opportunity, for both government and for the North East, to drive up the region's productivity by improving its transport connectivity. These schemes will enhance the region's sustainable transport networks and will link people to employment sites, enterprise zones, development sites and the opportunities of the region's diverse cities and town centres. They will also help to connect a range of employment and leisure options within easy range of great places to live. Together, they will reinforce the North East's unique offer to the country – to boost productivity, create more jobs and offer a good quality of life to its people.

The North East is a region like no other. Its geography is highly complex and polycentric: its economic assets are significant but dispersed across the region, rather than concentrated in its centre. The region's diversity is clearly its strength – these different places and assets are part of its unique offer to investors, businesses and workers.

This diverse offer means that an integrated and co-ordinated transport system is all the more important. Three cities, several large urban areas, and extensive rural hinterlands pose a unique challenge as people travel for work and for leisure. This non-radial geography means that transport has a distinctive role to play in sustaining and growing the regional economy and sharing its benefits between people and places in the North East.

This programme of work sets out the specific transport requirements the North East needs to support its unique economy. As such they are set out in corridors, which connect the three city centres but will also help regenerate towns, capitalise on natural assets, enhance the tourism offer of the region, and support its vital freight infrastructure, ports and industries. In addition they provide effective connectivity to opportunities for skills development and new sites for housing and commercial development (e.g. the Enterprise Zones in development, discussed below).

This programme of work enjoys broad support from leaders and stakeholders in the region. This is a joint bid from the North East Combined Authority and the North of Tyne Combined Authority, which has the support of the North East Local Enterprise Partnership and all local authority leaders in the region.

These schemes deliver the Department for Transport's six objectives, as set out in the guidance for the Transforming Cities Fund.

1. Drive up productivity through improved access to city centres and suburbs

City centres

The polycentric nature of the North East is most clearly demonstrated by the presence of *three* very different cities. Newcastle, Sunderland and Durham all offer a diverse range of employment, retail and leisure opportunities, and are also increasingly attractive as places to live. A strong sustainable transport system will help to improve air quality and reduce congestion for the region's cities, encouraging people to use public transport or to walk and cycle, and bringing health benefits as well as increased revenue (see below). The cities have complementary strengths and a wide range of different employment opportunities. If a job in Sunderland or Durham becomes accessible from the residential areas in North Tyneside and

Northumberland, skilled workers are more likely to choose the North East as a location where it is possible to build a professional career. In addition, movement between these centres will support the intersections between regional strengths that are identified as a particular strength of the North East economy.

Virtually all of the proposed schemes will vastly improve sustainable transport access to the region's cities, and they will also provide a better integrated 'offer' of low-carbon travel. For example:

- The proposed Newcastle City Centre schemes, and the 'Cities and Airport' corridor more generally, have the potential to transform the experience of accessing and using the city. Scheme NE01 (Transforming Newcastle city centre) offers safer walking options through traffic restrictions, faster and more reliable bus access, and key routes that allow cyclists to cross from north to south and east to west safely. The proposal for a cycleway linking the suburbs of Jesmond to Gateshead opens up sustainable travel into Newcastle for a wide range of residents.
- Links between Newcastle and its suburbs and hinterlands also support better access to the city centre offer. This is the case for the bus schemes that will reduce delays due to congestion in the outer west (NE04 (Newcastle Outer West)), and cycling options that link suburbs to the north and east to the city, e.g. those in the Banks of the Tyne and North and South corridors (NE03 (Newcastle-North Tyneside strategic cycling infrastructure) and NE08 (Newcastle Streets for People)).
- Schemes in Durham (part of the River Wear corridor) are focused on city centre access enhancements (DU02 (Park and ride expansion, Durham city), DU03 (Bus priority measures, Durham) and DU07 (Durham bus station)) all offer more reliable, accessible and attractive bus access to the city centre. They also offer factors that are likely to build loyalty to public transport (e.g. better facilities and environment at Durham bus station). Improved bus services will be important for lower-income residents in some parts of County Durham. Cycling and walking links (DU01 (Walking and cycling improvements, Durham)) offer a low-carbon and low-cost network around the city 'gateways'.
- Better bus journey times into Sunderland City Centre (again, part of the River Wear corridor) are offered by the priority schemes (SU05 (Inner ring road improvements - bus priority), SU09 (Chester Road bus corridor), SU10 (A690 route action plan)) and park and ride plans (SU07 (Holmeside / Sunderland station car park)). These will reduce congestion and also improve low-cost transport to employment opportunities for some low-income areas. Better cycling infrastructure will also contribute to both access and air quality (SU15 (Strategic cycle network A690 corridor)).

Town Centres

As well as major cities, the North East also benefits from towns and smaller concentrations of population. These offer an attractive residential alternative to city centres, which will be enhanced by swift and convenient public transport and a pleasant environment with good air quality.

Projects that are currently under way to redevelop towns in the region can benefit from the schemes in this programme, as they connect residents to a wider range of employment

opportunities and provide a sustainable option for people visiting town centres. Examples include:

- Ashington town centre redevelopment (NO01 (Northumberland Line))
- South Shields 365 (ST08a&b (Bus corridor improvements, South Tyneside))
- Durham Riverside Renewal (River Wear corridor, including DU01 (Walking and cycling improvements, Durham), DU02 (Park and ride expansion, Durham city) and DU03 (Bus priority measures, Durham), as well as improvements to the bus station (DU07 (Durham bus station)).
- North Shields renewal (Banks of the Tyne schemes including NT02 (Improvements to North Shields transport hub)).
- Gateshead town centre development (Banks of the Tyne and North and South corridors).

An increase in rates of cycling and walking will also bring economic benefits to town centres. Research shows that cycling can boost local economies (Rajé & Saffrey, 2015), e.g.:

- Per square metre, cycle parking delivers retail spend that is five times higher than the same area of car parking.
- Some urban improvements to the public realm, including cycling provision, are associated with increased trade for local businesses; one scheme in New York City saw an increase of 49 per cent.
- A compact town centre optimised for walking and cycling can have a spend per square metre ('retail density') 2.5 times higher than a typical urban centre.

This programme of work will have an impact through higher rates of cycling and walking for some of the region's town and city centres, in particular Newcastle City Centre (NE01 (Transforming Newcastle city centre) and NE03 (Newcastle-North Tyneside strategic cycling infrastructure) and IN01), Durham City Centre (DU01 (Walking and cycling improvements, Durham)), Ashington and Blyth (NO01 (Northumberland Line)), Gateshead and Blaydon (GA01 (West Tyneside cycle route: upgrading existing routes)), Birtley and Harlow Green (GO09 (Great North Cycleway - A167 Birtley to Eighton Lodge)), North Shields (NT02 (Improvements to North Shields transport hub)) and Ponteland (NE07/NO02 (Callerton - Airport -Ponteland cycle route)), as well as the clusters of local businesses on high streets and developments in Ouseburn, Byker and Fawdon (NE08 (Newcastle Streets for People)).

2. Improving access to work and delivering growth

The North East has many distinctive economic assets that work with its innovative universities and thriving industries to generate jobs and growth. The LEP's annual *Our Economy* report sets out in detail the region's competitive strengths: the vast majority of economic indicators show improvement, including employment and productivity – closing the gap with England (excluding London) (NELEP 2019d). The region is well placed to help address all of the Grand Challenges identified in the government's Industrial Strategy (NELEP 2019d). In particular, the region is distinctive in the intersections between sectors and assets, and also in its history of close and effective public/private collaboration.

But the evidence also shows that, in order to improve access to work and deliver growth, the region needs a more coherent and co-ordinated approach to its transport network, as well as forging new external links, and seizing opportunities to exploit existing investments in innovation and technology (Ibid).

This programme of work will support these vital intersections between people, sectors and assets by enhancing the region's transport connectivity: these interventions will enhance connectivity between city and town centres, and improve access to employment sites, innovation sites, enterprise zones, ports and business parks. They will also capitalise on the region's vital connectivity with the national transport network, including the East Coast Main Line, and forthcoming HS2 and Northern Powerhouse Rail infrastructure (see above). Figure 4 shows the geography of the area and its key assets. These are discussed in further detail below, before setting out how the programme of work will support the region to improve access to work and deliver growth.



Figure 4: The North East LEP area and its key assets

International gateways

These schemes will improve sustainable access to the North East's three Ports and Newcastle's busy International airport. For example:

- Improved Metro services (NX03 (Twin tracking of Metro line between Pelaw and Bede/Metro capacity enhancement)) and access to the metro from further afield (e.g. NX04 (Strategic park and ride sites - Follingsby park and ride links to Callerton Parkway) and NT10 (Healthy bus and Metro)) will facilitate access directly to the Ports of Tyne and Sunderland.
- Alongside the Northumberland Line (NO01 (Northumberland Line)), these also offer access to the Port of Blyth from across the region. The programme as a whole potentially opens up access to the Port of Blyth from the far south of the region, via faster bus transit to Sunderland, Metro travel to Newcastle or Northumberland Park, and the Northumberland line to Newsham for Blyth.
- The improvements to North Shields transport Hub and the A188/189 corridor bus routes (primarily parts of the Banks of the Tyne corridor, e.g. NT02 (Improvements to North Shields transport hub) and NT08 (Bus priority improvements along A188/A189)) support bus access to the Port of Tyne.
- River Wear corridor schemes, including improvements to Sunderland Central Station (SU03 (Sunderland Central Station redevelopment)) and reduction of congestion around the city centre (e.g. SU05 (Inner ring road improvements - bus priority), SU07 (Holmeside / Sunderland station car park)) will make it easier to reach the Port of Sunderland by Metro, regional train and bus.

The North East's ports are vital for the region's economy. They are the gateways for its major exporting businesses – and support the national balance of trade in goods. Thus they are vital to the 'outward looking' theme of the Local Industrial Strategy. They are also key employment sites in their own right. For example:

- Port of Tyne employs 470 people directly, and 4 per cent of the workforce are apprentices. There are 13,000 jobs in the immediate vicinity of the port (Port of Tyne 2017).
- Port of Blyth employs 500 jobs on site and plans to double this number to over 1,000 in the next 5-10 years. It has a growing role in supporting offshore energy and is expanding, with facilities for Royal IHC and plans to redevelop Bates Terminal
- Port of Sunderland has seen cargo volumes double since 2010, it is situated in an enterprise zone, and home to the International Advanced Manufacturing Park, a key centre of automotive sector.
- Newcastle Airport is the region's International airport – 5.4 million people travelled to 80 different routes. 142,000 people flew from Teesside International Airport (which is part-owned by Durham County Council) in 2018; this airport is also home to several defence corporations, a flying school and an international Fire Training Centre.

Employment sites, enterprise zones and business parks

Many important sites are distributed across the North East's economy, as figure 4 above shows. These account for a significant share of the region's economic growth and employment and pose a unique challenge for its transport network. An effective sustainable system must link workers to employment sites that support developments identified as crucial for long-term prosperity, including innovation, business start-up and development, and key sectors identified in the SEP (digital, advanced manufacturing, health and life sciences, and energy).

A key issue for the North East is the need to attract skilled workers with the option of building a career, rather than just getting a job, in the region. A well-integrated and reliable transport network, that links pleasant places to live (e.g. along the Tyne Valley, in rural Northumberland or County Durham, or in the suburbs of Newcastle) with a wide range of good quality job opportunities. This programme supports such an ambition; for example, the Tyne Valley line runs into Newcastle Central Station where improvements to cycling links provide a sustainable way to traverse the city and better Metro and bus links plus the Northumberland Line open up the whole of the region.

Another consideration in a region with relatively low levels of wealth and income is the need for reliable low-cost transport. Lower-income workers and jobseekers rely more heavily on public transport than do better-off communities, and poor connectivity with unreliable or infrequent services can be a barrier to getting or remaining in work (Crisp, Gore & McCarthy, 2017). Buses are heavily used by lower-income workers and jobseekers. People in the lowest income groups take *twice* as many bus journeys as those in the highest income groups (DfT 2018). Research has found that 1 in 10 bus commuters would be forced to look for another job if they were no longer able to commute by bus, and more than two fifths do not have a car available (Mackie, Laird & Johnson, 2012). Jobseekers are more than twice as likely to use buses as the rest of the population (PTEG, 2015), and a survey found that 58 per cent of unemployed people had relied on the bus when they were last in work (Johnson, Mackie & Shires 2014).

Cycling is also an important form of transport for people from lower income groups, including students and people in lower supervisory and technical occupations. Students (who form a large part of the North East population, including that of the three cities) are more likely than the general population to cycle two or three times a week, as are people in lower supervisory and technical occupations. People in managerial, administrative and professional roles also have markedly higher than average rates of cycling; the rate is also slightly above the average for people in semi-routine and routine jobs. Therefore improved cycling opportunities will *both* appeal to people in the 'better jobs' envisioned by the SEP, and open up better opportunities for lower-paid workers and students who need affordable travel.

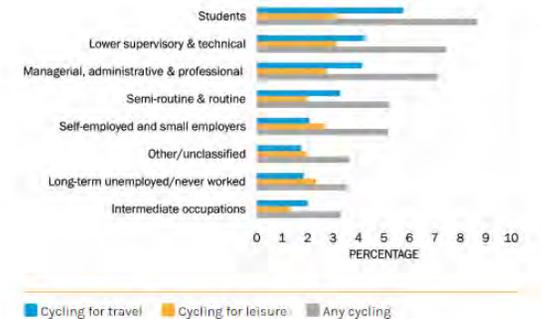


Figure 5: Use of cycling by different demographic groups (Cycling UK 2019)

Because the programme sets out a strategic and integrated approach to sustainable transport in the North East, it is difficult to link particular opportunities to individual schemes. For

example, as discussed above the *Northumberland Line (NO01 (Northumberland Line))* is the key to full north-south connectivity within the programme, supplemented by the rest of the North and South corridor.

Table 1 sets out how each Scheme provides access to particular employment sites that currently or potentially contribute to regional productivity. However, it is important to remember that the full programme potentially links much of the region to *any* of these sites via sustainable travel.

Table 2 presents the relationships between the North East's current and developing Enterprise Zones. These will play a vital part in building up the sectors identified in the SEP as fundamental to the region's future productivity. Many are promoted partly because of their excellent connectivity, much of which is currently by road – and by private car. If these are linked to the rest of the region by sustainable transport, the impacts on regional air quality, health and wellbeing are potentially huge. If not, a major opportunity will have been missed.

Please note that these tables do *not* include a discussion of the relationship between these schemes and the new IAMP development. It is recognised that sustainable transport connections are crucial to the success of IAMP, and this issue is explored in detail elsewhere, in analysis of housing and employment issues.

Site	Scheme [s]	Theme[s]				Sector[s]				Notes
		Ideas	Jobs mix	Business Env't	External & export	Digital	Adv. man.	Health sci.	Energy	
Newcastle Helix	Schemes in and accessing Newcastle City Centre	<input type="radio"/>			<input type="radio"/>			<input type="radio"/>		Health sciences innovation focus
Royal Victoria Infirmary, Newcastle	Schemes in and accessing Newcastle City Centre	<input type="radio"/>	<input type="radio"/>					<input type="radio"/>		
Freeman Hospital, Newcastle	NX02 (Park and ride enhancements, Nexus) and NX03 (Twin tracking of Metro line between Pelaw and Bede/Metro capacity enhancement) NE03 (Newcastle-North Tyneside strategic cycling infrastructure)	<input type="radio"/>	<input type="radio"/>					<input type="radio"/>		
South Nelson Industrial Estate	NO01 (Northumberland Line)	<input type="radio"/>					<input type="radio"/>			7000 jobs in the area around this site and Atley Business Park; companies include Transmission Dynamics & MillerUK engineering

Site	Scheme [s]	Theme[s]				Sector[s]				Notes
		Ideas	Jobs mix	Business Env't	External & export	Digital	Adv. man.	Health sci.	Energy	
Team Valley Trading Estate	GA01 (West Tyneside cycle route: upgrading existing routes) GO09 (Great North Cycleway - A167 Birtley to Eighton Lodge)		○	○		○				Over 25,000 employees in 700+ businesses; UK's first industrial estate and one of the oldest in Europe. Site for major private sector investment; retail and leisure offer as well as business
Gateshead Startup spaces (International Business Centre, Proto, Baltimore House, Northern Design Centre, Greenesfield Business Centre)	GA05 (Metrogreen) GA07 (Askew Road) GA08 (Hills Street and Gateshead Quays sustainable access) NX02 (Park and ride enhancements, Nexus)	○		○	○	○	○	○		Startup and scaleup spaces, research and development opportunities, creating a high value cluster of cutting-edge businesses focussed on digital and tech. Includes unique national centres e.g. for XR and VR (Proto)
Blaydon Business Centre	GA01 (West Tyneside cycle route: upgrading existing routes) GA05 (Metrogreen)	○	○							Flexible small business spaces
		Ideas				Jobs mix				Business Env't

Site	Scheme [s]	Ideas	Jobs mix	Business Env't	External & export	Digital	Adv. man.	Health sci.	Energy	Ideas
Washington Business Centre	GA11 (2, bus lane, Gateshead)		○	○		○	○			Set up for smaller and growing companies, with flexible provision
Viking Industrial Park	ST04 (Healthier Metro Stations) NX02 (Park & ride enhancements, Nexus), NX03 (Twin tracking of Metro line between Pelaw and Bede/Metro capacity enhancement) (Twin tracking of Metro line between Pelaw and Bede/Metro capacity enhancement)		○	○			○			Diverse industrial and trading estate; home to TEDCO business support which has helped 3600 SMEs access finance, creating 1350 additional jobs
Banks of Tyne	NE03 (Newcastle-North Tyneside strategic cycling infrastructure) NX02 (Park & ride enhancements, Nexus), NX03 (Twin tracking of Metro line between Pelaw & Bede/Metro capacity enhancement) (Twin tracking of Metro line between Pelaw & Bede/Metro capacity enhancement)	○	○	○	○		○		○	Extensive investment on North and South banks, e.g. a hub for offshore renewables on the old Swan Hunter site and the Maersk training centre in North Shields. High levels of local employment

Site	Scheme [s]	Theme[s]				Sector[s]				Notes
		Ideas	Jobs mix	Business Env't	External & export	Digital	Adv. man.	Health sci.	Energy	
Banks of Tyne	NE03 (Newcastle-North Tyneside strategic cycling infrastructure) NX02 (Park and ride enhancements, Nexus) and NX03 (Twin tracking of Metro line between Pelaw and Bede/Metro capacity enhancement) (Twin tracking of Metro line between Pelaw and Bede/Metro capacity enhancement)	○	○	○	○		○		○	Extensive investment on North and South banks, e.g. a hub for offshore renewables on the old Swan Hunter site and the Maersk training centre in North Shields. High levels of local employment
Quorum Business Park	NT08 (Bus priority improvements along A188/A189) NT10 (Healthy bus and Metro) NX02 (Park and ride enhancements, Nexus) and NX03 (Twin tracking of Metro line between Pelaw and Bede/Metro capacity enhancement) (Twin tracking of Metro line between Pelaw and Bede/Metro capacity enhancement)	○	○	○			○			12,500 jobs on site; 1m square feet of office space built or under construction. Home to key North East companies such as Greggs, and innovative advanced manufacturers such as British Engines and Contec

Site	Scheme [s]	Theme[s]				Scheme [s]				Site
		Ideas	Jobs mix	Business Env't	External & export	Digital	Adv. man.	Health sci.	Energy	
Sunderland Software City	SU04 SU05 (Inner ring road improvements - bus priority) SU07 (Holmeside / Sunderland station car park) NX02 (Park and ride enhancements, Nexus)	○		○	○	○				Home to Digital Catapult North East; space for over 60 businesses. Has supported growth of over 500 SMEs; links to national & international opportunities.
Doxford Park	SU10 (A690 route action plan) SU15 (Strategic cycle network A690 corridor)		○			○			○	c. 9000 jobs on site. Major telecoms employers including call centres; also significant site for solar energy generation
The Beam	SU05 (Inner ring road improvements - bus priority) SU03 (Sunderland Central Station redevelopment) SU03 (Sunderland Central Station redevelopment) NX02 (Park and ride enhancements, Nexus) and NX03 (Twin tracking of Metro line between Pelaw and Bede/Metro capacity enhancement) (Twin tracking of Metro line between Pelaw and Bede/Metro capacity enhancement)	○	○	○		○				Startup and established business space; aims is to encourage tech transfer, data-driven growth and collaboration between tech- and non-tech firms. Residential, retail and leisure as well as business

Site	Scheme [s]	Theme[s]				Scheme [s]				Site
		Ideas	Jobs mix	Business Env't	External & export	Digital	Adv. man.	Health sci.	Energy	
Sunderland Royal Infirmary	SU05 (Inner ring road improvements - bus priority) SU09 (Chester Road bus corridor) NX02 (Park and ride enhancements, Nexus) and NX03 (Twin tracking of Metro line between Pelaw and Bede/Metro capacity enhancement) (Twin tracking of Metro line between Pelaw and Bede/Metro capacity enhancement)	○	○					○		
Neptune Yard (Newcastle)	NX02 (Park and ride enhancements, Nexus) and NX03 (Twin tracking of Metro line between Pelaw and Bede/Metro capacity enhancement) (Twin tracking of Metro line between Pelaw and Bede/Metro capacity enhancement) NE08 (Newcastle Streets for People)	○			○		○		○	EZ: One of six UK Centre for Offshore Energy sites, with special planning and investment provisions

Site	Scheme [s]	Theme[s]				Sector[s]				Notes
		Ideas	Jobs mix	Business Env't	External & export	Digital	Adv. man.	Health sci.	Energy	
Swans Offshore Energy Park	NX2&03 NE03 (Newcastle-North Tyneside strategic cycling infrastructure)	<input type="radio"/>	<input type="radio"/>		<input type="radio"/>				<input type="radio"/>	EZ: state-of-the-art facility for offshore energy, subsea and marine firms
Royal Quays Enterprise Park	NT02 (Improvements to North Shields transport hub)	<input type="checkbox"/>	<input type="radio"/>		<input type="radio"/>			<input type="checkbox"/>		EZ (in development): close to Port of Tyne & large retail and leisure complex
Northumberland Energy Park	NO01 (Northumberland Line)	<input type="radio"/>	<input type="checkbox"/>					<input type="checkbox"/>	<input type="radio"/>	EZ (in development): hub for energy distribution with major assets

Site	Scheme [s]	Theme[s]				Sector[s]				Notes
		Ideas	Jobs mix	Business Env't	External & export	Digital	Adv. man.	Health sci.	Energy	
Bate and Wimbourne Quays (Blyth)	NO01 (Northumberland Line)		○		○				○	EZ (in development): large flexible terminal, close to energy/marine sites
Commissioners Quay & Dun Cow Quay (Blyth)	NO01 (Northumberland Line)	○			○				○	EZ: large port development with marine opportunities & training hub
Follingsby Max (Gateshead)	NX04 (Strategic park and ride sites - Follingsby park and ride links to Callerton Parkway)									EZ (in development): planning consent in place for up to 2,500,000 square feet
Newcastle International Airport Business Park	NX02 (Park and ride enhancements, Nexus) and NX03 (Twin tracking of Metro line between Pelaw and Bede/Metro capacity enhancement) (Twin tracking of Metro line between Pelaw and Bede/Metro capacity enhancement) NX04 (Strategic park and ride sites - Follingsby park and ride links to Callerton Parkway) NX02 (Park and ride enhancements, Nexus)/NE07		○	○	○					EZ (in development): office space, freight and warehousing planned.

Site	Scheme [s]	Theme[s]				Sector[s]				Notes
		Ideas	Jobs mix	Business Env't	External & export	Digital	Adv. man.	Health sci.	Energy	
Wansbeck Business Park (Ashington)	NO01 (Northumberland Line) (Northumberland Line)		○				○	○		EZ (in development): currently houses some advanced manufacturing firms; plans to extend advanced manufacturing and pharmaceutical sectors, as well as office space
Port of Sunderland Enterprise Zone	SU04 SU05 (Inner ring road improvements - bus priority) SU07 (Holmeside / Sunderland station car park)	○					○		○	EZ (in development): focus on offshore sectors including subsea and construction as well as companies that will use the port's marine facilities

Table 2: Schemes and Enterprise Zones

The 'themes' identified in this table reflect two of the key drivers of productivity that are connected by the schemes set out here, ideas and innovation, and business environment and opportunities to start or grow a business. The presence of sites with a mix of different job opportunities is also noted, along with examples where a site offers particularly strong opportunities to develop links outside the North East region, especially around international exports.

The four 'sectors' identified in this table are those identified as being of particular strategic importance for the North East in the 2019 SEP. These tables should not be read as implying that sites where a particular sector is highlighted do not offer other opportunities; rather these are sites where one strategic sector is particularly strongly facilitated.

Tourism – leisure, culture and business tourism

The North East has many unique natural and cultural assets that offer a significant opportunity for economic growth, as well as supporting its excellent quality of life. These Schemes offer sustainable transport access to many of these sites. For example:

- Natural assets in the North East are bounteous but under-developed, and all four corridors offer access to these. In the North and South corridor, the Northumberland Line (NO01 (Northumberland Line)) opens up access to the North Sea coast at Blyth in the North. Better Metro services (NX03 (Twin tracking of Metro line between Pelaw and Bede/Metro capacity enhancement)) link large parts of the coast from Tynemouth and North Shields, to South Shields and Sunderland. In the River Wear corridor, easier access to Durham city centre via the ECML (DU04 (Durham rail station access improvements)) and improvements to bus services and infrastructure linking Durham to its hinterland (DU02 (Park and ride expansion, Durham city)-DU07 (Durham bus station)) also support this theme.
- The North East has a rich collection of regional and national cultural assets, and the Cities and Airport corridor is particularly important to these. Venues in Newcastle-Gateshead are well known (the Sage, the Baltic and Laing Art Galleries, and the Theatre Royal); a more accessible city centre for people on foot or on bikes will help to boost access to these (NE01 (Transforming Newcastle city centre)). This provision, along with NE02 (Newcastle Central Station – Station Gateway), will also promote sustainable access to venues such as the North East's major new writing centre at Live Theatre and Dance City which offers performances by international touring companies as well as community classes. NE08 (Newcastle Streets for People) supports low-carbon travel to a thriving creative industries cluster at Ouseburn.
- Outside Newcastle-Gateshead, these schemes link to the vibrant cultural life outside the city centres. For example, the Banks of the Tyne corridor provides access to The Word (the National Centre for the Written Word in South Shields), the Customs House and the South Shields Museums (ST08a&08b), while the River Wear corridor accesses the National Glass Centre in Sunderland (SU03 (Sunderland Central Station redevelopment)). These corridors also provide access to Roman heritage sites at Arbeia and Segedunum (NT02 (Improvements to North Shields transport hub)), and Anglo-Saxon sites at Jarrow Hall Anglo-Saxon farm and village, Bede Museum, and Monkwearmouth. Improved metro services (NX02 (Park and ride enhancements, Nexus) and NX03 (Twin tracking of Metro line between Pelaw and Bede/Metro capacity enhancement)) (Twin tracking of Metro line between Pelaw and Bede/Metro capacity enhancement)) are important for all of these.
- The North East has a particular opportunity relating to business tourism that depends on high quality transport; links between the Cities and Airport corridor and the Banks of the Tyne are important here. The proposed North East Convention Centre at Gateshead Quays will provide the conferencing capacity that the region has long lacked; conferencing opportunities are also available at the Sage, Gateshead and other city venues. Newcastle City Centre which has substantially increased its hotel capacity; alternatively quick, reliable links to the coast mean that visitors have the option of accommodation by country's most beautiful coastlines and travel for just 20 minutes to reach an international business facility. Various schemes contribute to this offer, including NX02 and 03, the Newcastle city centre schemes, and the Gateshead Quays schemes.

Some of these schemes play a particularly important role in linking communities to work opportunities, for example:

- The South Shields area and the area to the south west of the River Tyne includes a high proportion of lower-income workers who can benefit from better access to work and skills development opportunities. This part of the region will benefit considerably from improved Metro services through better capacity (NX03, Twin tracking of Metro line between Pelaw and Bede/Metro capacity enhancement). In addition, more reliable bus services in the South Shields area (ST08a and b (Bus corridor improvements, South Shields)) Better cycling options in this area (GA10 (A184 cycle route) also open up more sustainable transport options for people seeking to access work.
- Newcastle's Outer West has a large population but congestion means that the bus services on which it relies are often slow-moving and infrequent; scheme NE04 (Newcastle Outer West) will help to reduce this issue.
- IN01 (Intu Cycle Storage) and GA05 (MetroGreen) present opportunities for lower-cost and sustainable transport to reach sites with extensive employment in retail.

Box 1: Major scheme - enhancing metro capacity

The Metro is a significant asset for the region. It is popular and well-used – especially at peak hours – and with some improvements could support the government’s objectives for the Transforming Cities Fund. In 2017/18 annual Metro usage was 36.4 million passenger journeys, with 60 million trips a year forecast by 2030. However, reliability of the existing fleet and some peak time crowding are growing issues.

The most urgent issue concerns the capacity constraints that result from some remaining single-track sections in the southern part of the network. Unless this is addressed – as outlined in this programme – the full potential of the Metro to support regional productivity, decarbonisation and social development cannot be realised.

Major improvements to the Metro system are already planned, with funding committed. These will help the Metro to support economic growth and sustainability. Plans include:

- Fleet renewal beginning in 2021 and complete by 2024
- An asset renewal plan that will be continued into the 2030s with a further £335m of investment into network infrastructure
- Investigating the economic benefits of adding new Metro corridors, and the technical feasibility of delivering them
- Technological innovations, such as advances in fuel cell technology, to enable greater future network flexibility.

However without dual tracks right across the system the impact of this ambitious programme will be severely diminished.

The Metro links the northern areas of North Tyneside and Newcastle-upon-Tyne to South Shields and Sunderland. Crucially, the network in turn integrates with local and pan-northern rail schemes – and the Northumberland Line proposal in Box 2 and schemes within the work programme which improve access to Metro stations via walking or cycling.

Improving the Metro would meet the TCF objectives as follows:

- *Drive up productivity through improved access to city centres and suburbs* – the metro connects the region’s major urban and suburban centres, and improving its performance would improve access
- *Improving access to work and delivering growth* – every additional passenger journey the Metro contributes £8.50 to the regional economy through increased productivity, economic growth and labour access.
Tackling air pollution and carbon reduction – modal shift from car to the low carbon options of Metro and rail will increase, because of improved resilience on Metro

3. Delivering apprenticeships & improving skills

Skills needs

Skills are a crucial input to productivity and to regional development. Investment in a region relies on its potential to supply skilled labour, and residents need access to skills development in order to make the most of the jobs created as the economy grows and develops.

Historically skills levels in the North East have lagged those for England as a whole. Across the working-aged population (16-64), the region has the lowest proportion of adults qualified to NVQ4 or above, and the third highest proportion with no qualifications. However, qualification rates have gradually *increased* over the past decade in the North East (Figure 6), with particularly strong growth in the proportion of the population with high qualifications in the period between 2012 and 2017:

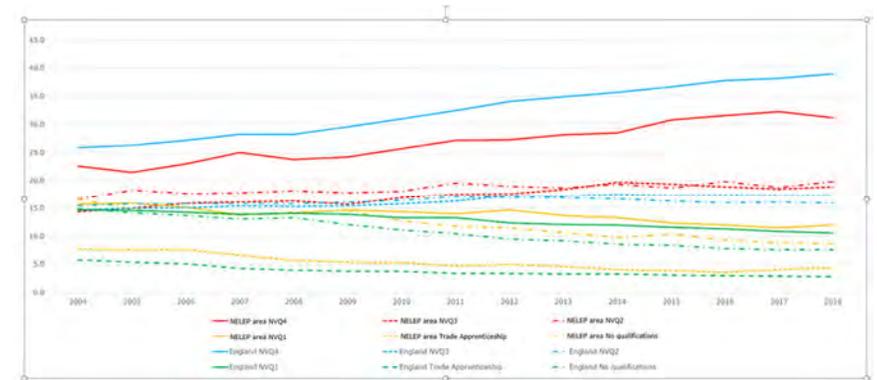


Figure 6: Proportion of population aged 16-64 with each type of qualification as their highest qualification level, NELEP area and England, 2004-2018. Source: NomisWeb

Qualifications rates in the North East City Region area are markedly higher for younger residents than for older ones (Figure 7). The proportion of residents aged 25-29 who hold a high qualification is higher than for the working-age population as a whole, and younger residents are less likely to have no qualifications. However, the gap between the England average and the North East City Region rate of high qualifications is *larger* for younger people than for the working-age population as a whole, which suggests that the region has *not* kept pace with an overall increase in qualification rates across England. Access to opportunities to learn and gain qualifications is therefore extremely important if the North East City Region area is to remain competitive. The rate of apprenticeship qualification is higher for all age groups.

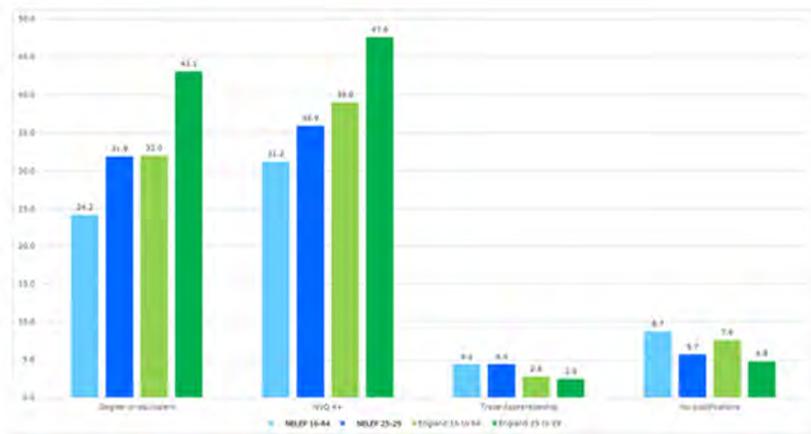


Figure 7: Proportion of population aged 16-64 and aged 25-29 with 'high' qualifications, Trade Apprenticeships and no qualifications, NELEP area and England, 2018. Source: NomisWeb

Qualifications levels vary considerably across the region. Newcastle, not surprisingly, has the highest rate of high qualifications; it is followed (at some distance) by North Tyneside. However the city *also* has a relatively high proportion of residents with no qualifications. Sunderland has the lowest number of residents with high qualifications, but it also has a high proportion of people who hold a trade apprenticeship as their highest qualification. Overall, qualification rates need to improve if people across the region are to share in the opportunities created by economic growth.

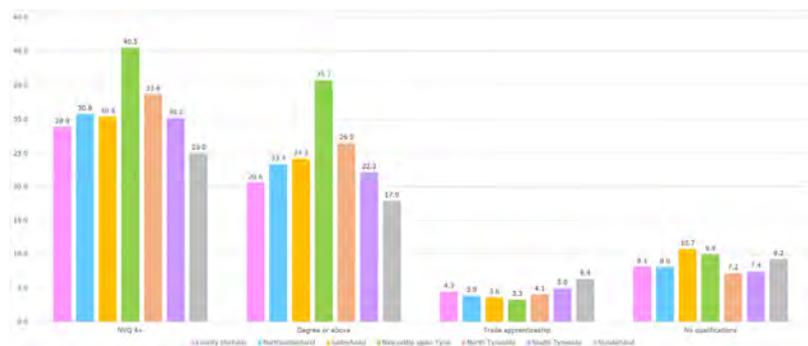


Figure 8: Proportion of population aged 16-64 and aged 25-29 with 'high' qualifications, Trade Apprenticeships and no qualifications, North East Local Authority areas, 2018. Source: NomisWeb

Potential impact on social mobility

Good quality transport has the potential to facilitate social mobility, by providing accessible and affordable travel to a wide range of employment sites and learning opportunities. In particular, poorer communities and individuals tend to rely heavily on bus services; access to regular and reliable bus services are important in opening up access to jobs and educational opportunities (Raikes, Straw & Linton, 2015). Recent research finds a clear impact of poor transport on access, persistence and achievement in post-compulsory education and training in developed countries such as the UK (see for example Wellman, 2019 and Hillman, 2016). The link between transport and social policies is vital:

Transport is shown to influence the success of both traditional and new social policies, with a particular focus upon education, demonstrating, through a case study, an unbreakable link between transport and social development. This link is so strong that transport must now be considered to be a social policy, if social development is to be furthered in the UK

Kenyon 2018

A recent wide-ranging enquiry for the Health Foundation found that young people's wellbeing and life chances depend heavily on access to transport:

Lack of transport is a barrier to education, employment and other activities. In many areas we were told that the transport on offer did not meet the needs of young people, with cost and low frequency of services being particular issues. This can deepen inequalities in access to services and opportunities.

Jordan, Bibby and Kane 2019

This research found that bus travel is particularly important for young people in many areas, but that poor reliability and high costs reduce access. Public transport and cycling opportunities will be particularly important given that:

There has been a general declining trend in the rate of young people who drive since the 1990s, increasing the reliance on a bus infrastructure which is dwindling, particularly in rural communities. For some the only option may be to use a car to get around but learning to drive, owning and maintaining a vehicle carries a substantial cost. This can mean that there is a divide between young people whose parents are able to help with these costs and those who cannot afford to learn to drive.

Jordan, Bibby and Kane 2019

The schemes have the potential to create good-quality jobs in themselves. Construction, planning and implementation of the schemes will all provide opportunities for skilled labour and also for integration with local policies on skills training, apprenticeships and – in the North of Tyne region – the devolution of the Adult Education Budget. Additional high quality infrastructure also opens up opportunities for creative revenue funding schemes, designed with social mobility and specific local contexts in mind, to have a substantial impact.

Social mobility in the transport sector. The transport sector has an important opportunity to promote and contribute to social mobility. The transport sector, by its nature, offers jobs of different kinds in all areas of the UK and brings together different dimensions of expertise and types of work. In particular it offers opportunities for learning in key skills groups for future prosperity such as STEM and digital technology (Hughes and Wade, 2017). Widening the pool of workers within the transport sector improves its ability to respond to diverse populations and leverage in the creativity and innovation that it needs. The 2019 paper, *Driving social mobility in transport* (STAT, 2019), sets out diverse opportunities and examples of good practice. Some of these correspond closely to elements of the proposed schemes, for example:

- Development of construction skills through structuring learning and training pathways within construction programmes.
- Opportunities in STEM and technology associated with future mobility programmes.
- Programmes designed to meet specific challenges, including those encountered by people with Special Educational Needs (SEN) and people on the autism spectrum. Some programmes also support people with a history of long-term unemployment.

Skills assets

The North East's economy has a specific and distinctive skills requirement and needs to draw on all of its population to meet its potential. The North East has the highest proportion of people with an apprenticeship qualification in England, and there are many high-quality job opportunities being created, which could provide opportunities for young people if they have the support to take them.

The region also has four universities which are world-leaders in their respective fields and align closely to the economic strengths of the area: Newcastle and Durham are high-performing universities across broad subject areas, while Northumbria specialises in climate change and sustainability; and Sunderland specialises in advanced manufacturing and public health.

The region's transport network has an important role in supporting the skills development of its people. Students from some of the most deprived communities in the North East will gain easier access to learning opportunities as a result of more reliable and affordable transport. As discussed above, students have higher rates of cycling than many other social groups, and jobseekers are particularly likely to use busses. Low-cost and sustainable transport options that provide reliable transport to opportunities for learning will have an important impact on the region's skills profile and opportunities for its workers and potential workers.

This programme of work will deliver apprenticeships and improve skills as follows:

- NO01 (Northumberland Line) is particularly important for expanding the labour pool, especially for city centre businesses and the industries based in Blyth (see Box 2 below). In particular it offers access to the extensive training opportunities for subsea and renewable energy at Port of Blyth, and links potential learners to Ashington College
- Students who rely on bus transport can more easily access Sunderland College's Washington Campus using the GA11 (2, bus lane).
- Sustainable access to Sunderland's University, a national leader in widening participation and vocational skills development for key industries, is facilitated by many of these schemes: in particular SU05 (Inner ring road improvements (bus priority)) and SU09 (Chester Road bus corridor).

- The Banks of the Tyne offer numerous opportunities for learning including multiple apprenticeships in the thriving subsea and energy businesses located here and the Maersk training centre. NT02 (Improvements to North Shield's transport hub) and NT10 (Healthy Bus and Metro) are particularly important, as is the overall impact of a better integrated cycle network across the region.
- South Shields College and South Shields Marine School provide important vocational skills opportunities. Schemes such as ST08a and b (Bus corridor improvements, South Shields) and several of the cycling schemes such as GA10 (A184 cycle route) support access to these.
- NE04 (Newcastle Outer West) supports links to Newcastle College and the city's UTC, which provides secondary education with a focus on STEM and digital.

Across the North East, the number of workplaces offering apprenticeships is slightly *smaller* in proportion to the rate of apprenticeship participation than is the case for England as a whole (Figure 9). This suggests that opportunities to offer apprenticeships are *not* being taken up as widely as could be the case, despite high overall rates of participation in apprenticeships (Figure 10).

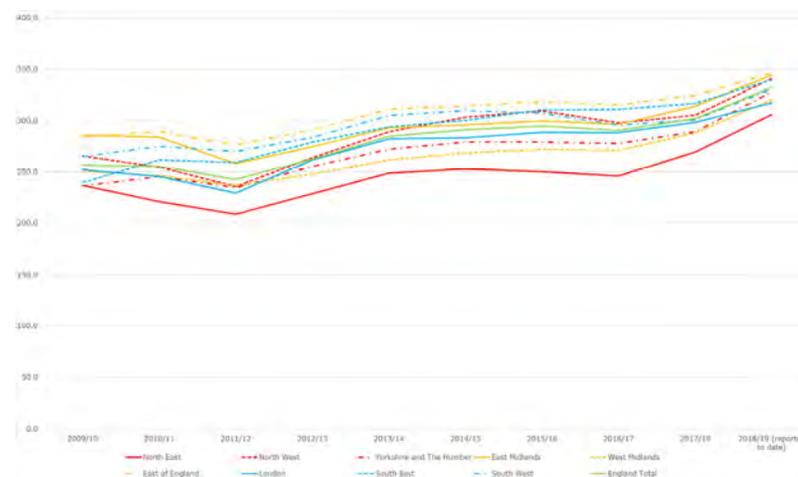


Figure 9: Workplaces employing apprentices, per 1000 apprentices, English regions. (DfE, 2019 – IPPR North calculations; data for 2018/19 are as reported at April 2019).

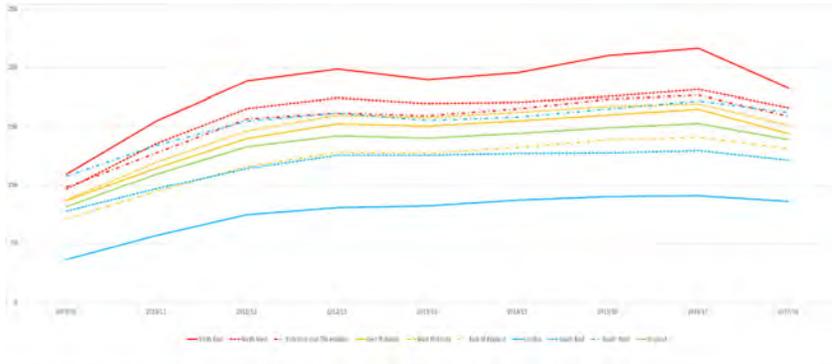


Figure 10: Participation in apprenticeship programmes, per resident aged 16-24, English regions. (DFE 2019 and NomisWeb – IPPR North calculations; data for 2018/19 are as reported at April 2019). *Note that some apprentices are aged over 24 so these figures do not indicate the proportion of the population in that age group who are apprentices; the aim is to give a rough indication of participation rates in relation to the general population.*

Impacts on deprivation and deprived communities

The proposed schemes potentially offer low-cost, convenient transport between employment sites and some of the North East's most deprived communities. The 2019 *Index of Multiple Deprivation* (ONS 2019c) identifies the North East LEP area as having relatively high rates of deprivation. The region has the *sixth* highest average deprivation score across the smallest units for which deprivation is calculated (LSOAs), out of 38 LEP areas in England. It also has the sixth largest extent of deprivation across the region. It ranks 10th for the proportion of LSOAs that are ranked as belonging to the most deprived decile nationally.

Compared to the 38 other LEP areas, the NELEP area ranks as follows for dimensions of deprivation:

- *Sixth* for income
- *Fourth* for employment
- *Fourth* for health
- *11th* for education, skills and training

The proposed schemes are located within wards that fall within the 20 per cent most deprived England:

North and South Corridor:

- Northumberland Line (NO01): The proposed Northumberland line links several communities that experience high levels of deprivation. Around half of the LSOAs in Ashington, at the start of the line, fall into the 'most deprived' twenty per cent of areas in England and around a quarter fall into the most deprived decile. The whole of neighbouring Newbiggin-by-the-Sea falls into the most deprived twenty per cent. Over half of the LSOAs in Blyth, which the line will serve, fall into the most deprived twenty per cent; the majority are in the most deprived decile. These LSOAs *also* fall into the most deprived twenty per cent of areas (and in many cases also the most deprived decile) in relation to education, skills and training and adult skills.
- The Bus Priority Improvements on the A168/A189 (NT08) link some of North Tyneside's communities that fall into the most deprived 20 per cent of LSOAs in

England to the Metro System and the Northumberland Line (parts of the Camperdown and Longbenton wards).

- The Healthy Bus and Metro (NT10) scheme links the above communities and also serves a small pocket of relative deprivation (LSOA in the most deprived 20 per cent for the UK) in Whitley Bay.
- The West Tyneside Cycle Route in Gateshead (GA01) potentially links parts of the Dunston and Teams ward that fall into the most deprived 20 per cent of areas in England to the city centres of Newcastle and Gateshead, and in particular to learning and employment opportunities in these areas.

Banks of the Tyne Corridor

This corridor serves some of the most deprived communities in the UK within the Newcastle, North Tyneside, South Tyneside and Gateshead areas.

- Improvements to the North Shields transport hub (NT08) and Bus Corridor Improvements in South Tyneside (ST08) both serve areas of high deprivation. Around the centre of South Shields, the vast majority of LSOAs fall into the most deprived decile in England, with many of the rest falling into the most deprived 20 per cent, in the Beacon and Bents, Simonside and Bede wards. These LSOAs have high levels of deprivation in relation to education and skills in particular. On the northern banks of the Tyne, LSOAs in North Shields's Riverside ward also fall into the most deprived decile for the UK. The Riverside, Howden and Wallsend wards, where many LSOAs fall into the most deprived 10 or 20 per cent nationally, will also benefit from this scheme.
- Twin tracking of the Metro Line (NX03) enhances provision for all of these communities and also to deprived areas in the Primrose, Hebburn and Monckton wards (all in the most deprived 20 per cent nationally, with large parts of the former in the most deprived decile and the most deprived 20 per cent for skills).
- Schemes that improve access to Newcastle City Centre from the east (including NE01, NE03 and NE08) all support the large proportions of the Byker, Walker and Walkergate wards that fall into the most deprived decile of LSOAs in the UK, with high rates of deprivation in relation to education and skills. NE08 schemes also serve SME of the deprived parts of Newcastle's West End including parts of the Benwell, Denton and Lemington Wards (in the most deprived decile in England).
- The Metrogreen scheme (GA05) and schemes extending cycling, walking and improved bus services to the east of Gateshead town centre will serve deprived communities including those in the Pelaw and Heworth, Felling, Deckham and Windy Nook wards. Deprivation levels overall and in particular in relation to education, training and adult skills are in the most deprived decile or twenty per cent in England in these areas.

Cities and Airport corridor

- The Newcastle Outer West (NE04) scheme serves LSOAs in the Blakelaw, Kenton and Woosington wards that fall into the most deprived decile or twenty per cent in England.
- Schemes linking Gateshead with the Sunderland area serve some communities with high levels of deprivation, including the eastern parts of Gateshead and large parts of Sunderland's city centre including the Southwick, St Peter's, Hendon and Millfield wards.

River Wear corridor

- Schemes in South Tyneside, including those linking South Shields with the Sunderland area serve some communities with high levels of deprivation, including the coastal areas of Horsley Hill wards (in the most deprived decile for England overall and for education and skills), and the central and western areas of Sunderland.

Tackling health inequalities

The UN (UN, 2016) defines transport as an important contributor to social development and also to good health:

‘Transport is not an end in itself but rather a means to allowing people to access what they need: jobs, markets and goods, social interaction, education, and a full range of other services contributing to healthy and fulfilled lives’.

Starting from this premise, the Health Foundation (Williams, 2018) defines a healthy and sustainable transport system as one which:

- Supports safe and community-friendly streets and spaces.
- Is accessible and efficient for everyone.
- Minimises harmful impacts on the environment.
- Enables walking, cycling and public transport use.

Inequitable access to sustainable transport disproportionately affects deprived communities, with ‘socially excluded people able to access fewer facilities than others but suffering more from the externalities [such as traffic casualties and vehicle emissions’ (Mackett and Thoreau, 2015). Both the availability of sustainable and affordable public transport, and initiatives that make it easier to afford contribute to greater access to employment, learning and healthy lifestyles. The proposed schemes both improve the transport infrastructure that is available and open up the possibility of boosting social inclusion through targeted schemes of discounted ticketing and other measures to increase use among disadvantaged groups (see Mackett and Thoreau (2015) for examples).

Sustainable transport has multiple health benefits, due to cleaner air, increases in physical activity levels, and social contact. Investment in sustainable public transport and in safe walking and cycling environments is associated with a major boost to population health in cities; the precise impacts vary depending on the overall local health profile and the nature and scale of transport innovation (Stevenson et al, 2016). However, the impact of a reduction in inactivity is substantial. Worldwide, physical inactivity is estimated to cause about 6 per cent of disease burden from coronary heart disease, 7 per cent of type 2 diabetes, and around 10 per cent of common cancers (breast and colon); it causes about 9 per cent of premature mortality (Lee et al, 2012). A meta-analysis of studies exploring disease risk and active commuting found that active commuting that incorporates walking and cycling is associated with an overall reduction of around 11 per cent in cardiovascular risk (Hamer & Chida, 2008). Recent evidence using UK Biobank data found that mixed public transport and active commuters have significantly lower BMI and body fat compared to car-only commuters (Flint & Cummins, 2016).

Physical activity increases both where active transport such as walking and cycling is facilitated, and as a result of public transport use. The average daily activity time associated with active transport use is estimated at around 20 minutes, rising to 30 minutes (the recommended level) for around one third of users (Patterson et al, 2019).

At present, physical inactivity is widespread in the North East of England and across the North East City Region. At present, across the North East the proportion of adults who walk or cycle for travel on at least three days in each week is **below** the average for England. Rates are particularly low in Sunderland and South Tyneside; the cycling and bus improvement schemes in these areas could have an important impact in making walking or using a bicycle safer and more practical for residents.

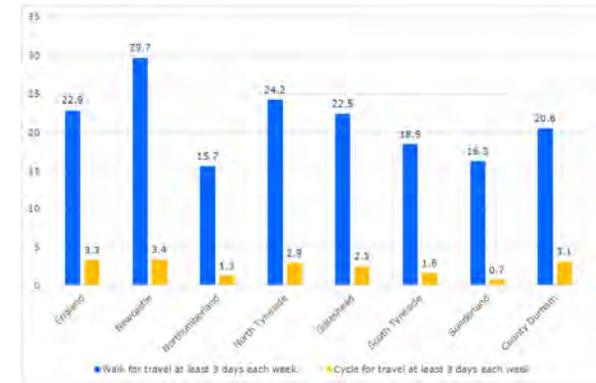


Figure 11: Percentage of adults who walk or cycle for travel at least three days a week, England and North East Local Authority areas (PHE 2019)

The health benefits of cycling are well-known, and the physical activity associated with regular cycle commuting has a substantial impact on health (Götschi, Garrard and Giles-Corti, 2015). However, this depends on good-quality cycle infrastructure of the sort outlined in this programme of work: without cycle networks that are convenient, pleasant and easy to use and above all safe – and perceived as safe – people simply won’t switch to bikes. A large body of evidence from across Europe demonstrates that where there is investment in large-scale cycling networks, this both encourages the use of bikes as a form of transport **and** improves population health as a result, due to increased physical activity levels (Mueller et al, 2016). For example, investment in active transport infrastructure in London is associated with an increase of over 130 per cent in the number of cycle trips per day between 2000 and 2017 (TfL, 2017). Evaluation of a major investment in new bus and cycling infrastructure in Cambridge (England) identified significantly greater time spent in cycling and active commuting, particularly among the groups who had been most inactive (Panter et al, 2016). A study in Sydney, Australia, found that good quality infrastructure was associated with an increase in cycling and in particular cycle commuting, against a trend of **declining** cycling participation (Crane et al, 2017). The proposed programme will help the North East to enjoy benefits of this kind.

The North East City Region area has relatively **high** rates of disease that is associated with such as overall mortality, obesity, cardiovascular disease and cancer. For example:

- Both life expectancy and healthy life expectancy are *below* the English average. This means that people born in the North East region have a lower average life expectancy, and on average live for a shorter period in good health. Across the region, Overall life expectancy at birth is below the English average by around one and a half years, while healthy life expectancy is lower by 3.9 years for men and 3.4 years for women. The lowest average life expectancy at birth is in Sunderland, Gateshead and South Tyneside for men and in Newcastle and Sunderland for women. Healthy life expectancy is lowest in Sunderland for men and in South Tyneside, Gateshead and Sunderland for women.

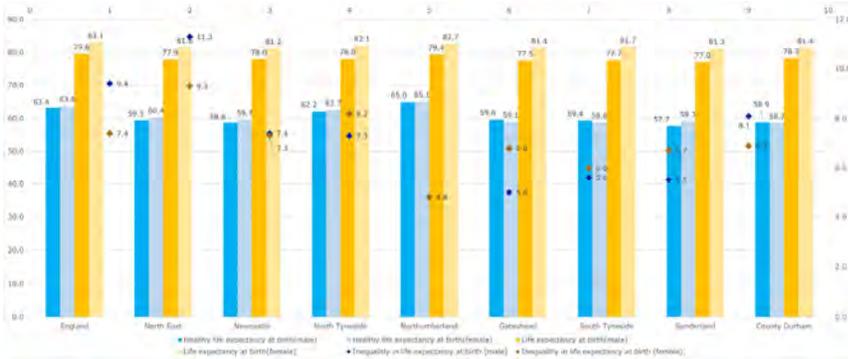


Figure 12: Life expectancy and healthy life expectancy at birth, and inequality in life expectancy and healthy life expectancy at birth, England, the North East and North East Local Authority areas. (PHE 2019)

- The North East City Region has rates of mortality from cardiovascular disease that are significantly *higher* than the English average in all Local Authority areas except for Northumberland and South Tyneside; for those considered preventable the rate is significantly higher in all areas except for Northumberland, South Tyneside and County Durham. Rates of mortality from cancer, including cancer that is considered preventable, are higher in all parts of the region except for Northumberland. Rates of mortality from respiratory disease, including those considered preventable, are also higher in all Local Authority areas except for Northumberland. Ratings for health-related quality of life among older people are *poorer* in all parts of the region except for Northumberland and North Tyneside. Death rates from preventable cardiovascular disease are highest in Newcastle, Gateshead and Sunderland; death rates from preventable cancers are highest in Gateshead, North Tyneside and Sunderland. Rates of death from preventable respiratory disease are highest in South Tyneside, Newcastle and Gateshead. The poorest scores for health-related quality of life are found in Sunderland and County Durham.

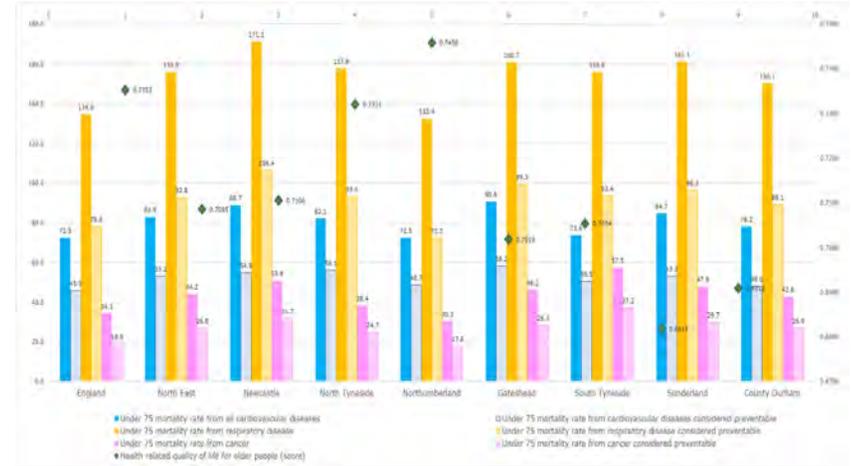


Figure 13: Mortality rates from cardiovascular disease, cancer and respiratory disease and health related quality of life scores, England, the North East and North East Local Authority areas (PHE 2019)

- The region has a *higher* proportion of adults who are defined as 'physically inactive' and a lower proportion of people who are 'active' than the English average. Activity levels are particularly low in Gateshead, South Tyneside and Sunderland; the concentration of proposed schemes in these areas is therefore especially important.

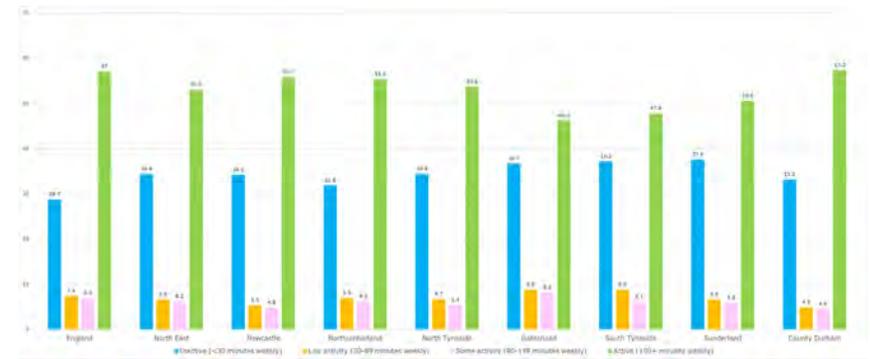


Figure 14: Physical activity levels in England, the North East and North East Local Authority areas. Source: Public Health England (PHE 2019)

Mapping of health issues suggests that these schemes could have specific impacts for the North East region.

The potential impacts of sustainable transport opportunities on overall longevity. Several of the schemes that facilitate increased public transport use and active commuting area located in areas where average life expectancy is among the lowest in England (CDRC, 2019 – IPPR North analysis). The following schemes serve parts of the North East where life expectancy at birth was 75 or below as calculated in 2009-13:

- Schemes in the North and South corridor: relevant areas include parts of the Cowpen and Kitty Brewster wards in Blyth. In the College ward of Ashington life expectancy was 76.
- Schemes in the Banks of the Tyne area that serve central parts of Newcastle-upon-Tyne including Elswick and Walker wards, Riverside ward in North Tyneside, and Simonside and Rekendyke ward in South Tyneside. Life expectancy in Gateshead's Bridges ward and South Tyneside's Hebburn North ward was 76.
- Schemes in the River Wear corridor that serve Sunderland's Millfield and Hendon wards. Parts of Pallion, Southwick and Redhill wards had a life expectancy of 76.

The potential impact of sustainable transport opportunities on childhood obesity. Several of the schemes that facilitate walking and cycling are located in parts of the region where childhood obesity (at Year 6) is in the highest or second highest decile for England (CDRC, 2019). These include:

- Schemes in the Banks of the Tyne corridor that serve the Gateshead, Felling, Heworth and Jarrow areas to the south of the river, and Walker, Byker and Wallsend to the north.
- Schemes in the southern section of the North and South corridor that serve central Gateshead and the Teams/Team Valley area.
- Schemes in the Cities and Airport corridor that serve Newcastle's West End, including Benwell, Elswick, Fenham, Denton and Kenton, and that serve parts of Sunderland to the north of the River Wear.

Air pollution

The total cumulative cost to the NHS and social care of air pollution is estimated to reach £5.37bn by 2035, rising to £18.57bn if the costs for diseases for which there is less robust evidence (Pimpin et al, 2018). Across the UK, outdoor air pollution is estimated to contribute to around 40,000 deaths annually (RCP, 2016).

The health benefits of cycling are great enough to outweigh the additional exposure to air pollution that cyclists experience. However across the UK air pollution has a dramatic negative impact on health. Research from Oxford University estimates that the health cost from air pollution per fossil fuel car is around £121 annually (Brand & Hunt, 2018). Around 2.5 million cases of disease attributable to air pollution are forecast by 2035 if air pollution levels are not reduced. This means a big hit to workforce through lost productivity due to health-related absence from work, and from work performed at reduced capacity because of ill-health (Bloom et al, 2018).

Mental health benefits

Mental health benefits are also substantial. For example, physical activity and time spent in natural environments due to sustainable travel are shown to have positive outcomes for mental health and wellbeing (Zijlema et al, 2018). Sustainable transport and 'walkable' environments help to reduce social isolation and build social cohesion and capital, because of the social interactions that they facilitate (Boniface et al, 2015). This is particularly important for older people (who make up a larger-than-average proportion of the North East population), for whom public transport use is associated with lower rates of loneliness and depression (Reinhard et al, 2018). As well as mental health gains, sustainable transport use social and creative benefits as well as economic ones as a result of human contact, through improved connectivity across places and connections between people (Sim et al, 2015).

Box 2: Major scheme – the Northumberland Line

South East Northumberland holds significant opportunities for the region. The principal settlements here are Blyth (population 37,000) and Ashington (population 28,000) (Centre for Towns 2017). Since the historic decline of its mining industry, Ashington has become associated with narratives of decline. However, Blyth is an economic ‘good news story’ with new clusters of innovative businesses, the Port of Blyth – which handles 2 million tonnes of freight each year – and some significant development sites for renewable energy (Port of Blyth 2018). The port and offshore cluster is a major opportunity, and this is fast being joined by more innovative manufacturing companies – for example Tharsus robotics are undertaking genuinely world-leading work.

The Ashington-Blyth and Tyne railway line once connected these settlements with Newcastle – it was not a single route, but a small network built in 1840 to link the collieries to the River Tyne. However, in 1964 passenger services were withdrawn. The proposed intervention would see the line – still used for freight – reopened for passengers.

There are several constraints on growth in this region and this intervention could unlock this corner of Northumberland’s significant potential. The proposal aligns closely with the Transforming Cities Fund objectives as follows. It would:

- *Drive up productivity through improved access to city centres and suburbs* – by opening up Ashington into a suburb of Newcastle, thereby bringing prosperity and regeneration to the area
- *Improving access to work and delivering growth* – by allowing those resident in the area to access jobs in the wider conurbation; by improving access to jobs in Blyth from across the North East; and by providing businesses in the area with access to a skilled workforce – especially in the strong engineering cluster where businesses currently struggle to find skills and appeal to graduates
- *Delivering apprenticeships and improving skills* – by opening up new learning opportunities for Ashington’s young people, as travel to one of the region’s colleges becomes practical via improved transport networks
- *Tackling air pollution and carbon reduction* – by providing opportunities for those who currently travel by car to and from the area to use public transport instead
- *Delivering more homes* – by stimulating investment in the region and helping to bring forward the delivery of housing allocations

4. Tackling air pollution & carbon reduction

The North East has been transformed into a low emission economy: CO2 emissions have halved in the last decade, more than almost any other region, while Northumberland and County Durham have some of the best air quality in the country (Raikes et al 2018). Yet air quality remains a challenge to health, quality of life, and the attractiveness of places for potential residents and businesses. In the urban centres of the region, estimates suggest that some roads will have concentrations of nitrogen dioxide above the annual mean limit values by 2021 (although it may fall thereafter).

The region was awarded £1.7m to help improve air quality in 2018, in response to a bid to the JAQU Early Measures Fund; this has been invested in cycling and walking route improvements.

Schemes in the current programme link to these and help to create an integrated network for cyclists, e.g.:

- Investment in cycling options linking Newcastle and Gateshead (JAQU investment) mean that the city centre itself and routes that cross the city centre will be more accessible for people using the new Newcastle City Centre routes (NE01 (Transforming Newcastle city centre)), the Gateshead Quays routes (GA08 (Hills Street and Gateshead Quays sustainable access)) and the routes linking the existing North Tyneside routes to the city centre and the North of the City (NE03 (Newcastle-North Tyneside strategic cycling infrastructure)).
- Investment in the Durham Road route will be complemented by the upgrading of the Great North Cycleway (GO09 (Great North Cycleway - A167 Birtley to Eighton Lodge)).
- Investment in the route between Northumberland Park Metro station and Cobalt Business Park will be linked to Newcastle City Centre and North Tyneside (NE03 (Newcastle-North Tyneside strategic cycling infrastructure)).

In addition, the improvements to bus travel proposed in this programme will capitalise on the use of JAQU funding to develop clean bus technology, which will see 191 lower-emissions busses operating on twenty routes in Newcastle, Gateshead and North Tyneside.

This programme of work will help tackle air pollution and carbon reduction across the region as follows:

Air pollution is a particular challenge for the region’s city centres and along the banks of the Tyne in Gateshead. The following schemes will be especially important in reducing pollution around the region’s cities:

- NE01 (Transforming Newcastle city centre), NE02 (Newcastle Central Station – Station Gateway) and NE03 (Newcastle-North Tyneside strategic cycling infrastructure) will all support a reduction in air pollution in the centre of the city.
- DU01 (Walking and cycling improvements, Durham): This will encourage more people traveling into Durham to use sustainable forms of transport, and to use these to access public transport from the city centre rather than making the whole of a longer journey by car.
- DU02 (Park and ride expansion, Durham city): This will encourage people to travel into Durham City Centre by public or sustainable transport.
- DU03 (Bus priority measures, Durham) and DU07 (Durham bus station): These will encourage the use of busses rather than cars to access Durham City Centre.
- GA01 (West Tyneside cycle route: upgrading existing routes), GA07 (Askew Road), GA08 (Hills Street and Gateshead Quays sustainable access) and GA16 (Gateshead Interchange Bus Lane): These will encourage people to access the centre of Gateshead and to travel between Gateshead and Newcastle City Centres using public transport or by cycling and walking; GA16 (Gateshead Interchange Bus Lane) will also encourage more public transport journeys between Gateshead and Sunderland.
- SU03 (Sunderland Central Station redevelopment), SU04, SU05 (Inner ring road improvements - bus priority), SU07 (Holmeside / Sunderland station car park) and SU09 (Chester Road bus corridor) will all encourage more use of sustainable transport to access Sunderland City Centre, and to make short journeys across the River Wear. They will also increase public transport journeys between Durham and Sunderland.

5. Encouraging the use of new mobility systems and technology as part of the Grand Challenge on the Future of Mobility

The North East offers a unique opportunity to pioneer new technological developments in transport. Solutions tested and evaluated in this region can help to reduce congestion and tackle climate change across the UK, transforming the way we travel. The North East is particularly well placed to do so:

- The population have a proven high interest in transport innovation: the region has a track record of high take-up of smart technologies and use of one of the largest charging networks in Europe for electric vehicles is rising.
- The region offers expertise and centres of excellence in key sectors for future mobility, including digital, advanced manufacturing, and logistics as well as all aspects of transport. Its universities, cutting-edge businesses, and facilities such as the Digital Catapult will all contribute to a vision for future mobility.
- Assets include: data from current trials and schemes for innovative transport, including electric cars, connected and autonomous vehicle trials, and the Regional Traffic Management and control centre at Newcastle University. The University also hosts the Urban Observatory, which monitors Newcastle across multiple sectors and scales.
- National Centres located in Newcastle (hosting collaborations led by Newcastle University) include: advanced electric drives (through the Advanced Propulsion Centre), vehicle to grid implementation and second life battery research (through the Siemens Smart Grid Lab and the National Centre for Energy Systems Integration), modelling and user-centric design (jointly with the Transport Systems Catapult), mobility for an older population (with the National Innovation Centre for Aging), smart cities, big data and IoT for intelligent mobility through the National Innovation Centre for Data and the UK Collaboratorium for Research in Infrastructure and Cities (UKCRIC). Newcastle University is a core partner of the UK Rail Research and Innovation Network co-funded by Industry and the UK Research Partnership Investment Fund worth overall circa £92m over 10 years and exploring with industry areas such digital railways and next generation urban rail systems;

The North East's polycentric spatial distribution includes a microcosm of different kinds of place, facility and community that offers key 'test bed' opportunities and learning that can be applied nationally:

- The region's two million residents live in a Core City, two smaller cities with very different characteristics, large urban areas, several supporting and market towns, and an extensive rural hinterland. *North East projects are relevant to a diverse range of places.*
- Its assets include three very different ports, major centres for manufacturing in both traditional and cutting-edge sectors, a diverse tourism and leisure offer including multiple high-profile sporting and cultural venues, major hospitals, and a distinctive rural and coastal locations. *North East projects are relevant to a diverse range of economic opportunities.*
- The region's demographic and social challenges, including an ageing population and some pockets of high deprivation and poorer public health, mean that solutions addressing these issues can be trialled effectively here. *North East projects are relevant*

to a diverse range of people and can help to promote equality of opportunities through accessible transport.

This programme of work will encourage the use of new mobility systems and technology as follows:

The North East has more to offer, and the combination of TCF funding with robust FMZ proposals mean that Its transport network is well-placed to be a test bed for innovation and partnerships. It has a strong digital and data systems presence, with excellent university departments and major companies that can drive private sector innovation. and its leading research in the field of ageing means that innovation for this key group of public transport users can be tested and evaluated in the North East.

6. Delivering more homes

Transport connectivity could unlock significant housing development within the North East's towns. Washington and areas around Ashington are important communities with a great deal of local housing growth. Good transport links that make areas like Ashington a viable and convenient place to live – with the option of working across the North East – can give them a new purpose – and support regeneration. Effectively places like Ashington and Blyth can become easily commutable to Newcastle – but can also offer a different and more rural kind of place to live.

Rail projects are particularly attractive to housing developers – long-term certainty, the capital is out of the way, and the costs of operating it are the main issue. There is an expectation that it will continue. In the case of the Northumberland Line there is an asset that is already there; it's a reopening project, with a lot of local buy-in.

This programme of work will help deliver more homes as follows:

- The Northumberland Line could stimulate investment and regeneration in the region – especially in Ashington - and therefore help to bring forward the delivery of housing allocations.

This programme of work may have a further impact on the delivery of homes in the region but this information is not available at the time of drafting.

4. Conclusion

The North East of England has historically received relatively low levels of infrastructure funding, reflected in its patchy history of economic progress following the decline of traditional heavy industries. However, the region shows the potential to come together with creativity, innovation and openness, and to use these as the foundation for economic and social progress. This is demonstrated by its recent impressive productivity growth; its attractiveness to foreign direct investors; the establishment of several crucial modern and 'green' industries including advanced manufacturing, renewable energy and health innovation; and its progress in reducing air pollution.

Investment in sustainable transport will help the North East to build on this track record. At present the region is creating high quality job opportunities, as shown by the success in meeting SEP objectives; it needs to connect people to these via low-carbon, low-cost transport. It needs to create attractive places to live, so that skilled workers will choose to stay in the region and build careers here. And it needs to make sure that its city centres and visitor attractions are pleasant and easy to access, with low levels of pollution and traffic, to make the most of the great places that are characteristic of the region.

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APPENDIX

Housing and Employment Analysis



Transforming Cities Fund, Supporting Housing and Employment Growth – Methodology
Author: Andrew Dorrian (Transport Strategy Unit)

1. Background and Summary

- 1.1 The North East Regional Transport Team are preparing a regionwide bid for capital funding from Tranche 2 of the Transforming Cities Fund (TCF). TCF is a capital fund for Public and Sustainable Transport schemes that meet DfT and programme specific objectives. More details are available at <https://northeastca.gov.uk/what-we-do/transport/north-east-transforming-cities-fund-bid/>.
- 1.2 Objectives identified by the Department for Transport include that proposals which support housing delivery as well as address economic productivity will be favourably considered. Proposals must also be focused on improving capacity on commuting trips and access to employment centres, enterprise zones and development sites.
- 1.3 For the purposes of developing a coherent bid for submission, the region has exemplified where transport schemes have directly contributed to this objective. As an example, where transport schemes are being planned to unlock housing and employment growth or deliver wider local plan objectives such as more sustainable patterns of development.
- 1.4 A way to achieve this is through drawing out employment and residential allocations, permissions and associated requisite infrastructure improvements noted in the authorities Infrastructure Delivery Plans. A complimentary further step is to undertake a dependent development appraisal so that these numbers can be calculated in a Value for Money Appraisal for the programme. The latter is undertaken in the economic case.
- 1.5 The assumptions made include that,
 - This assessment focuses largely on new development, i.e. new homes and jobs rather than existing sites (accessibility analysis in the TCF SOBC captures existing jobs separately);
 - Local Plan data has been used and supplemented with updates around permissions or publicly available data sets;
 - Mapping has utilised existing Shapefiles provided by the Local Authorities and noted against TCF proposals;
 - There is no account for levels of demand varying between modes other than the variance in proximity that has been undertaken;
 - As noted below data has been tailored so it is specific to the TCF bid area, and
 - A combined dataset for all 7 local plans has been created regarding new homes and jobs, kit is intended that this data could be updated and utilised to support the development of the North East Transport Plan.

2. Methodology

Supporting Housing Delivery

- 2.1 The developed SOBC should as directed by the DfT objectives demonstrate the inherent link between the TCF programme and planned housing growth and delivery. The TCF Tranche 2 programme covers schemes that must be delivered between 2020 and 2023, therefore development plans which can be realised in the next 0-5 and 6-10 years are of interest when looking at the impacts of delivery.
- 2.2 From an initial review of the Local Plans it was demonstrated in the June 2019 submission that 117,509 homes were planned across the seven North East Local Planning Authorities in their respective plan periods. It is noted that timescales associated with Local Plans vary from authority to authority with several local plans at draft stages. As a result, this figure is now at 109,555 as shown in the Challenges section of the TCF SOBC.
- 2.3 To explore the housing targets further GIS data (shapefiles) from Local Plan Strategic Housing Land Availability Assessments / Strategic Land Reviews / Housing and Economic Land Availability Assessment were obtained from all 7 Local Planning Authorities (LPA's).
Filter and Initial sift
- 2.4 A filter was then applied so that sites considered to be unsuitable or discounted by the LPA's were removed.
- 2.5 Data for sites was then abstracted from the layers to create a TCF shapefile. In the case of the five Tyne and Wear Authorities data from the entire authority area was utilised initially and in the case of Northumberland and Durham a 10km radius around TCF interventions of identified / allocated sites was applied given the nature of the schemes proposed in these authorities and the geographic context.
- 2.6 Data for all Local Authorities was interrogated, and updates were applied based on planning application history data and discussions with LPAs.
Deliverability and Suitability
- 2.7 A method of ranking the housing sites was applied using a Red Amber Green rating system for their applicability to TCF. This utilises the following criteria;
 - Red: All sites that are not suitable – Removed from the programme and thus not shown on the lists;
 - Amber: Sites that have an allocation but are unlikely to come forward in the TCF timescales / have limited planning history in terms of a consent or similar; and
 - Green, Schemes that have a Local Plan allocation, have emergent or valid permissions and / or are expected to be under construction in the next 4 years.
- 2.8 Applying this methodology results in an overall yield of 84,265 units across the seven authority areas for sites considered to be amber or green. Applying only the green ranked sites results in yield of 43,826 units. This data was reviewed by local authority partners to ensure accuracy.
- 2.9 This data captures all housing sites across the Tyne and Wear authorities and selected areas of Durham and Northumberland, the next step was to derive the

dependency of development associated with each scheme. This is utilised for both the strategic case and for the economic appraisal.

Supporting Economic Development

- 2.10 All employment land has been obtained from local plans. This data was combined with Enterprise Zone data and existing large employment centres to identify growth opportunities.
- 2.11 The yield for jobs is not present in this data however assumptions are generally available in the accompanying Employment Land Review documents and a method of applying a proxy may be needed.
- 2.12 The data received for Northumberland and County Durham was narrowed down so that only the relevant sites within the TCF bid area would be analysed; this was done by applying the same 10km radius to the schemes as the housing sites and discarding sites which fell outside of this area.
- 2.13 Using the data sources in Appendix 2, the missing total site area and/or land use class data was identified and added to the spreadsheet for each site. This data largely came from Employment Land Reviews and local plans for each authority.

3. Development Dependency

- 3.1 The resultant future housing demand and jobs yield is typically authority wide as such there is a need to consolidate this and to agree a proximity threshold in and around interventions.
- 3.2 Utilising WEBTAG unit A2.3, this describes development dependency as “New housing is dependent on the provision of some form of transport scheme if, with the new housing, but in the absence of any transport scheme, the transport network would not provide a “reasonable level of service” to existing and/or new users”. A reasonable level of service is not defined fully but essentially if new demand cannot be accommodated without additional costs for existing users the network would not provide a reasonable level of service.

3.3 Supporting Delivery

For the economic case we use this definition to define housing schemes that could benefit from this definition of reasonable level of service based on the growth expected. The level of dependency will vary as will the benefits accrued, possibly on a geographic proximity basis.

- 3.4 For the strategic case, development is considered in three ways,
 - a) New homes or employment generation that would not be expected to reasonably come forward without the advent of a transport intervention
 - b) New homes or employment generation that would reasonably benefit from new sustainable transport links and therefore be developed in a more sustainable way.
 - c) Sites that are not expected to have a reasonable benefit from Transforming Cities interventions / are beyond the proximity thresholds
- 3.5 The definition of reasonableness will be linked to the dependency calculations referred to in 3.2 but extended to include any evidence that a transport scheme is being promoted through the advent of the Local Plan and supporting Infrastructure Delivery Plan.

- 3.6 Quantification of the homes supported will be made in broad terms with the support of local authorities around a transport scheme’s contribution to deliver wider governmental and council policy. In addition, letters of support from development providers such as housebuilders, agencies and Transport for New Homes have been sought and are included in the bid’s appendix.

- 3.7 In relation to the sustainable transport dimension there will be cross linkages with the regional cycling and walking principles work that is ongoing as well as local plan policy and cycling strategies such as LCWIPs.

4. Delivering new homes and jobs

- 4.1 The result of this work is a yield figure of new homes and employment generating floorspace that can be reasonably attributed to TCF programme.
- 4.2 The above analysis provides global figures as described we need to calculate the dependency of development on the interventions proposed.
- 4.3 We have proposed a five-stage process in order to calculate and report new homes and jobs,

1. Proximity Analysis: The TCF interventions mapped against housing and employment sites with reasonable distance isochrones applied (see below)
2. Local Plan review: Specifically related to the Infrastructure Delivery Plans the status of the TCF intervention in the local plan,
3. Development certainty review, (applicable to housing only) looking at the numbers of units that are expected to come forward within the expected timeframe of TCF.
4. Thematic analysis, looking at the five thematic packages the numbers of schemes that would be supported (using the two definitions) by the schemes promoted.
5. Case studies with specific analysis provided in City Centres and growth areas.

Following this assessment, we will be able to make some assumptions (with caveats) around the number of schemes that are supported directly or indirectly by TCF interventions.

4.4 Proximity Analysis:

A proximity factor is proposed to be used to look at sites that will benefit from interventions proposed. This is reported at a preferred cost scenario level as well as based on thematic packages (see below). The proximity criteria used includes,

- Sites within 400m of a Bus Corridor that is subject to investment (Assumes a reasonable walk distance to bus stops and services that are set to benefit from enhanced services, i.e. improved punctuality), Based on CIHT Planning for Walking guidance (2015)¹

¹ CIHT, Planning for Walking (2015), https://www.ciht.org.uk/media/4465/planning_for_walking_-_long_-_april_2015.pdf

- Sites within 1km of a Metro station, a local rail station subject to investment or the Northumberland Line (the mean distance suggested by WYG in their 2015 Walking Analysis report)²
- Sites within 5km of a Park and Ride enhancement, as a focus of intercepting trips,
- Sites within 2km of a walking and cycling route that is subject to investment as a means of capturing local demand.

We have avoided duplication in the reporting by including a site once against the criteria above. This will be broken down further by thematic package (as below)

4.5 Results

Applying this criterion results in,

- 69,205 units, broken down into 35,738 units classified as green schemes and 33,467 amber schemes;
- 32,680,000 sqm or 3268ha of employment generating floorspace that is accessible from TCF interventions,

4.6 Local Plan Review

It is important to establish the link between TCF interventions and Local Plan policies when developing a development dependency analysis as this is a tangible link between what the authority is planning for in respect of a future employment and housing market and the necessary infrastructure that is required to support plans.

A summary of Infrastructure Delivery Plans (IDP) and other relevant policies is shown below.

Authority	Key Points
Durham*:	The IDP, Local Plan and Durham City Sustainable Transport Strategy promotes modal shift away from cars in the city centre and specifically references the delivery of cycle and walking infrastructure to support growth in the city and Aykley Heads, the expansion of the city's park and ride system, enhancing the railway station and delivering a new bus station.
Gateshead:	Included in the Joint Newcastle Gateshead Core strategy and IDP are essential schemes required to facilitate development as well as

² WYG, How far do people walk? (2015), https://www.wyg.com/uploads/files/news/WYG_how-far-do-people-walk.pdf

	growth areas and areas of transformation. On the essentials, this includes support for Follingsby Park and Ride, cycle improvements at Gateshead Quays and the Great North Cycleway. To support growth, there is inclusion of bus lane upgrades including at New Road, wider cycle lane upgrades and sustainable access to growth sites including Metrogreen and around Askew Road
Newcastle:	Following the above theme, essential developments include a package of walking and cycling measures to target significant growth across the west of Newcastle as exemplified on the housing plans together with strategic cycle route enhancements, city centre pedestrian and cycle improvements and more efficient bus movements and the completion of the Central Gateway project.
North Tyneside:	North Tyneside's local plan and IDP is focused on infrastructure that delivers healthy, accessible, affordable and integrated outcomes. This includes strategic cycle corridors, supported by the council's Cycle Strategy, delivering enhanced links to public transport nodes, support for Northumberland line and for enhanced bus services. The council also have policies in the Local Plan around the regeneration of its town centres including North Shields.
Northumberland:	The Northumberland emerging Local Plan and IDP expresses support for schemes which will deliver sustainable transport access to new homes and jobs. The South east area of the county is likely to see the most significant amount of growth in jobs and homes. The need for connected and integrated cycle routes is recognised together with the reopening of the Northumberland line to support growth in this part of the county.

South Tyneside*:	The emergent updated draft South Tyneside Local Plan and IDP has been supported by a RAG assessment of the impact of development on the highways network. We have ensured that these assumptions around the need for interventions have travelled through in the assumptions we have made in this region wide review. The IDP includes the need to deliver enhancements to Metro including Twin Tracking and station upgrades, a package of bus priority measures as well as cycling and walking schemes and the Tylesheds crossing. Fundamentally South Tyneside is a net exporter of labour and its wider connectivity to the region is of interest to the authority as well as supporting future inward investment opportunities on sites such as IAMP and Holborn Riverside.
Sunderland*:	The draft Local Plan and IDP, splits projects into essential and desirable or aspirational. Cycle / walking route development as well as Sunderland station, city centre developments and bus priority schemes are supported as aspirations / within wider policies.

*Certain Policies are draft and subject to consultation / Inspection

This shows critically many of the interventions are already directly related to infrastructure delivery plans or local policies. Generally, there is a gap between what can be funded locally through mitigation mechanisms such as s106 and CIL and TCF will seek to provide funding to deliver these important infrastructure projects. We have examples where significant sums of s106 have been pooled or CIL contributions raised in order to provide the requisite match funding for the schemes.

4.7 **Development certainty review**

With housing sites, we have applied a certainty rating using a RAG scoring mechanism to look at sites that will likely to come forward in the timeframes available.

Using the above analysis, we have 357 allocated green schemes providing 35,738 units and 334 amber schemes providing 33,467 units that are in the proximity thresholds applied above.

Looking at this against housing needs across the region, there are 69,205 new housing units that would benefit from Transforming Cities interventions. This represents 59.1% of the total planned housing need from around the entire region which is substantial.

4.8 **Thematic Analysis**

It is important to further define the contribution that TCF will make to the development and delivery of these schemes. This uses the approach of a reasonable level of service defined in section 3.2 above through the application of the three classifications,

- a) Sites that would not be expected to reasonably come forward without the advent of a transport intervention / are directly related to them
- b) Sites that would reasonably benefit from new sustainable transport links and therefore be developed in a more sustainable way.
- c) Sites that are not expected to have a reasonable benefit from Transforming Cities interventions / are beyond the proximity thresholds.

Housing

It is anticipated that the vast majority of our 'green' housing schemes would come forward in the TCF timescale due to their advanced status with permissions or emerging development. In this guise we consider that these units are capable of being defined as sites that would reasonably benefit from new sustainable transport links and therefore be developed in a more sustainable way. This is important given the support that has been afforded to schemes included in the TCF programme through Local Plans and their Infrastructure Delivery Plans. In that guise we have 35,738 units defined as sites that would reasonably benefit from new sustainable transport links and therefore be developed in a more sustainable way.

Looking at Amber schemes, by their nature these are schemes that are a little less advanced than those attributed to a green rating. To establish the reasonable level of service definition for these schemes, a qualitative analysis has been undertaken based on commentary afforded to schemes in local plans and Strategic Housing Land Availability Assessments. In addition, this analysis pays attention to the fact that infrastructure investment has an attraction factor in the development of housing sites where sites have stalled or have little interest of late. This is not entirely conclusive but provides a step in defining the contribution TCF schemes will make.

Breaking down the schemes by authority, there are several identified areas where schemes are reliant on essential infrastructure to deliver the projects,

- Durham: Sites around the city centre and north – 45 units that can be classified as reliant on TCF transport infrastructure and 780 will benefit from new sustainable links;

- Gateshead: Focus on Inner Gateshead and MetroGreen - 3061 units that can be classified as reliant on TCF transport infrastructure and 897 will benefit from new sustainable links;
- Newcastle; Particular focus on outer west and City Centre developments – 2937 units that can be classified as reliant on TCF transport infrastructure and 1001 will benefit from new sustainable links;
- North Tyneside: New development that will benefit around North Shields and Metro stations which will benefit from improved connections, 193 units that can be classified as reliant on TCF transport infrastructure and 7712 will benefit from new sustainable links;
- Northumberland: Mainly focused on growth around the Northumberland line and sites which will benefit from improved cycle connectivity Tyne and Wear, 1223 units that can be classified as reliant on TCF transport infrastructure and 182 will benefit from new sustainable links;
- South Tyneside: Builds on South Tyneside’s highways assessment and denotes growth around Metro, bus corridors and improved links to stations, 2637 units that can be classified as reliant on TCF transport infrastructure and 2205 will benefit from new sustainable links; and
- Sunderland: Focused on City Centre developments and those that benefit from enhanced bus link improvements. No sites classed as reliant on TCF infrastructure, but 1347 units will benefit from new sustainable links.

Overall, we have 9,861 units that are capable of being classed as sites that would not be expected to reasonably come forward without the advent of a transport intervention. In addition, we can reasonable construe that an additional 21,153 units would be capable of being classed as sites that would reasonably benefit from new sustainable transport links and therefore be developed in a more sustainable way.

Employment Land.

Regarding Employment Land we have a substantial amount of allocations around the region resulting in 3,268,000 sqm being in the proximity thresholds associated with TCF interventions.

Strictly applying Local Plan analysis to project proximity to TCF interventions this results in 5,233,280sqm (523.3ha) of employment sites that can be construed as being directly related to the transport intervention and reliant on it. In addition, there are 2,736,000sqm (2736ha) of floorspace that would reasonably benefit from new sustainable transport links and therefore be developed in a more sustainable way.

There are caveats to this analysis, as it has been strictly based on employment allocations it looks at a mix of new employment generating floorspace. This excludes existing centres of employment including our three major city centres

and industrial locations such as Team Valley, Quorum or Cobalt. There are in addition a number of sites that are mixed use.

Taking an example of Sunderland City Centre, there is an estimated 64.8 persons per ha³ employed in the City Centre and there are significant regeneration sites such as Vaux coming forward underpinned by the Local Plan. Vaux alone will deliver 60,000m² of employment floorspace.

5. **Supporting Economic Development**

5.1 The calculation of economic development supported directly by the schemes promoted through TCF is a little more complicated owing to data limitations in that sites through Local Plans / Employment Land Reviews are quite rightly given broad employment classifications. In addition, there is a limited certainty factor that can be applied to the sites which makes it difficult to establish tests of deliverability.

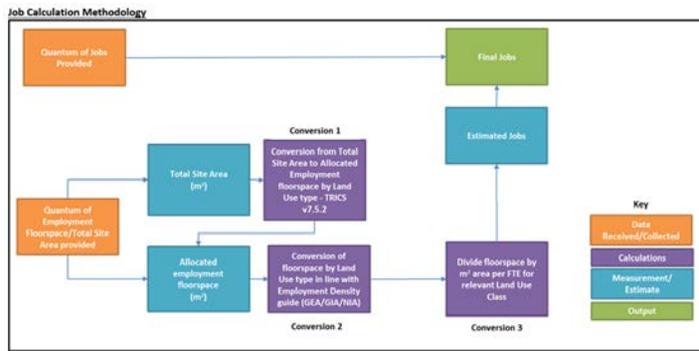
A number of approaches were considered,

- 1) Look to establish a jobs yield (Full Time Equivalent – FTE) through establishing a proxy use class with a midpoint density through converting allocated land into employment floorspace. (Not Preferred)
- 2) Make more detailed assessments of all sites to develop a yield (Not preferred)
- 3) Avoid the calculation of jobs yield and look to establish developable floorspace (Preferred)
- 4) Look to apply assumptions only to consented employment sites to get more accurate representations of supply, (Not preferred)

5.2 Whilst the calculation of jobs yields would provide a helpful picture about growth, it is subject to a significant number of assumptions and at such as scale is open to inaccuracies. The preferred option is to as far as practicable calculate the amount of employment generating floorspace albeit with significant caveats. This will then lead us to establish the support that TCF is providing using the proximity analysis (see above) to new opportunities.

5.3 We have therefore applied a two-step conversion methodology below to calculate the employment generating floorspace of the allocated sites. We are clear that a yield can be calculated using step 3 at a future date and certainly at a more focused geography.

³ Business Register and Employment Survey (BRES) (2018), Open Access, <https://www.nomisweb.co.uk/query/construct/summary.asp?mode=construct&version=0&dataset=189>



directly supported by or will benefit from the TCF programme. This can be summarised as,

	Homes	Employment Floorspace
Directly supported by TCF interventions	9861	77.76ha
Sites that would reasonably benefit from new sustainable transport links	21,153 (+35,738 with existing permissions)	407.04ha
Total	69,205	484.8ha

The sites mapped by thematic package are available in Appendix 3, the data used and detailed authority maps are available upon request.

7 Conclusion

7.1 Ultimately there may be a need to monitor the success of this programme in what it has delivered. One of the potential indicators is around TCF's contribution to new homes. It is suggested that at a programme level a review period is planned five years post build to understand the link between the programme and new homes and jobs that have been delivered or are underway. This could refer to the yield figure above.

7.2 Whilst there are many externalities which could affect the achievement of this yield, this analysis will at the very least be an update between transport infrastructure delivery and the impacts on creation of new demand, the learning from which can be applied to subsequent projects. Data to supplement this review will typically be sourced from Local Plan Annual Monitoring Reports together with updated SHLAA's and ELR's. If possible, there is the potential to also link this process to any travel plans that may support new development and create a picture of modal use which may be impacted by the provision of new infrastructure.

5.4 Quantum of Allocated Employment land/ Total Site Area

The global figure of all employment land calculated is 3919ha or 39,190,000sqm.

5.5 Conversion 1: Allocated Employment land

The employment land allocations provide the global figure of size of the sites. Not all sites are subject to TCF support. 5,233,280sqm (523.3ha) are directly related to TCF and 27,36,000sqm (2736ha) of allocated land would reasonably benefit from new sustainable transport links. A reduction factor needs to be applied to get from the site size to allocated employment floorspace measured as Net Internal Area via GEA.

On the assumption that we use the midpoint density in the HCA's Employment Density Guide for consistency we have utilised B1c. Based on data from the TRICS 7.5.2, this results in a reduction factor of 0.382. Applying this to the data results in a floorspace of,

3,244,000sqm (324.4ha). sites directly supported by TCF interventions
16,963,200sqm (1696ha) that would reasonably benefit from new sustainable transport links.

This is measured as Gross External Area.

5.6 Conversion 2: Conversion of Floorspace by Land Use Type

Once we have the employment floorspace in Gross External Area it is necessary to apply a further reduction factor to calculate the Net Internal Area associated with a B1c use class. NIA is stipulated as a measure in the HCA's Employment Density Guide. The factor to reduce it by is 0.76. Applying this results in a floorspace of 777,600sqm (77.76ha) sites directly supported by TCF interventions and 4,070,400sqm (407.04ha) that would reasonably benefit from new sustainable transport links

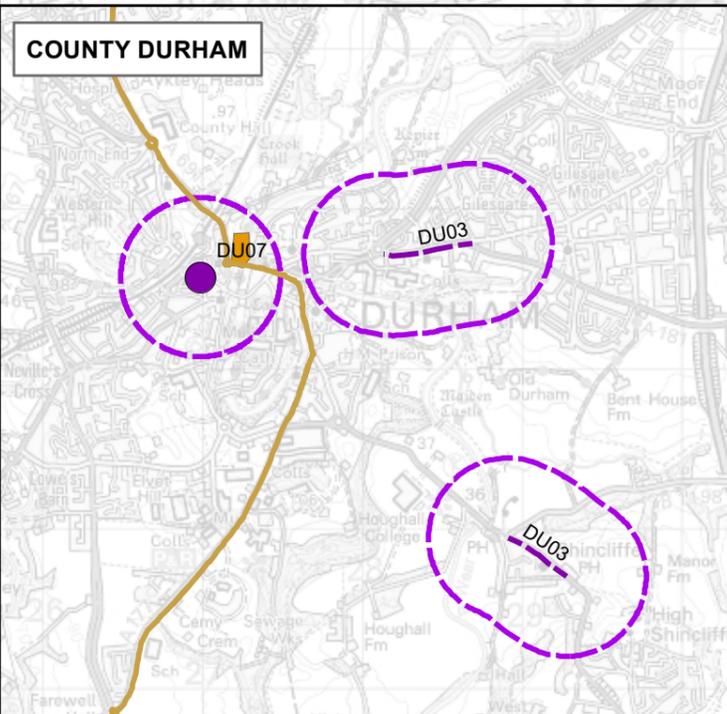
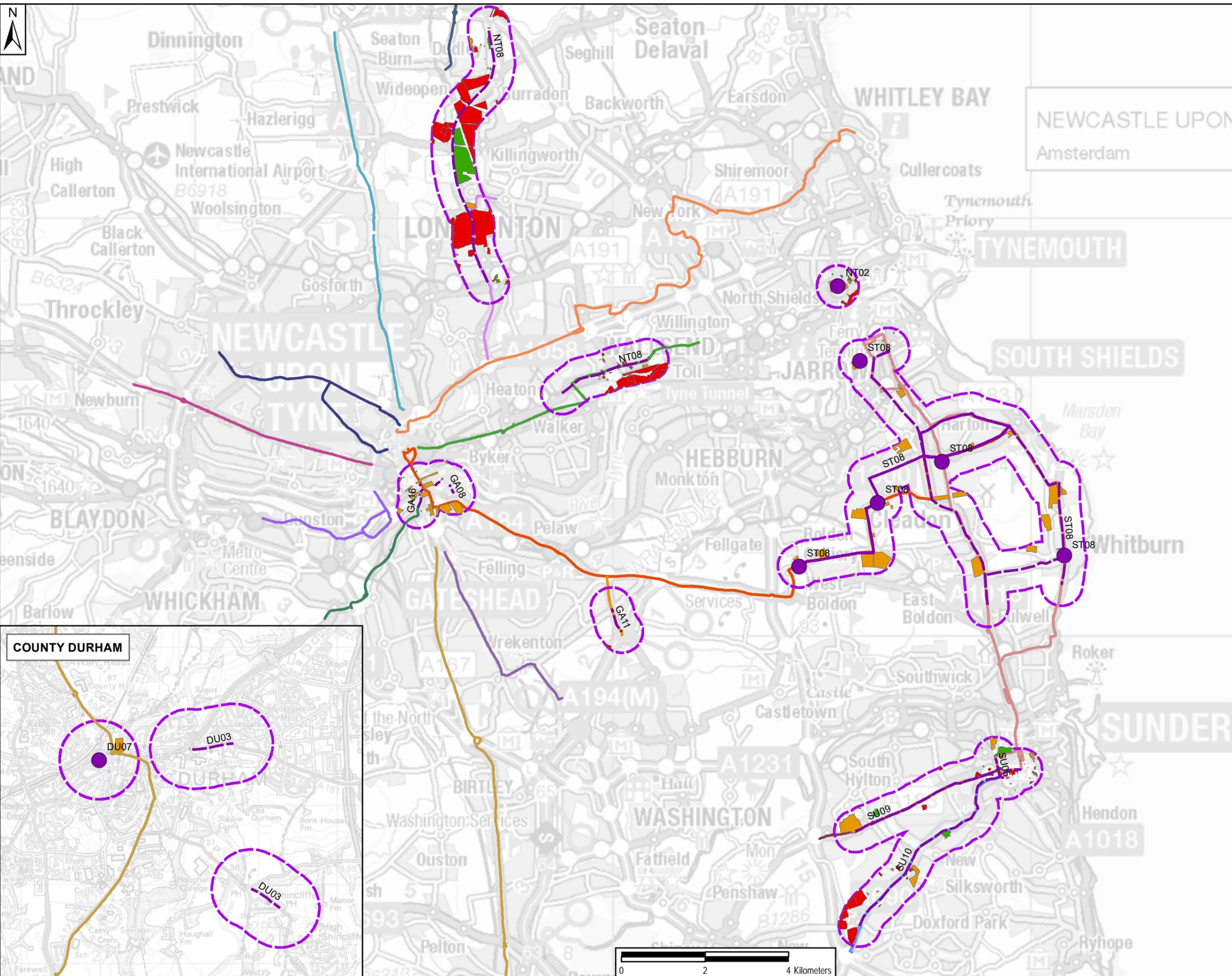
6 Results

6.1 The above analysis demonstrates using the data available showcases a significant amount of new homes and employment generating floorspace which can be

Appendix 2: Data sources

Authority	Data Source	Link
Durham	Employment Land review Draft Local Plan SHLAA	http://durhamcc-consult.limehouse.co.uk/file/5423365 http://durhamcc-consult.limehouse.co.uk/file/5429026 https://www.durham.gov.uk/article/3280/Strategic-Housing-Land-Availability-Assessment-and-Brownfield-Register
Gateshead	Employment Land review Core Plan and SHLAA	https://www.gateshead.gov.uk/media/1959/EL-31-Gateshead-Employment-Land-Review/pdf/EL31-Gateshead-Employment-Land-Review.pdf?m=636657844357700000 https://www.gateshead.gov.uk/media/7765/Core-Strategy-and-Urban-Core-Plan-for-Gateshead-and-Newcastle/pdf/Core-Strategy-and-Urban-Core-Plan-for-Gateshead-and-Newcastle_SMALLER.pdf?m=636619103092500000 https://www.gateshead.gov.uk/media/7771/SHLAA-October-2017/pdf/Draft-SHLAA-report_(1).pdf
Newcastle	HELAA databases and interactive map Appendix 1 - Schedule of suitable housing sites and mixed use sites Appendix 2 - Schedule of suitable standard economic (offices, industrial and warehousing sites Core Plan	https://www.newcastle.gov.uk/services/planning-building-and-development/planning-policy/housing-and-economic-land-availability https://www.gateshead.gov.uk/media/7765/Core-Strategy-and-Urban-Core-Plan-for-Gateshead-and-Newcastle/pdf/Core-Strategy-and-Urban-Core-Plan-for-Gateshead-and-Newcastle_SMALLER.pdf?m=636619103092500000

Northumberland	Employment Land review assessment paper Local Plan and SHLAA	https://www.northumberland.gov.uk/NorthumberlandCountyCouncil/media/Planning-and-Building/planning%20policy/Local%20Plan/Employment-Land-Strategy-and-Assessment-of-Sites-Technical-Paper-December-2018-Final_1.pdf https://www.northumberland.gov.uk/NorthumberlandCountyCouncil/media/Planning-and-Building/planning%20policy/Studies%20and%20Evidence%20Reports/Housing%20Studies/1.%20SHLAA/SHLAA-5yr-Supply-2018-Report-Final.pdf http://northumberland-consult.limehouse.co.uk/file/5261020
North Tyneside	Employment Land review Local Plan and SHLAA	https://my.northtyneside.gov.uk/sites/default/files/web-page-related-files/Employment%20Land%20Review%202015.pdf https://my.northtyneside.gov.uk/sites/default/files/web-page-related-files/North%20Tyneside%20Local%20Plan%202017-2032.pdf https://my.northtyneside.gov.uk/sites/default/files/web-page-related-files/Strategic%20Housing%20Land%20Availability%20app1.pdf
South Tyneside	Strategic Land Review Consultation draft local plan and SHLAA	https://www.southtyneside.gov.uk/article/36024/Strategic-Land-Review https://www.southtyneside.gov.uk/article/36012/Emerging-Local-Plan https://www.southtyneside.gov.uk/article/36023/Housing-Land-Supply
Sunderland	Employment Land review Draft core strategy and SHLAA	https://www.sunderland.gov.uk/media/20880/SD-37-Sunderland-Employment-Land-Review-2016-pdf/SD_37_Sunderland_Employment_Land_Review_(2016).pdf?m=636802955306300000 https://www.sunderland.gov.uk/media/20849/SD-1-Core-Strategy-and-Development-Plan-2015-33-Publication-Draft/pdf/SD_1_Core_Strategy_and_Development_Plan_2015-2033_Publication_Draft.pdf?m=636803778731670000 https://www.sunderland.gov.uk/article/15206/Sunderland-Housing-Land-Availability-Assessment-SHLAA-2017



Project Title:
 TRANSFORMING CITIES
 TRANCHE2
Client:
 NORTH EAST JOINT
 TRANSPORT COMMITTEE

LEGEND

Development Certainty

- Red
- Amber
- Green
- Preferred Programme Bus Corridors
- Preferred Programme Bus Corridors
- Preferred Programme Bus Corridors 500m Buffer

High Frequency Bus Corridors

- Seaton Burn
- Coast Road
- Wallsend
- A188/A189
- Old Durham Road
- Westgate Road
- Durham A167 Corridor
- Bensham Road
- Dunston
- Barrack Road and Central Motorway
- Sunderland A690
- Chester Road Sunderland
- Cramlington
- South Shields to Sunderland Corridor
- Leam Lane Corridor
- South Shields to Newcastle Corridor

ITS Package upgrade to 160 junctions and 165 pedestrian crossings.

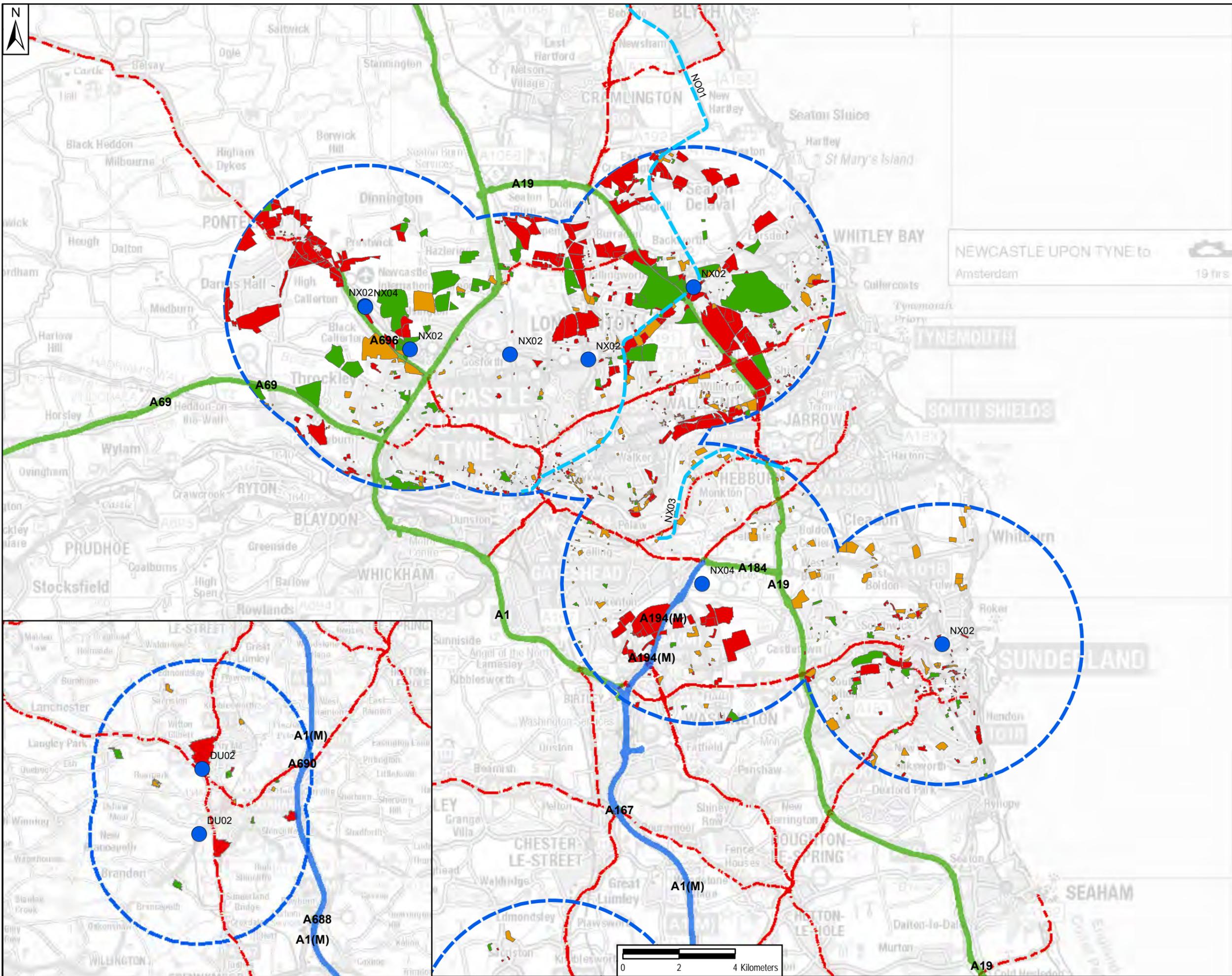
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BUS CORRIDORS AND HOUSING SITES
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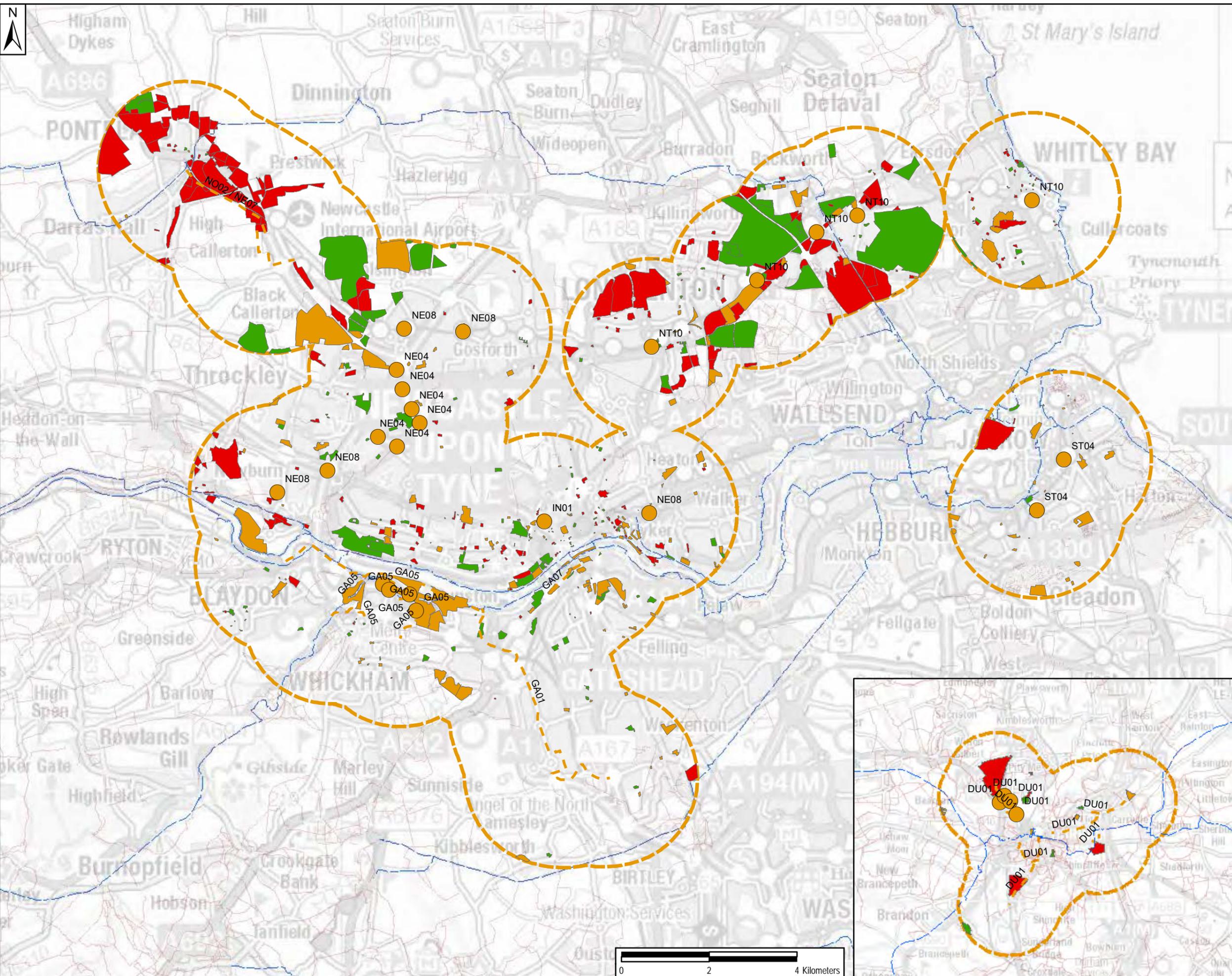
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 TRANSFORMING CITIES TRANCHE2
Client:
 NORTH EAST JOINT TRANSPORT COMMITTEE
LEGEND

- Development Certainty**
- Red
 - Amber
 - Green
 - Preferred Park & Ride
 - Preferred Programme Park and Ride 5km Buffer
- Strategic Road Network**
- A Road
 - Motorway
 - Major Road Network

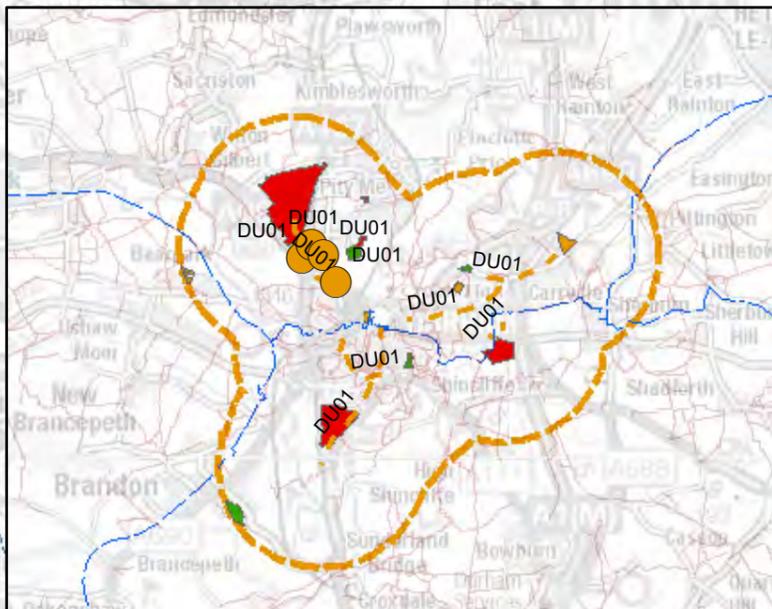
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Project Title:
 TRANSFORMING CITIES TRANCHE2
Client:
 NORTH EAST JOINT TRANSPORT COMMITTEE

LEGEND

- Development Certainty**
- Red
 - Amber
 - Green
 - Preferred scheme Cycle Walking
 - Preferred Programme Cycle Walking
 - Preferred Programme Schemes Cycling and Walking 2km Buffer
 - Public Right of Way
 - National Cycle Network

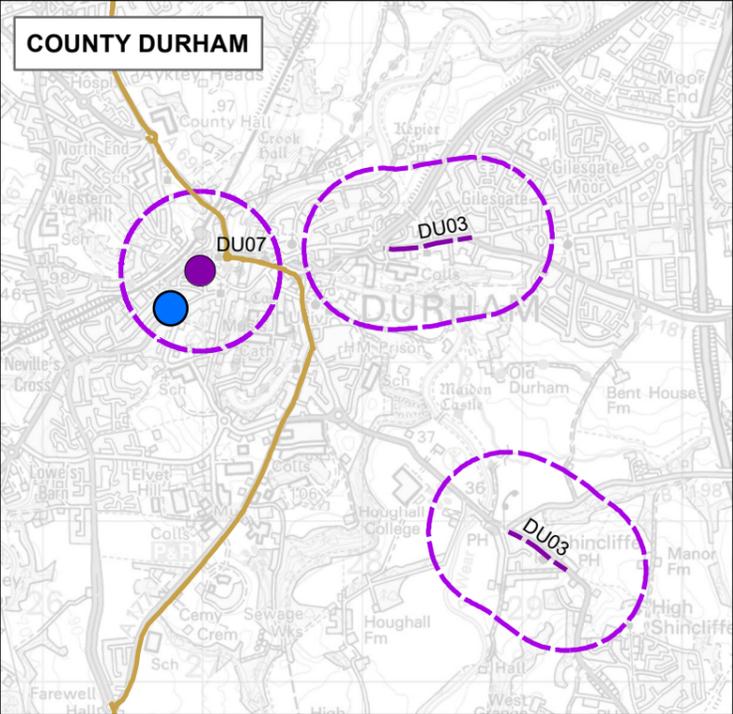
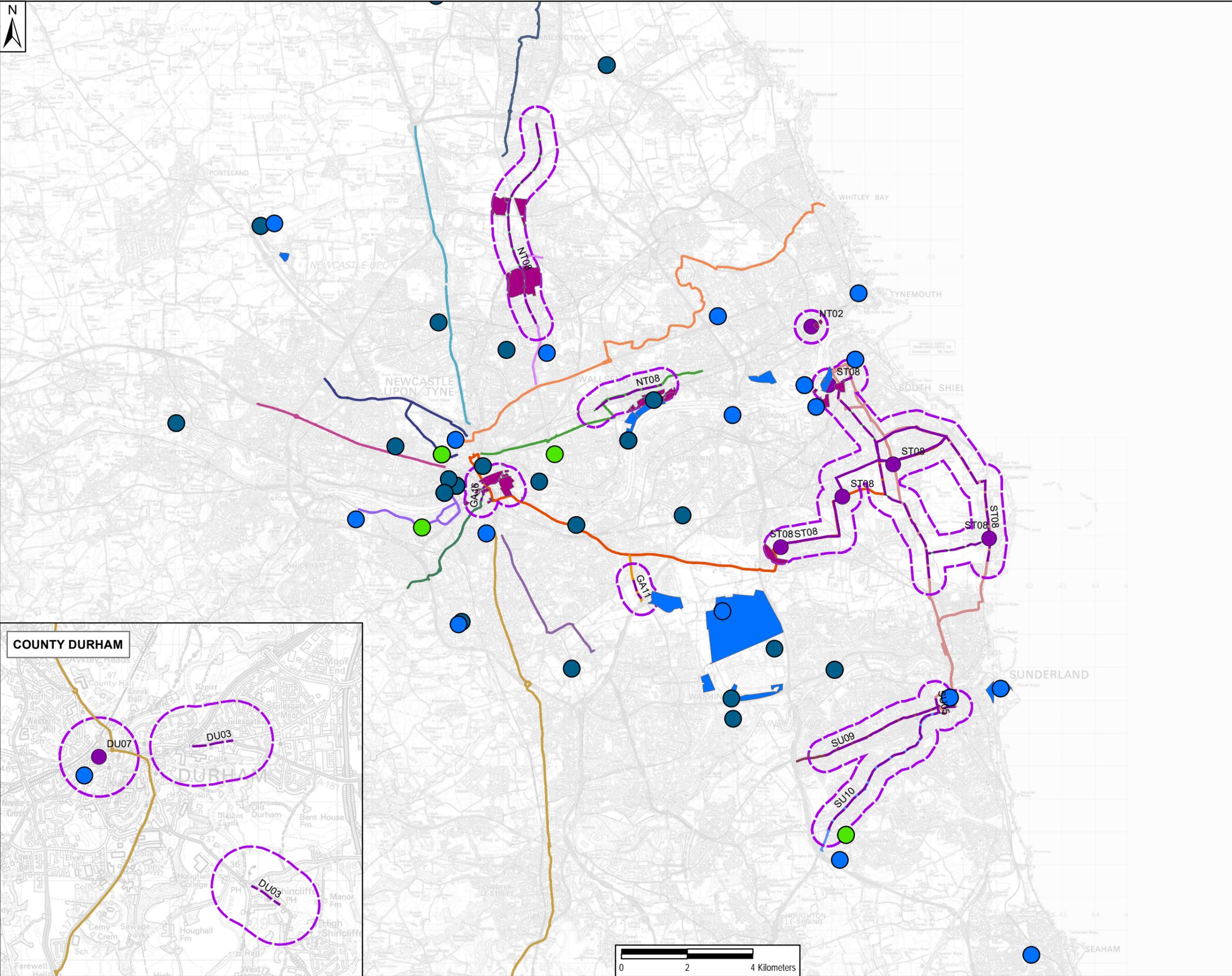


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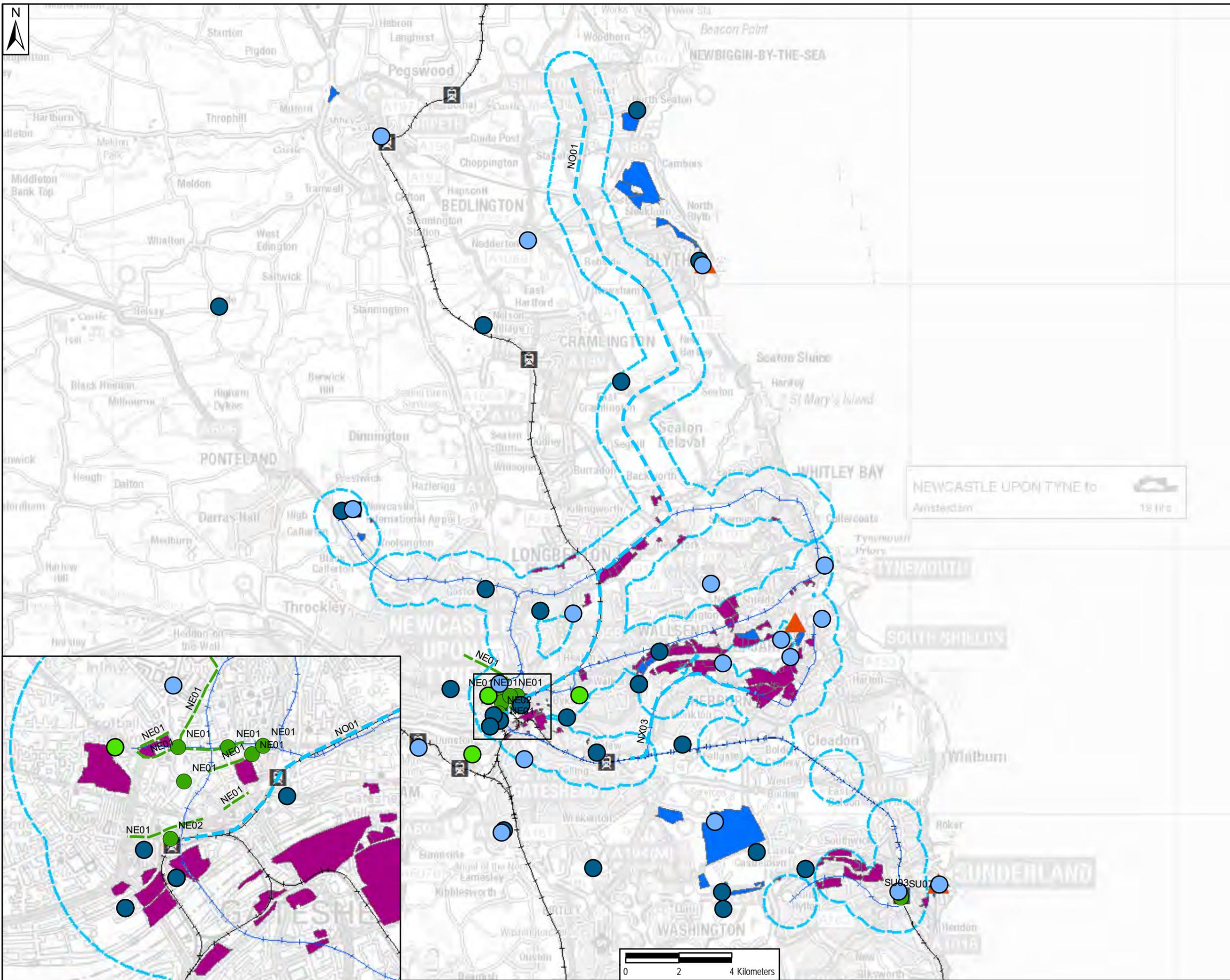


- Employment Sites
- Enterprise Zones
- Key Economic Centres – TfN
- Northern Powerhouse Independent Economic Review - Prime Capabilities
- Northern Powerhouse Independent Economic Review - Enabling Capabilities
- Medium Cost Scheme Bus Corridors
- Medium Cost Scheme Bus Corridors
- Medium Cost Scheme Bus Corridors 500m Buffer

High Frequency Bus Corridors

- Seaton Burn
- Coast Road
- Wallsend
- A188/A189
- Old Durham Road
- Westgate Road
- Durham A167
- Bensham Road
- Dunston
- Barrack Road and Central Motorway
- Sunderland A690
- Chester Road Sunderland
- Cramlington
- South Shields to Sunderland Corridor
- Leam Lane Corridor
- South Shields to Newcastle Corridor

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Client:
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LEGEND

- Employment Sites
- Enterprise Zones
- Medium Cost Scheme Metro and Local Rail Corridors 1km Buffer
- Medium Cost Schemes Delivering the Metro and Local Rail Strategy
- Medium Cost Schemes City Centre Gateways
- Medium Cost Schemes City Centre Gateways
- Key Economic Centres – TN
- Northern Powerhouse Independent Economic Review - Prime Capabilities
- Northern Powerhouse Independent Economic Review - Enabling Capabilities
- Tyne and Wear Metro Stations
- Tyne and Wear Metro
- National Rail Stations
- Railway Track
- Newcastle International Airport
- Ports

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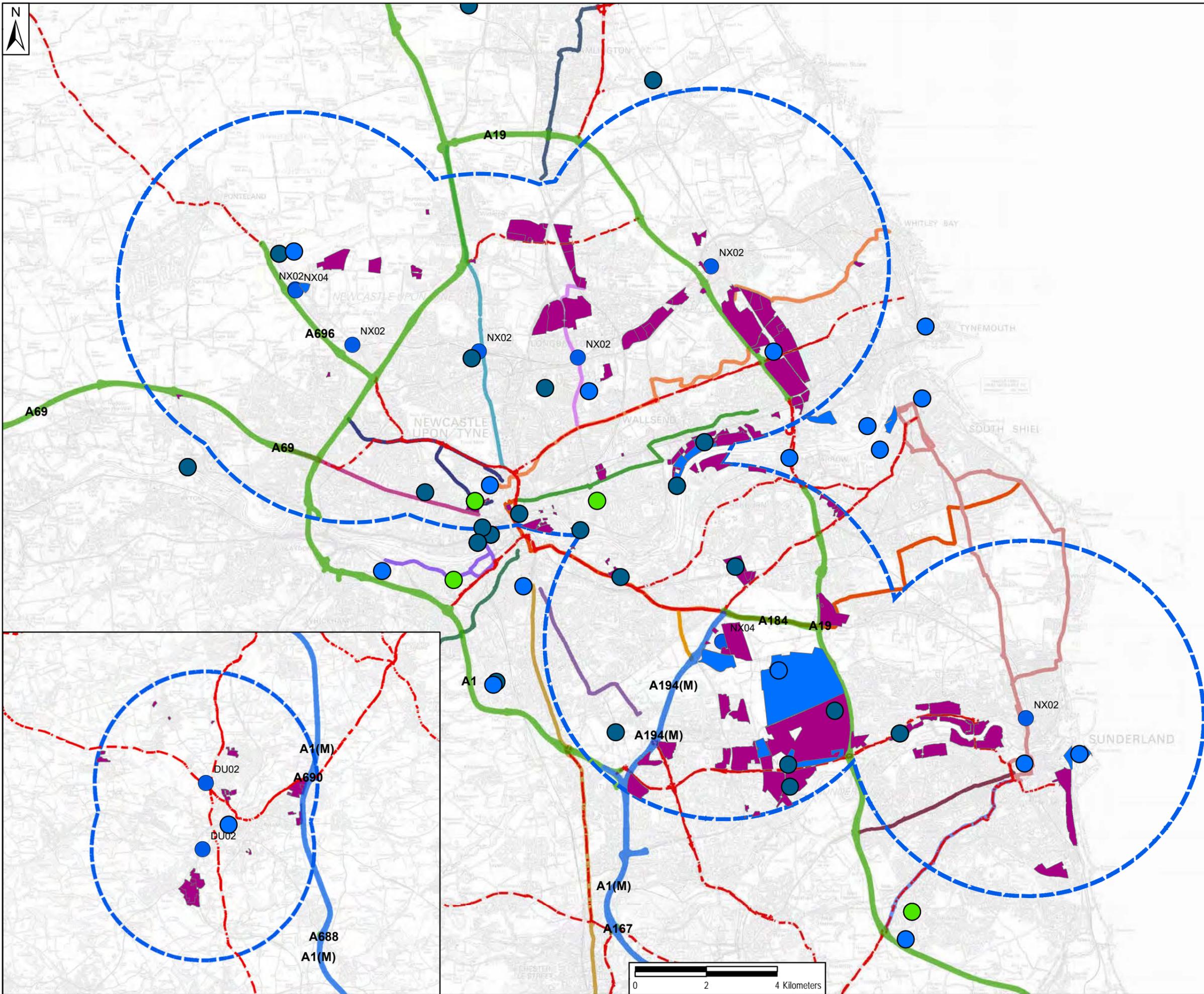
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TRANCHE2
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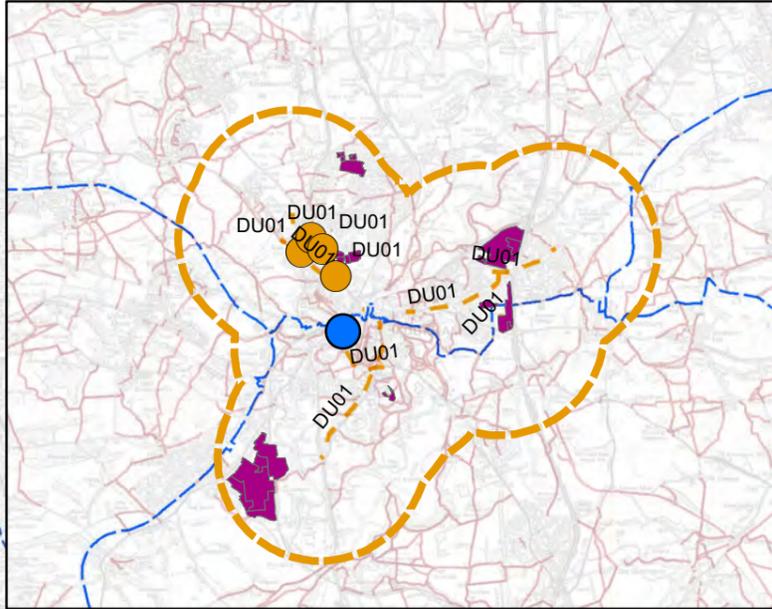
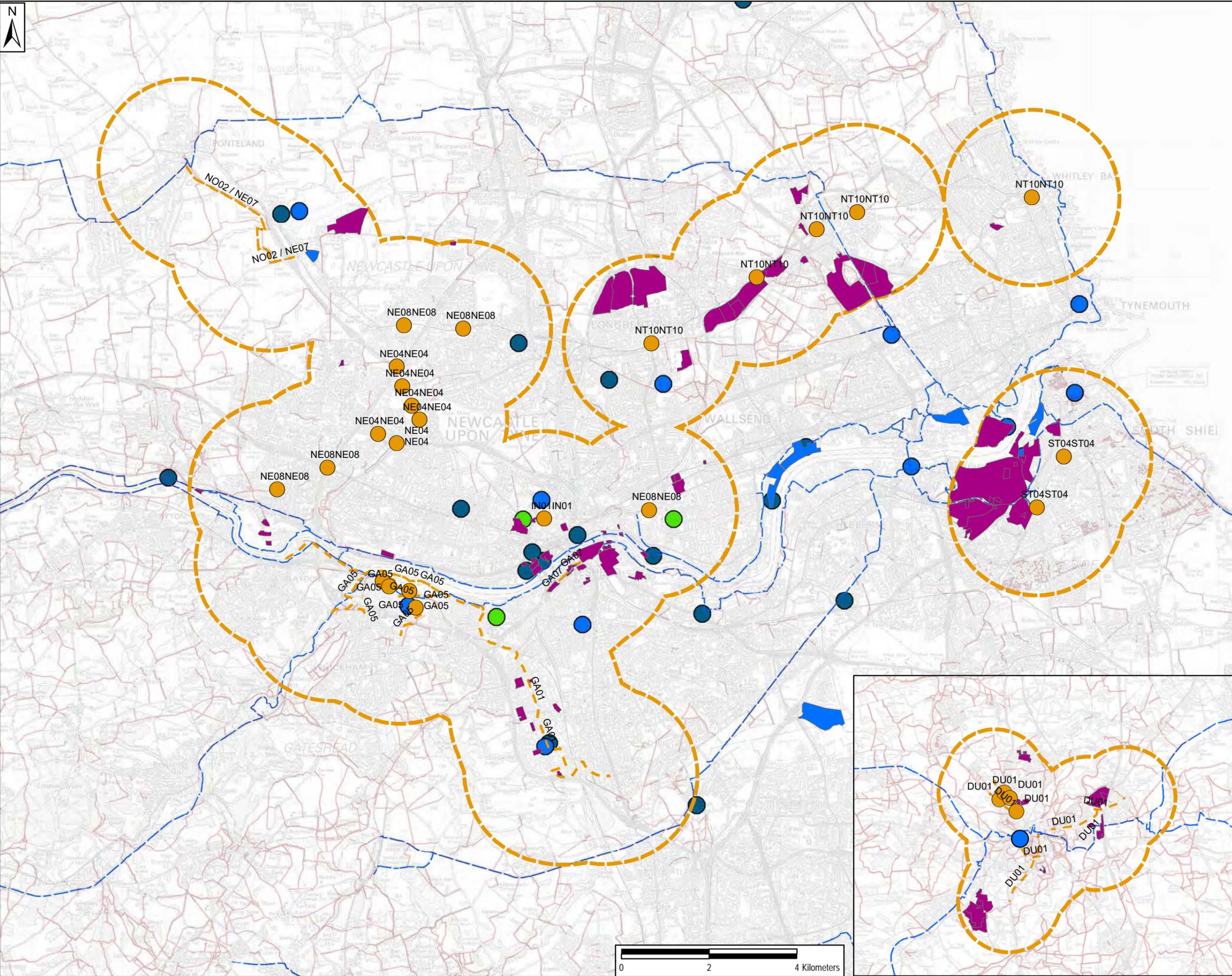
- LEGEND**
- Employment Sites
 - Enterprise Zones
 - Medium Cost Scheme Park and Ride 5km Buffer
 - Medium Cost Scheme Park & Ride
 - Key Economic Centres – TfN
 - Northern Powerhouse Independent Economic Review - Prime Capabilities
 - Northern Powerhouse Independent Economic Review - Enabling Capabilities

- Strategic Road Network**
- A Road
 - Motorway
 - Major Road Network

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Rev: 001
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Project Title:
 TRANSFORMING CITIES TRANCHE2
Client:
 NORTH EAST JOINT TRANSPORT COMMITTEE

LEGEND

- Employment Sites
- Enterprise Zones
- Medium Cost Scheme Cycle Walking
- Medium Cost Scheme Cycle Walking
- Medium Cost Schemes Cycling and Walking 2km Buffer
- Key Economic Centres – TfN
- Northern Powerhouse Independent Economic Review - Prime Capabilities
- Northern Powerhouse Independent Economic Review - Enabling Capabilities
- Public Right of Way
- National Cycle Network

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Drawing Title:

WALKING AND CYCLING CORRIDORS AND EMPLOYMENT SITES

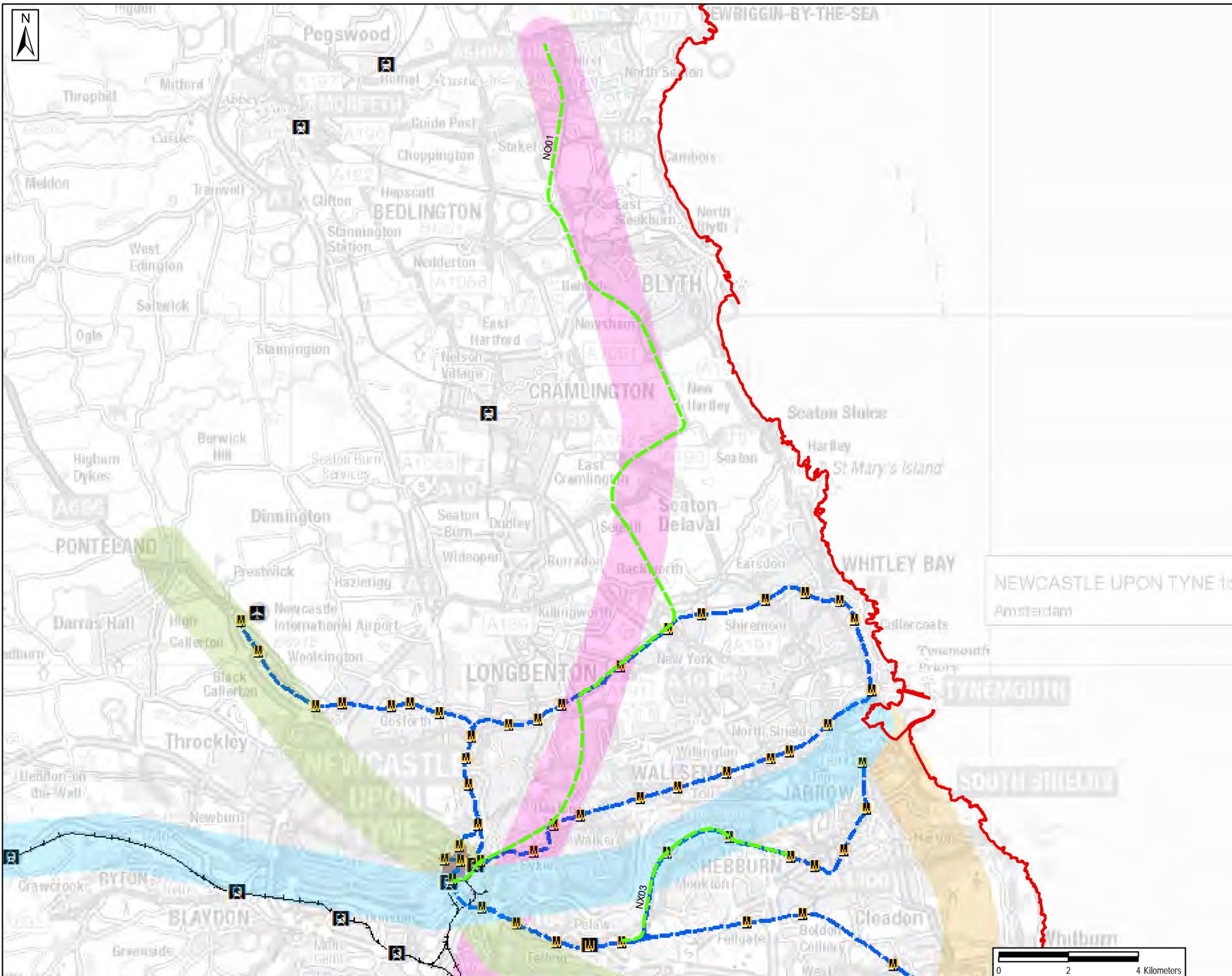
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APPENDIX

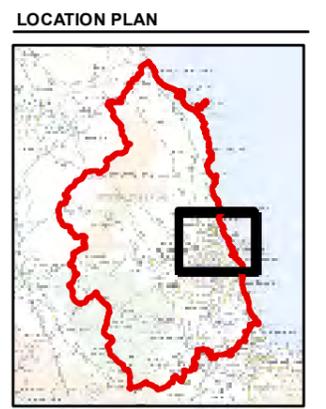
Maps of Thematic Packages And Corridors





Project Title:
 TRANSFORMING CITIES
 TRANCHE2
Client:
 NORTH EAST JOINT
 TRANSPORT COMMITTEE

- LEGEND**
- Preferred Package Metro and Local Rail
 - Increase in Metro Frequency
 - NELEP Boundary
 - Durham City Centre
 - Newcastle City Centre
 - Sunderland City Centre
 - Metro Network
 - National Rail Stations
 - Railway Track
 - Newcastle International Airport
 - Banks of the Tyne
 - Cities and Airport
 - North and South
 - River Wear

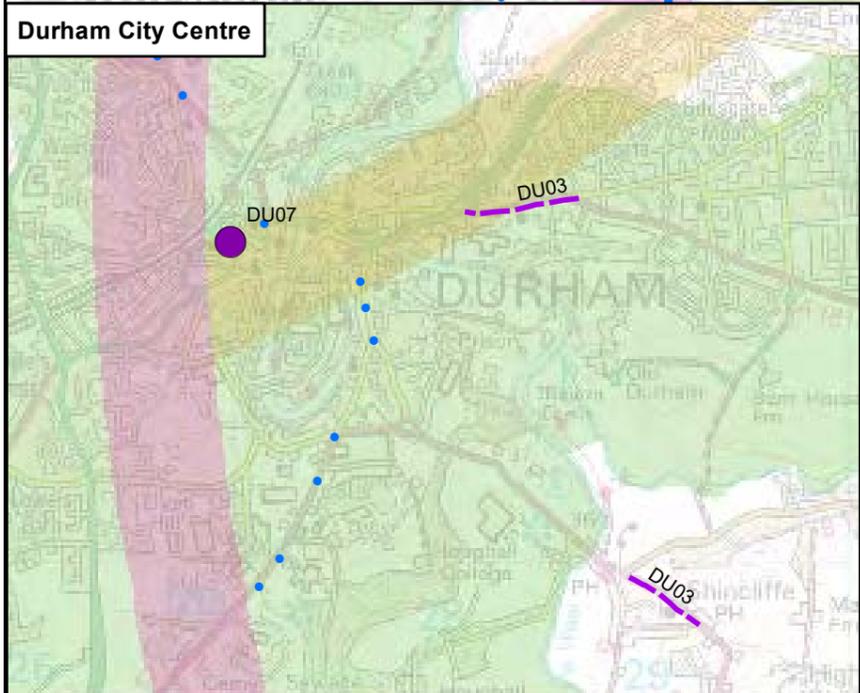
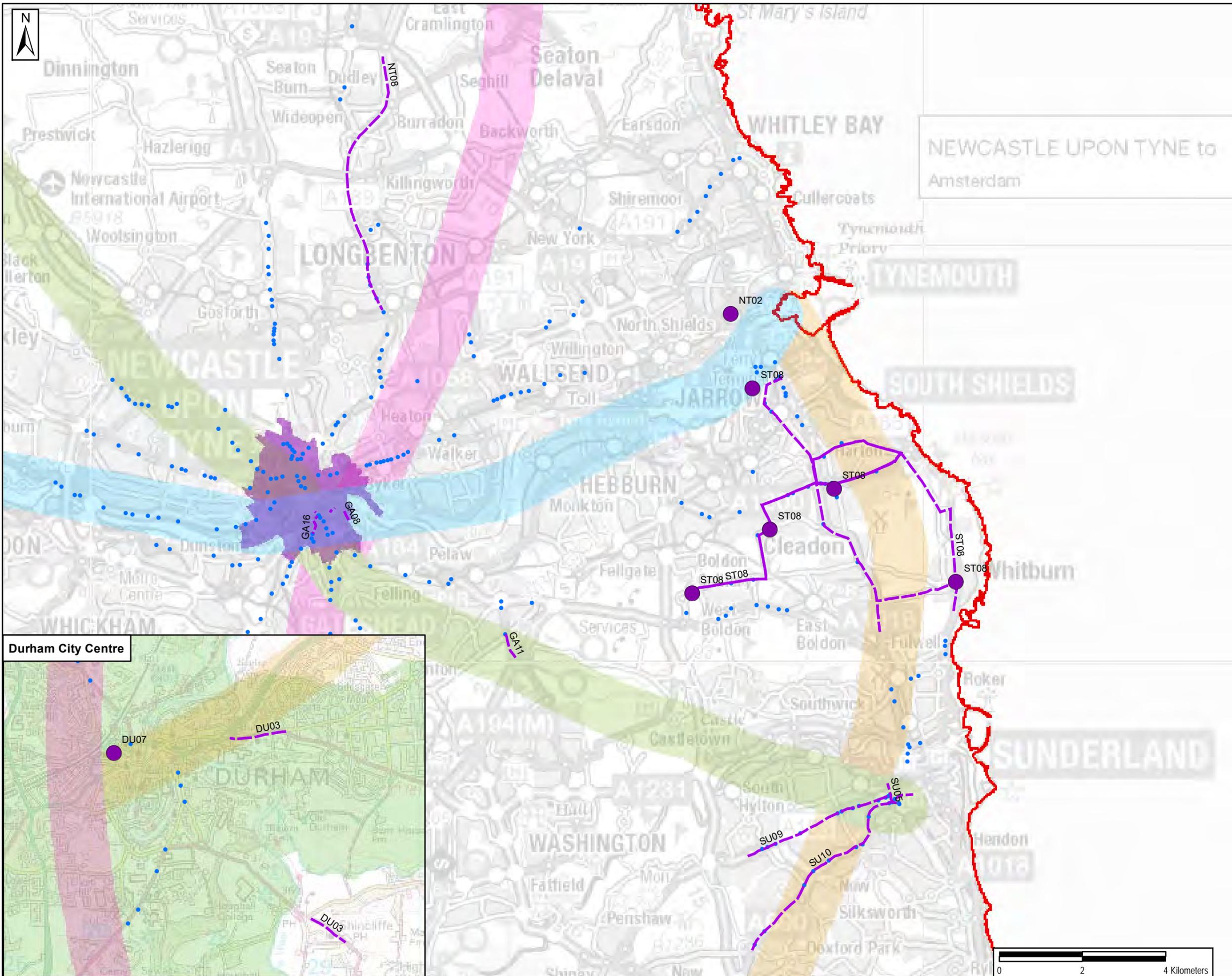


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Project Title:
TRANSFORMING CITIES
TRANCHE2
Client:
NORTH EAST JOINT
TRANSPORT COMMITTEE

- LEGEND**
- Preferred Package Bus Corridors
 - Preferred Package Bus Corridors
 - ITS Junction Locations
 - ▭ NELEP Boundary
 - ▭ Newcastle City Centre
 - ▭ Durham City Centre
 - ▭ Sunderland City Centre
 - ▭ Bus Congestion Location
 - ▭ Banks of the Tyne
 - ▭ Cities and Airport
 - ▭ North and South
 - ▭ River Wear



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CORRIDORS

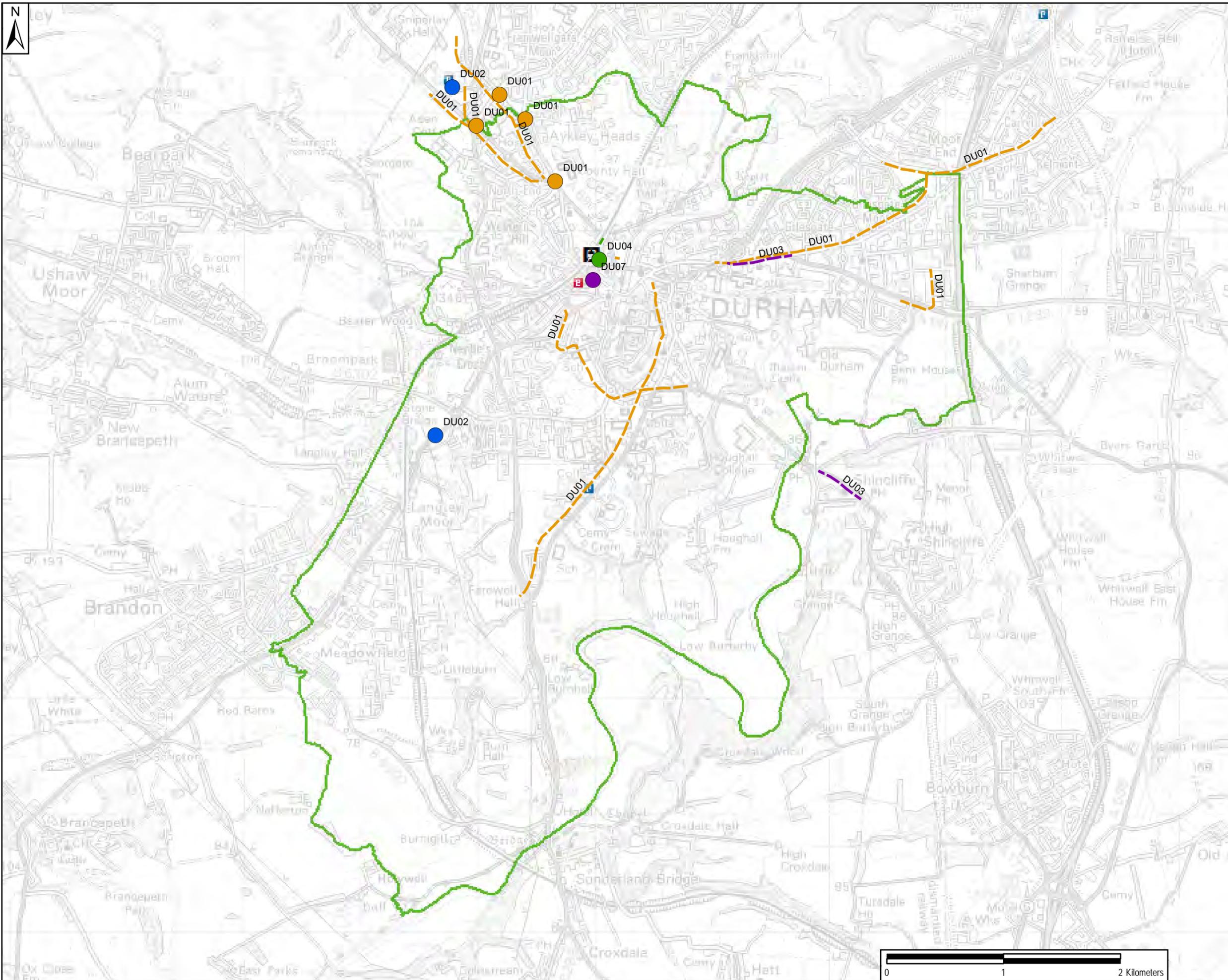
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TRANSFORMING CITIES
TRANCHE2
Client:
NORTH EAST JOINT
TRANSPORT COMMITTEE

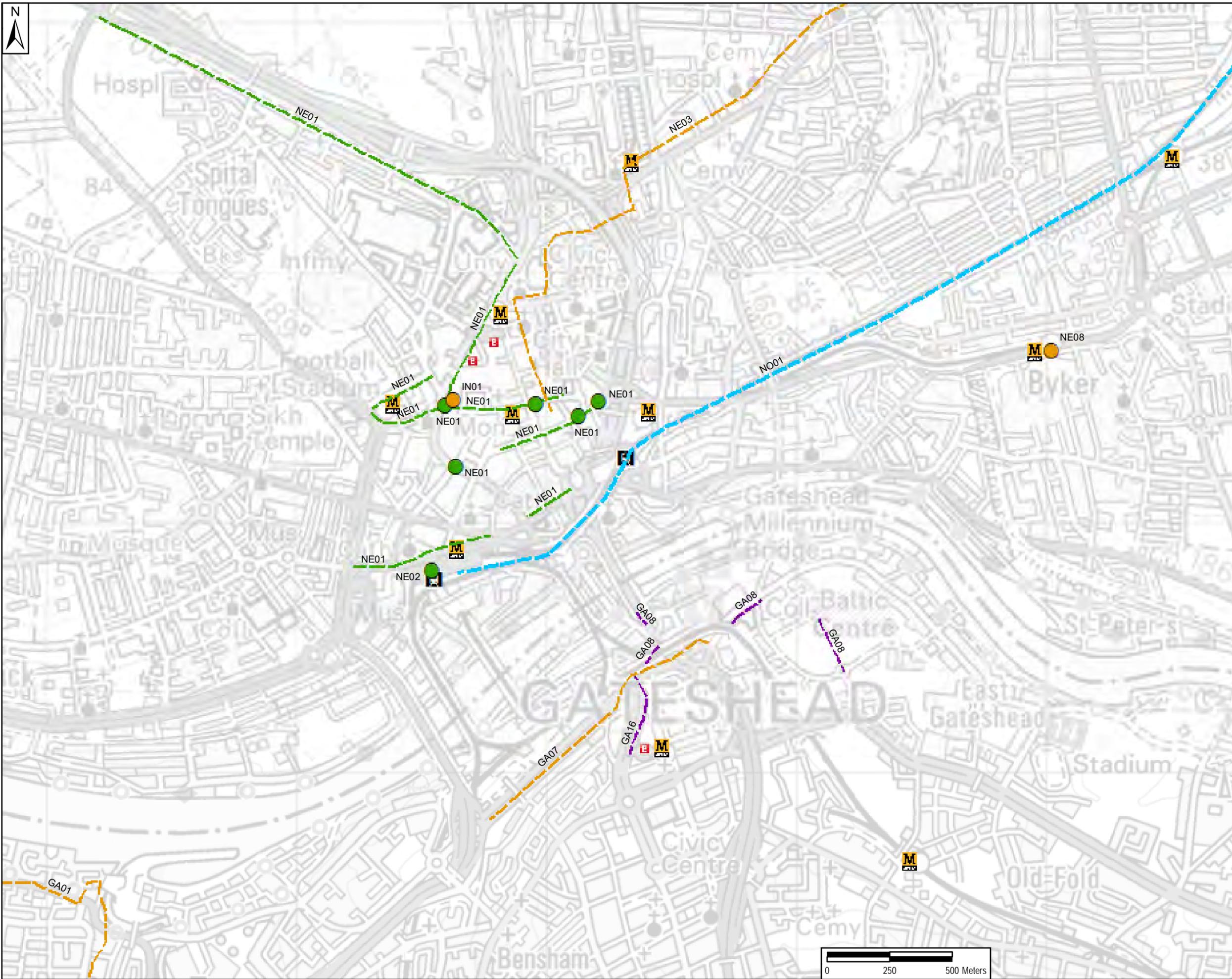
- LEGEND**
- Preferred Package for Park & Ride Schemes
 - Preferred Package for Cycle and Walking
 - Preferred Package for City Centre Gateways
 - Preferred Package for Bus Schemes
 - Preferred Package for Cycle and Walking Schemes
 - Preferred Package for City Centre Gateways
 - Preferred Package for Bus Schemes
 - Preferred Package for Metro and Local Rail Strategy
 - Durham City Centre
 - + Bus Station
 - + Existing Car Parks
 - National Rail Stations



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Project Title:
TRANSFORMING CITIES
TRANCHE2
Client:
NORTH EAST JOINT
TRANSPORT COMMITTEE

- LEGEND**
- Preferred Package for Park & Ride Schemes
 - Preferred Package for Cycle and Walking Schemes
 - Preferred Package for City Centre Gateways
 - Preferred Package for Bus Schemes
 - Preferred Package for Cycle and Walking Schemes
 - Preferred Package for City Centre Gateways
 - Preferred Package for Bus Schemes
 - Preferred Package for Metro and Local Rail Strategy
 - Newcastle Boundary
 - Metro Network
 - National Rail Stations
 - Bus Station
- LOCATION PLAN**



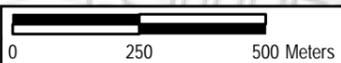
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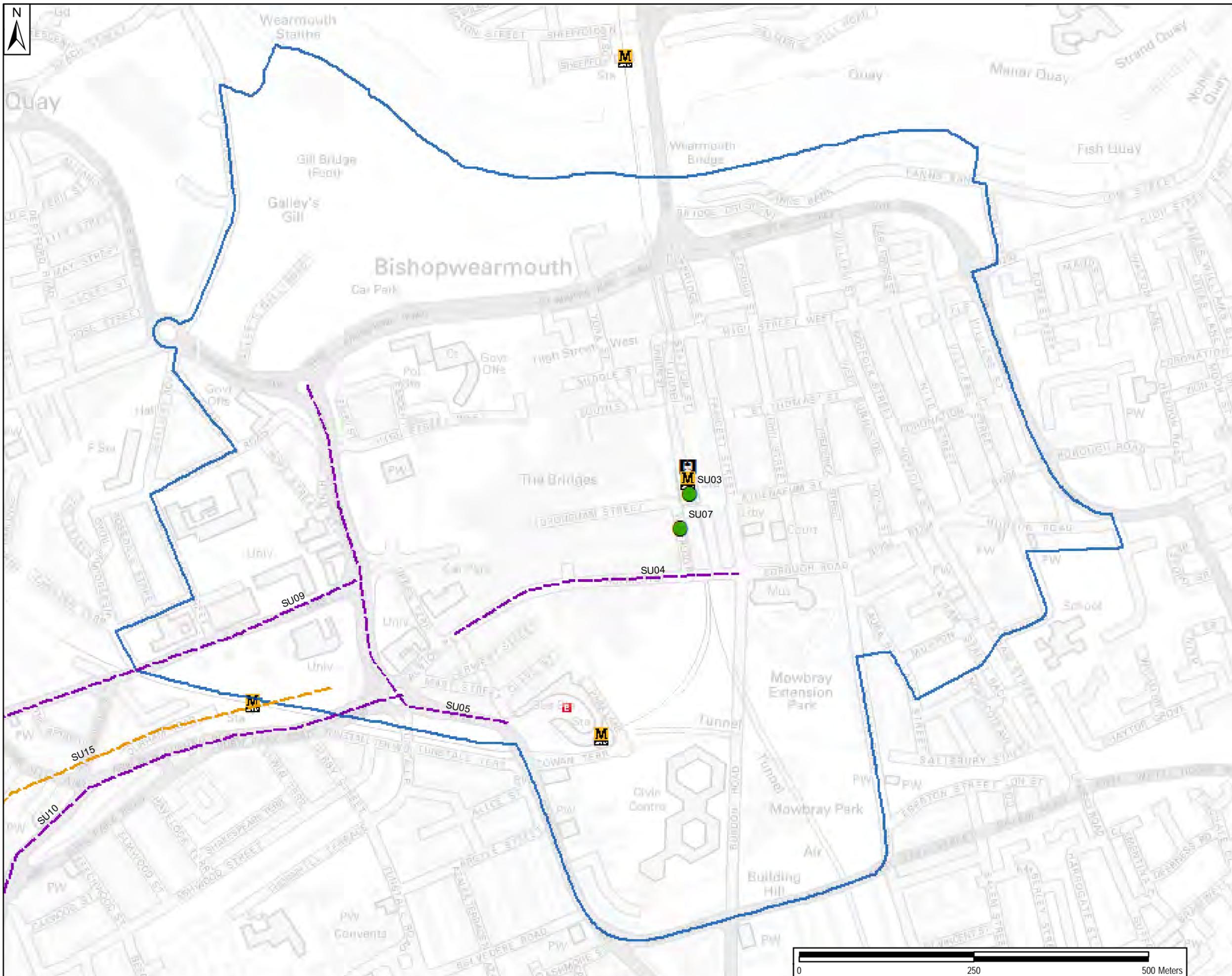
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NEWCASTLE
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Project Title:
 TRANSFORMING CITIES
 TRANCHE2
Client:
 NORTH EAST JOINT
 TRANSPORT COMMITTEE

- LEGEND**
- Preferred Package for Park & Ride Schemes
 - Preferred Package for Cycle and Walking
 - Preferred Package for City Centre Gateways
 - Preferred Package for Bus Schemes
 - Preferred Package for Cycle and Walking Schemes
 - Preferred Package for City Centre Gateways
 - Preferred Package for Bus Schemes
 - Preferred Package for Metro and Local Rail Strategy
 - Sunderland City Centre
 - + Bus Station
 - M Metro Network
 - R National Rail Stations



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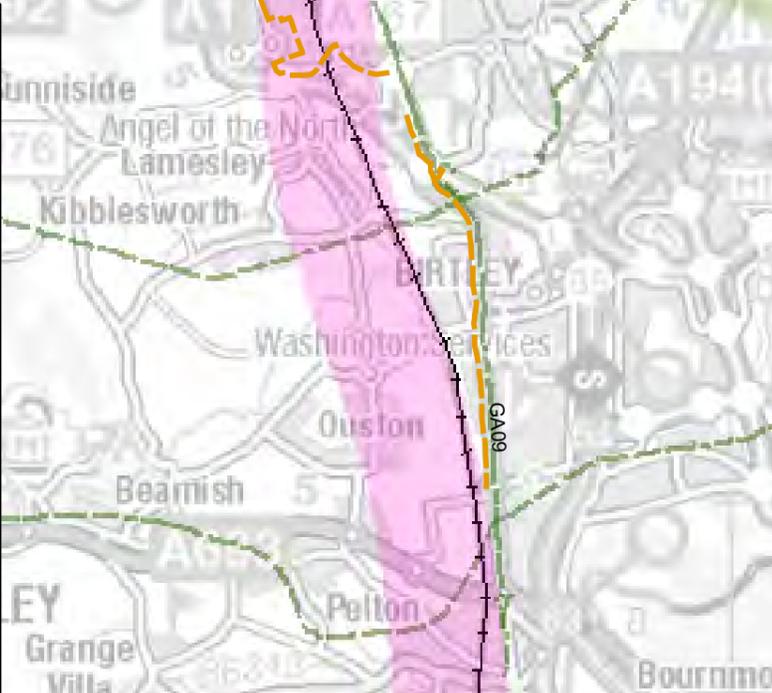
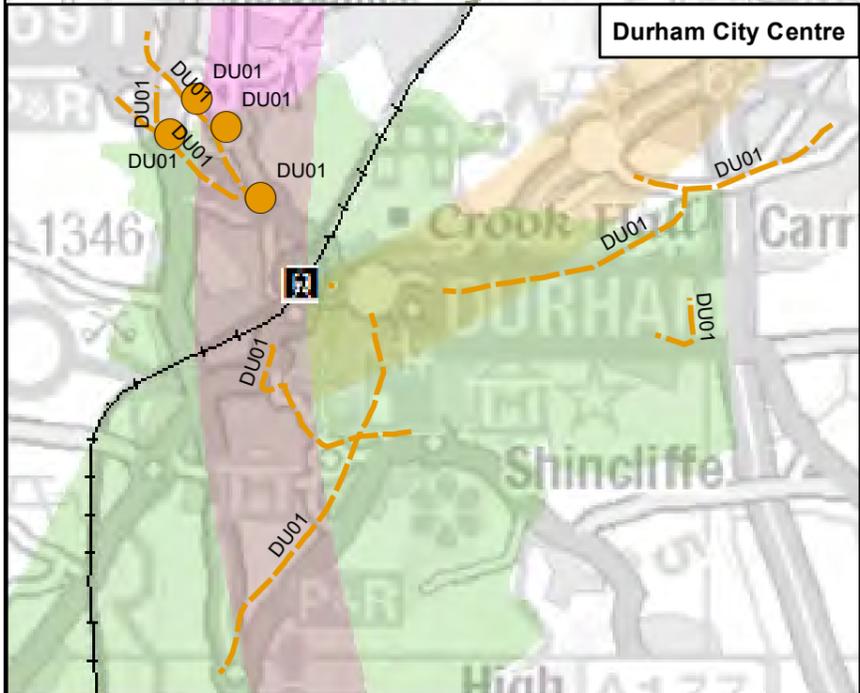
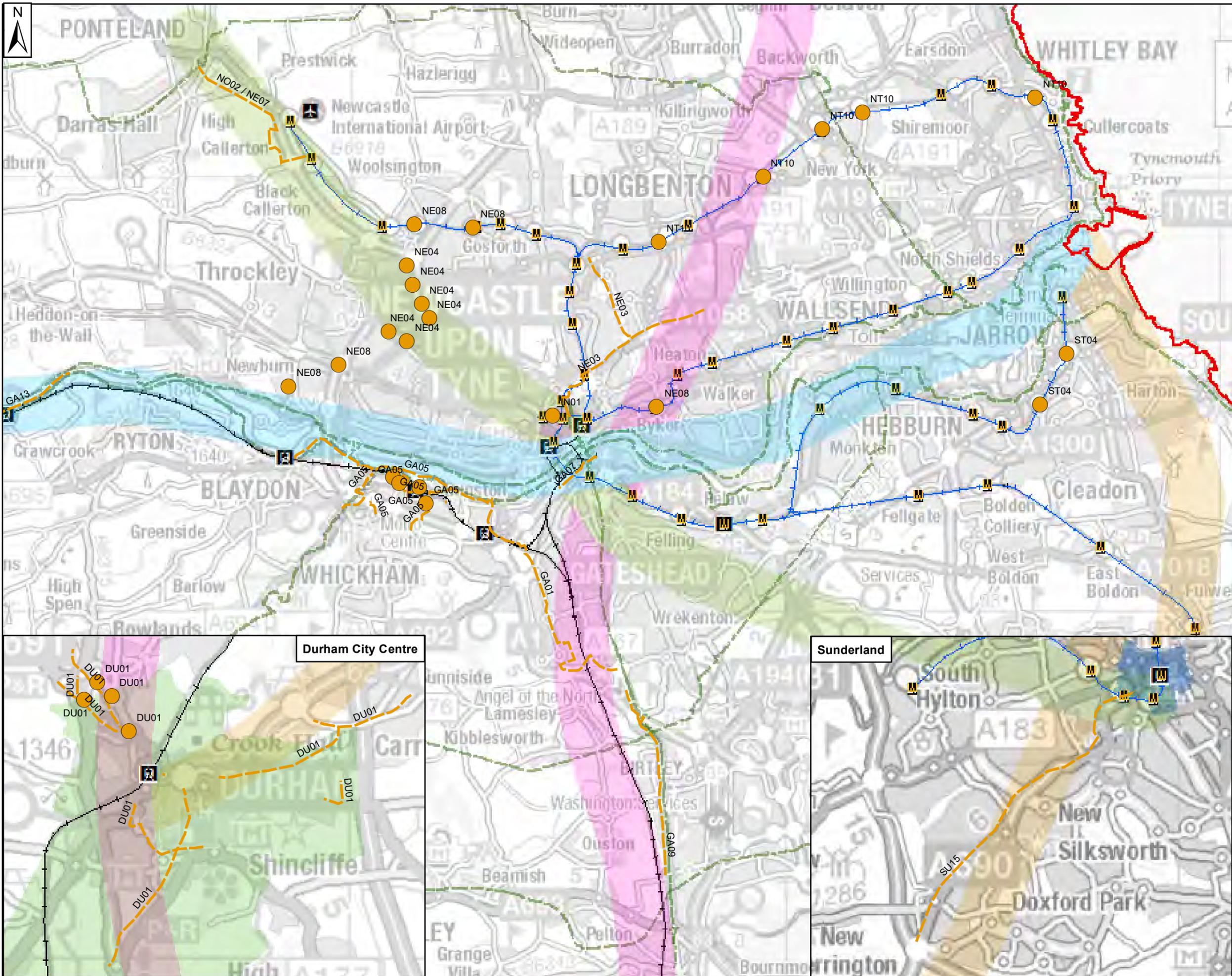
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 CENTRE GATEWAYS
 SUNDERLAND
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Project Title:
 TRANSFORMING CITIES
 TRANCHE2
Client:
 NORTH EAST JOINT
 TRANSPORT COMMITTEE

- LEGEND**
- Preferred Package for Cycle and Walking
 - Preferred Package for Cycle and Walking Schemes
 - Durham City Centre
 - Newcastle City Centre
 - Sunderland City Centre
 - NELEP Boundary
 - M Metro Network
 - R National Rail Stations
 - Metro Lines
 - Railway Track
 - National Cycle Network
 - A Newcastle International Airport
 - Banks of the Tyne
 - Cities and Airport
 - North and South
 - River Wear



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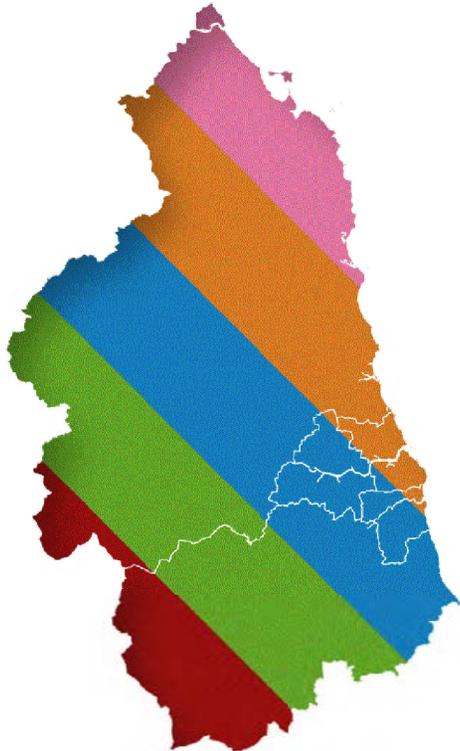
APPENDIX

Stakeholder Engagement Strategy & Communications Plan





STAKEHOLDER
ENGAGEMENT STRATEGY



CONTENTS

1. Introduction	4
2. Stakeholder Engagement Strategy	6
3. Aims and objectives	7
4. Governance.....	10
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Appendix A Programme Stakeholder Register (sample)

Appendix B Frequently Asked Questions

EXECUTIVE SUMMARY

This Stakeholder Engagement Strategy (SES) has been prepared as part of the Transforming Cities Fund (TCF) business case. The Region's Transforming Cities Programme envisages a £470million investment in public transport, sustainable transport and supporting capital investment. This is a hugely ambitious Programme of investment and is designed to transform and improve the economy, environment and society.

This document provides a background to the Transforming Cities Programme, outlines Thematic Packages and Schemes to be delivered within the Programme and provides the structure for individual scheme Delivery Partners to ensure engagement with stakeholders is effective, coordinated and ultimately supports delivery of a successful Programme.

It demonstrates the co-ordinated approach and commitment of the North East bid Partners to ensuring clear, concise and honest communications with our stakeholders. It provides guidance on the preferred approach to engagement and details our plans going forward in line with Programme development. It recommends appropriate terminology to be used by Partners for communications and sets out governance arrangements.

Governance processes and protocols are discussed as is the role of the Joint Transport Committee in regards to being the body with ultimate responsibility for delivery of the Programme and the role and relationship of the Transport North East Strategy Unit and LA7 Transport Strategy Board.

The Strategy also introduces a new temporary role of a dedicated Communications Manager whose main responsibility it is to support and liaise with Scheme Delivery Partners to ensure effective stakeholder engagement and consistency of approach.

1. INTRODUCTION

1.1. Transforming Cities Fund

- 1.1.1. As part of the Government's Industrial Strategy and the National Productivity Investment Fund, the Transforming Cities Fund (TCF) aims to drive up productivity through improved connections between urban centres and suburbs. To do this, the Government has determined that we need to invest in infrastructure to improve public and sustainable transport connectivity. Encouraging an increase in journeys made by low carbon, sustainable modes is a key objective of the fund.
- 1.1.2. The Department for Transport launched the Transforming Cities Fund in 2018 with 12 city-regions invited to bid for funding from a total pot of £1.28 billion.
- 1.1.3. Our Region's Transforming Cities Programme sees a £470million investment in public transport, sustainable transport and supporting capital investment.
- 1.1.4. This is a hugely ambitious Programme, which is designed to transform and improve the economy, environment and society in the North East.
- 1.1.5. This document is the Stakeholder Engagement Strategy prepared for introduction of the Programme.

1.2. The Transforming Cities Programme of Works

- 1.2.1. The North East's Transforming Cities Programme is one of the largest in the Country and involves investment in the following thematic packages:
 - **Transforming Bus Corridors:** key strategic bus corridors across the region.
 - **Transforming Cycling and Walking Corridors:** strategic cycle and walking routes around town and city centres and into regional gateways.
 - **Transforming City Centre Gateways:** improvements in and around Durham, Newcastle and Sunderland stations.
 - **Transforming Park and Ride:** park and ride improvements in Durham, Follingsby (A194M Whitemare Road), Callerton and other Metro sites.

- **Delivering the Metro and local Rail Strategy:** bringing passenger services to the Northumberland Line (Ashington-Newcastle), and delivery of Metro Flow Project, which addresses a single-track capacity constraint on the South Shields branch and allows Metro to improve service reliability across the network enabling the daytime Metro frequency to increase from five to six trains per hour.

1.2.2. Included within each of the Thematic Package are 'Individual 'Schemes', details of which can be found in the Strategic Outline Business Case submitted to the Department for Transport in November 2019.

1.3. PROGRAMME VISION

- 1.3.1. More sustainable connectivity, and more mobility, making sustainable transport the natural choice for people moving around our city region, banishing congestion and its polluting effects, and improving air quality and public health.
- 1.3.2. Our communications framework recognises the value in communicating our vision while seeking to control the conversation and mitigate the risks around unsatisfied expectations.
- 1.3.3. Councillor Martin Gannon, Chair of the Joint Transport Committee and Leader of Gateshead Council, said:

"We are seeking to transform the way people travel around the North East because that unlocks access to jobs, training and opportunity and drives the whole economy.

"We have built an ambitious Programme which reaches all parts of our region from Northumberland to Durham to put simple, sustainable, environmentally friendly travel at the heart of our plans for the North East's future.

"Our final Programme follows extensive engagement with businesses, developers and transport operators in the region. It ranges from smaller walking and cycling schemes to major upgrades to our rail network, but all focused on the key corridors people use to move around the North East."

2. STAKEHOLDER ENGAGEMENT STRATEGY

2.1. What is the Stakeholder Engagement Strategy (SES)

- 2.1.1. This Stakeholder Engagement Strategy (SES) has been prepared in preparation for delivery of the Transforming Cities Fund Programme.
- 2.1.2. It gives details on a preferred approach to engagement, with stakeholders and outlines our approach to media and marketing activities across the Programme.
- 2.1.3. It provides a structure for individual Scheme Delivery Partners to ensure engagement with stakeholders is effective, coordinated and ultimately supports delivery of a successful Programme.
- 2.1.4. It sets out the governance for Communications, which reflects that of the overall Programme Governance arrangements and that of the two Combined Authorities of the North East and the Joint Transport Committee.

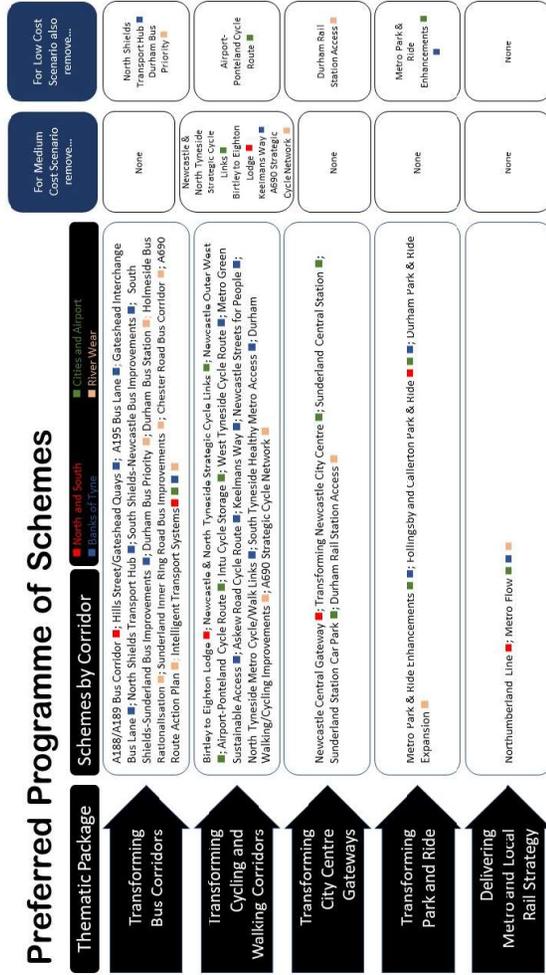
2.2. Whom is the Strategy for?

- 2.2.1. This Stakeholder Engagement Strategy is designed as guidance to those responsible for Scheme Delivery with a remit for communications, media, public relations and marketing of the Programme.

2.3. Terminology

- 2.3.1. Throughout the document, we will use the term 'Engagement' to incorporate all activities related to Communication, Public Affairs and Consultation.
- 2.3.2. The Schemes that are included in our Transforming Cities fund Bid are collectively termed as the '**Programme**'.
- 2.3.3. Within the 'Programme' are five '**Thematic Packages**'
- 2.3.4. Within each 'Thematic Package' there are individual '**Schemes**' (See **Figure 1** below for summary)
- 2.3.5. The Schemes will be delivered by Local Authority partners, Nexus and other organisations relevant to each particular Scheme. Referenced as '**Scheme Delivery Partners**'.

Figure 1 : TCF Thematic packages



3. AIMS AND OBJECTIVES

3.1. Aims of the Stakeholder Engagement Strategy (SES)

3.1.1. The overarching aim of this SES is to support successful delivery of the Programme and associated Thematic Packages and Schemes.

3.1.2. The SES supports the TC Bid and Programme by:

- Encouraging a consistent and coordinated approach from all Partners based on established best practice and ensuring all schemes are presented within the context of the Transforming Cities Programme;
- Identifying benefits and costs of both the overall Programme and individual Schemes and clearly and concisely relaying what this means to the North East, and how our proposals will deliver modal shift towards sustainable forms of transport;
- Facilitating effective and proactive engagement with stakeholders to promote advocacy and to help minimise risks to delivery;
- Adopting and adapting key messages appropriate to the audience; and
- Enabling efficient and effective co-ordination of information amongst Programme Partners and ensuring governance procedures are upheld and delivered.

3.1.3. A Communications Manager is appointed to support the TC Programme bid Partners in achieving the above aims.

3.2. Our Commitment to Stakeholders

3.2.1. Understanding stakeholders' interests and aspirations and demonstrating a willingness to listen and respond to concerns is essential to the successful delivery of the Programme.

3.2.2. This strategy sets out our commitment to stakeholder engagement, whereby all partners promise to:

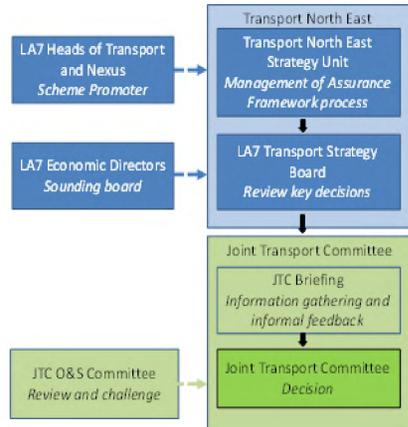
- Engage with a wide range of representative groups, neighbours, users and the wider public to ensure involvement at appropriate milestones within the Programme;
- Ensure stakeholder engagement is proportionate to the level of involvement needed;
- Provide clear, transparent, relevant, up to date information on the Programme and individual schemes within to ensure stakeholders can easily understand the impacts of the proposals;
- Properly consider public concerns and values to assist in the development of Schemes where appropriate;
- Respond appropriately and in a timely manner to issues, concerns or questions raised over the life of the Programme;
- Manage a robust processes and secure systems to capture stakeholder interaction and engagement;
- Promote openness, transparency and honesty in all activities.

4. GOVERNANCE

4.1. Roles and responsibilities

- 4.1.1. The Transport North East Strategy Unit (TNESU) manages, and is responsible for, the daily delivery activities of the Programme on behalf of the Joint Transport Committee (JTC) and manages the Assurance Framework process for the Programme.
- 4.1.2. The scheme promoters are responsible for supplying the TNESU with specific details relating to individual schemes and manage the delivery of the Communication and Stakeholder Engagement for their schemes.
- 4.1.3. The Transport Strategy Board reviews and informs key decisions for the Programme. In addition, the LA7 Economic Directors and LA7 Heads of Transport support this process and act as a sounding board.
- 4.1.4. Overall accountability and the final decision of the Programme sit with the JTC. The North East's bid to transform the way we travel is driven by the JTC on behalf of the whole region (North East Combined Authority and North of the Tyne Combined Authority).
- 4.1.5. To encourage a consistent approach and smooth transition from inception to delivery of Schemes a Communications Manager is assigned to the Programme to coordinate Stakeholder Engagement and to ensure reporting procedures and process are implemented across all schemes.
- 4.1.6. Governance structure detailed in the flowchart below:

Figure 2 : Governance Structure



4.2. Communications Manager

4.2.1. The Communications Manager is allocated to the Transport North East Strategy Unit and is appointed until Programme Delivery and hand over.

4.2.2. The Communications Manager:

- Ensures consistency of key messages across the Programme and acts as a conduit between Scheme Delivery Partners and the Transport Strategy Board;
- Manages the Programme Stakeholder Register and Activity Log;
- Co-ordinates and disseminates guidance to Scheme Delivery Partners with regards to FAQ's, media plans and content;
- Contributes to progress reports from Delivery Partners in preparation for Transport Strategy Board and Joint Transport Committee as defined by the TCF Governance process;
- Monitors and coordinates engagement with Scheme Delivery Partners;
- Identifies stakeholder-related risks to scheme delivery; and

- Assists with implementation of processes and procedures required by Scheme Delivery Partners to ensure effective Stakeholder Engagement.

4.2.3. To enable appropriate guidance at a strategic level, the Communications Manager will have access to expert marketing and media resources and advice within Partner organisations.

5. STAKEHOLDER MANAGEMENT

5.1. Approach to Stakeholder Management

5.1.1. Guidance to the Programme's overall approach to stakeholder management is based on the four steps illustrated in Figure 3 below.

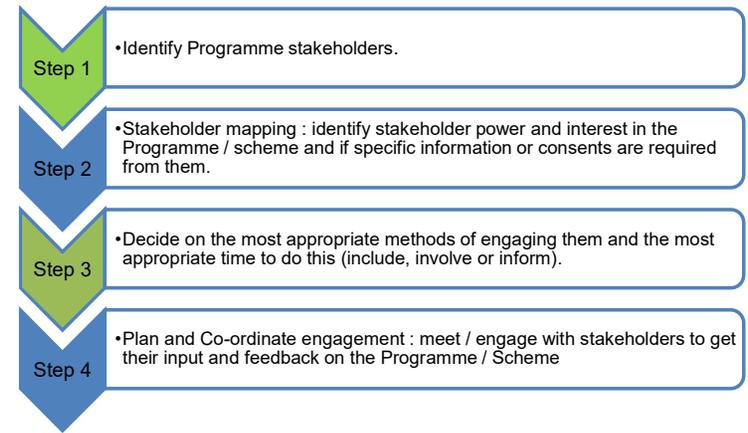


Figure 3 : Steps Stakeholder Management

5.2. Step 1- Stakeholder Register

- 5.2.1. A 'Stakeholder' is an individual, group or organisation who is impacted by, has an interest or influence in the delivery the Programme.
- 5.2.2. The sample **Programme Stakeholder Register** is at **Appendix A**, managed at Programme level and maintained by the Communications Manager.

- 5.2.3. This is not an exhaustive list but is included to demonstrate the Programme level stakeholders and their preferred/planned communication methods.
- 5.2.4. Individual Scheme delivery partners develop and maintain their own **Scheme Specific Stakeholder Registers**, and ensure transfer of Strategic Stakeholders to the Programme Stakeholder Register.

5.3. Activity Log

- 5.3.1. A **Programme Stakeholder Activity Log** is managed at Programme level and is held by the Communications Manager. This captures stakeholder details, dates and methods of engagement. It logs a summary of information exchanged at Programme level and is derived from information provided by Scheme Delivery Partners.
- 5.3.2. Individual **Scheme Stakeholder Activity Logs** are created and developed by Scheme Delivery Partners. The log's record engagement activity across their own individual Schemes and are made available to decision makers as and when required.

5.4. Risk

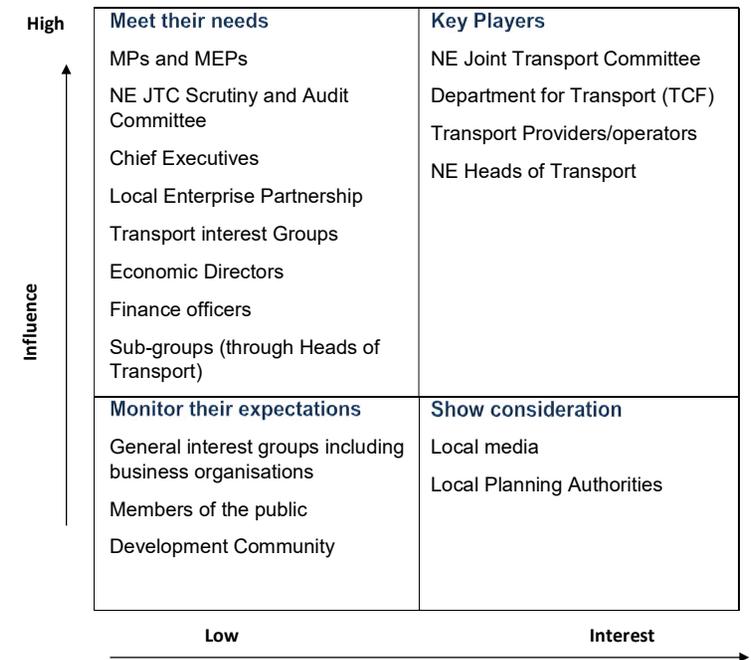
- 5.4.1. Individual Scheme Delivery Partners are responsible for informing the Communications Manager of any stakeholder risks that they perceive would affect the overall Programme.
- 5.4.2. The Communications Manager will collate stakeholder risks from Scheme Delivery Partners to ensure inclusion within the Programme Risk Register.

5.5. Step 2 – Stakeholder Mapping and Analysis

- 5.5.1. The Transforming Cities Programme was drawn up through extensive engagement work by the region's seven local authorities and transport executive, Nexus, alongside private sector partners, major developers, academic institutions, walking and cycling groups and public transport operators.
- 5.5.2. Initial analysis is shown in Figure 4 below (which helped determine key influencers) and includes those with a strategic overview of the North East,

its politics, and the transport demands of the region who have been involved in development of the Programme.

Figure 4 : Transforming Cities Fund Initial Stakeholder Analysis



- 5.5.3. Regular review of the mapping exercise is carried out at key stages throughout the Programme.
- 5.5.4. Individual Schemes also conduct their own analysis of Stakeholders specific to the Scheme in question.

5.6. Step 3 - Levels of Engagement (Include, Involve and Inform)

- 5.6.1. Due to the number of stakeholders in the overall Programme, their varied information needs, and the range of consents required to deliver the

Schemes within the Programme, differing levels of engagement is required.

- 5.6.2. For the purpose of this strategy 'engagement' is understood to mean any activity that involves sharing new/updated scheme details and/or discussions that may have an impact on the scheme (e.g. design or Programme).
- 5.6.3. 'Engagement' can be broken down further to:
- Include – relates to 2 way communication and influence (akin to open consultation where stakeholders are able to influence decisions)
 - Involve – stakeholders are kept well informed (but are have limited opportunity to influence outputs/outcomes)
 - Inform – relates to one way conversations (i.e. information provision).
- 5.6.4. When conducting any kind of engagement activity, it is important that it be always made clear when stakeholders are being included, involved or informed to ensure they understand when they are being given an opportunity to shape proposals.
- 5.6.5. Individual Scheme Delivery Partners are responsible for determining the most appropriate levels of engagement and implementation of their decisions.
- 5.6.6. **A Stakeholder Matrix** is held a Programme Level based on RACI principles that identifies the roles of Local Authority Officers and Stakeholder (i.e. Responsible, Accountable, Consulted or Informed). This is a controlled document and is not included within this strategy.

5.7. Step 4 - Plan and co-ordinate engagement and feedback

- 5.7.1. **Figure 5** below illustrates the steps partners take when planning any engagement activity:



Figure 5: Process for Planning Engagement Activity

5.7.2. Recording Engagement

- A record of the engagement is produced, including details of any plans and information shared, actions agreed or commitments made.
- Where appropriate, the Communications Manager is made aware of engagement details to be recorded on the Strategic Stakeholder Activities Log with five working days.
- Final notes are agreed and issued within 10 working days of the meeting taking place.
- Where risks or impacts to the Programme become evident because of engagement, they are escalated to the Scheme Lead, Communications Manager or TNESU employee immediately.

- The Communications Manager/appropriate TNESU employee will ensure Transport Strategy Board members are aware of relevant strategic risks and issues immediately.

5.7.3. Scheme Delivery Partners are responsible for ensuring appropriate and comprehensive feedback as and when necessary.

5.7.4. All information held is compliant with the General Data Protection Regulation (GDPR).

6. PROTOCOLS

6.1. Media (Including Social Media)

6.1.1. Senior Communications experts from the partner organisations develop the Media Plan in line with key stages of the Programme.

6.1.2. The Communications Manager is responsible for monitoring delivery of the plan.

6.1.3. The plan includes key 'strategic' messages in relations to the overall Programme and once agreed by Scheme Delivery Partners is delivered by exception.

6.1.4. Media enquiries regarding the overall Programme are referred to TNESU Communications Manager where appropriate. Where this is not possible, Scheme Delivery Partners should refer to the agreed FAQ's for guidance on response.

6.1.5. Scheme Delivery Partners are responsible for their own media content in relation to individual schemes but are committed to ensuring their schemes are set in the context of the overall bid in order to continue to promote the North East region and overall TC bid objectives.

6.1.6. The Communications Manager will draft press releases and statements on behalf of the Programme and share these for consultation and information with partners prior to release, according to a detailed protocol between partners.

6.1.7. Where time permits, planned press releases from Scheme Delivery Partners are passed through the Communications Manager for sign off from the appropriate board before release (e.g. JTC if required).

6.2. Key Messages and Frequently Asked Questions (FAQ's)

6.2.1. Key messages and FAQ's at Programme level are developed and reviewed by the Senior Communications experts from the partner organisations in preparation for stakeholder and media enquiries.

6.2.2. The Communications Manager is responsible for maintenance and dissemination of these documents between partners.

6.2.3. An example of FAQ's is found at Appendix B – 'Frequently Asked Questions'.

6.2.4. The FAQ's is a living document and is revised at Programme key Milestones by all Scheme Delivery Partners.

6.3. Political Enquiries

6.3.1. Nexus co-ordinates overall Programme engagement with political bodies through its existing Public Affairs expertise on behalf of the Joint Transport Committee and the Transport North East Strategy Unit.

6.3.2. Nexus is responsible for arrangement of any Parliamentary Receptions or liaison with MP's and MEP's.

6.3.3. Where possible, all Scheme Delivery Partners liaise with Nexus before engagement with MP's or MEPs to ensure consistency of approach and message where appropriate.

6.3.4. Scheme Delivery Partners engage with their own Local Councillors regarding progress of individual schemes.

6.4. Web Development

6.4.1. The Transforming Cities Fund Programme has a dedicated webpage. This provides an overview, updates on Programme delivery, and is updated by the Communications Manager on behalf of all Partners.

6.4.2. Where appropriate, Scheme Delivery Partners also use their own websites to signpost users to the TCF webpage.

6.4.3. Opportunities to promote the TCF Programme are reviewed regularly as new or amended Committees, Governing bodies are developed throughout

the region ensuring the Fund, and the Programme of works is portrayed in the appropriate context.

6.5. Marketing

- 6.5.1. Marketing activities for individual schemes are the responsibility of Scheme Delivery Partners and are delivered in line with the Marketing Policies of their own business or organisation.
- 6.5.2. The region's established and successful 'Go Smarter' campaign and branding is used to promote sustainable travel, including walking and cycling, through workplaces and schools as the Programme delivers schemes which improve this.
- 6.5.3. Each Scheme Delivery Partners adheres to the marketing and branding guidelines of the Programme that considers requirement of the funding body.

7. MILESTONES

7.1. Stakeholder Engagement to Date.

- 7.1.1. High level Stakeholder activity to date is recorded and managed by the bid team until such a time that full implementation of this strategy is possible, following the funding decision.

7.2. Strategy Review Dates

- 7.2.1. This strategy will be reviewed following funding decisions on March 2020.

Appendix A Sample Programme Stakeholder Register

Stakeholder	Relevance to Programme	Methods of Engagement
Enabling Bodies		
Department for Transport (DfT)	Government department responsible for investment in transport infrastructure.	Transport Strategy Board and Project Steering Group meetings.
North East Local Enterprise Partnership	Produce the area's Strategic Economic Plan, which acts as a blueprint for the activities that need to take place to improve our economy.	Bi-monthly board meetings
Transport for the North (TfN)	Support is required to ensure the Programme aligns with TfN's long-term strategy and Strategic Transport Plan.	Briefings/consultation as required.
Joint Transport Committee	On behalf of the Combined Authorities for the region	Regular meetings
Political		
Government Ministers	Politicians who hold significant public office in Government, making and implementing decisions on policies in conjunction with the other ministers. Of particular relevance is the Secretary of State (SoS) for Transport	Regular Briefings
North East MP's and MEP's	Will be particularly interested in benefits to local communities	Keep informed through local councils
Local Councillors	Elected members of local councils that represent the interests of their local area.	

Stakeholder	Relevance to Programme	Methods of Engagement
	Will be particularly interested in benefits to local communities and anticipated disruption. Need to ensure they are aware and supportive of the Programme.	
Business Organisations		
North East Chamber of Commerce	Interested in benefits to local businesses	Ad-hoc attendance at meetings
Media Opinion Leaders		
Regional and National press	Communicate messages and updates to a wider audience.	Press releases issued at key project milestones. Reactive statements and responses as appropriate.
Specialist transport press	Communicate messages and updates to a targeted and engaged audience.	Dedicated features proposed as appropriate.
Transport Industry		
Bus and Rail Operators	Major beneficiaries of the Programme, support and input essential.	Regular face-to-face meetings and updates.
Sustrans	Major beneficiaries of the Programme, support and input essential.	Regular face-to-face meetings and updates.
Nexus (Tyne and Wear Passenger Transport Executive)	Administers funds on behalf of the Joint Transport Committees. Major beneficiary (and delivery partner) of the Programme	Transport Strategy Board and Project Steering Group meetings.
Taxi and Private Hire	Beneficiaries of the Programme. Support and input essential	Regular updates.

Stakeholder	Relevance to Programme	Methods of Engagement
Emergency Services		
Police and British Transport Police	'Statutory' consultees.	Keep informed with regular updates and contact details of scheme delivery partners.
Ambulance and Fire and Rescue Service	'Statutory' consultees.	Keep informed with regular updates and contact details of scheme delivery partners.
Special Interest Groups		
North East England Civic Trust	Have an active role in conservation and regeneration across the North East of England, North Yorkshire and Cumbria.	Keep informed with regular updates.
Equalities groups	To opine on equalities issues with the Programme.	Keep informed and invite to opine on individual schemes.
User Groups		
Passenger Focus	An independent passenger watchdog set up by the government to represent the interests of Britain's rail passengers.	Keep informed with regular updates and consult where appropriate.
Passenger Transport User Group	An independent passenger watchdog set up by the government to represent the interests of Britain's rail passengers.	Keep informed with regular updates and consult where appropriate.
Community and residents	Neighbours/schools/local businesses	Keep informed and consult where appropriate but mainly dealt with at Scheme level.

APPENDIX B

FREQUENTLY ASKED QUESTIONS

About the bidding process

This is an ambitious £470million bid to transform the way people travel around the North East.

The Programme will be delivered over the next three years, overseen by the North East Joint Transport Committee, bringing together the North East and North of Tyne Combined Authorities.

Through co-development with the Department for Transport, we will ensure our proposed schemes are of the highest quality and will result in a step-change in local public and sustainable transport connectivity with better access to jobs, reduced congestion and improved air quality.

We are committed to delivering the packages identified in our Programme between now and 2023.

What is in the bid?

A new passenger rail line for Northumberland, more park and ride around city centres, improvements to bus, walking and cycling routes and more frequent Metro services all form part of the region's bid to the Government's Transforming Cities Fund.

The bid submitted to the Department for Transport is the cornerstone of a £470m Programme of investment up to 2023 made up of five key themes:

Improvements to bus corridors into and through town and city centres, with high quality priority measures to deliver consistent journey times.

Improvements and increase in cycle and walking routes as well as cycle parking around town and city centres and major destinations including Metrocentre and Newcastle International Airport.

Upgrades to key gateway rail stations including a new terminal building and parking at Sunderland, major improvements to access in and around Newcastle Central station and better access to Durham station.

Building new and larger park and ride sites for bus and Metro in Durham, Gateshead and north of Newcastle, as well as modernising payment.

Providing a new passenger rail line between Ashington, Blyth and Newcastle, and to deliver the Metro Flow Project to increase frequency, cut journey times and unlock future expansion of the network.

What will the bid do for the area?

The TCF will stimulate and support economic growth, regeneration and community development in the North East. It will do this by providing new and improved connectivity between the communities in the region, including to major employment hubs

APPENDIX

Walking and Cycling Principles



North East: Walking and Cycling Principles

1. Introduction

1.1 The North East region is preparing an ambitious regionwide bid for capital funding from Tranche 2 of the Transforming Cities Fund to directly support public and sustainable transport links. Through our business case we are seeking to create up to 82.9km of new or improved walking and cycling infrastructure across the region with £59m of investment. This is following the success of Tranche 1 which has facilitated the delivery of around £5.5m of high-quality cycling and walking interventions regionally.

2. Purpose of the document

2.1 The purpose of this document is to set out common principles our seven local authority partners are applying in the development and delivery of walking and cycling interventions that are included as part of this funding package. It additionally notes how the proposals will align to emerging Local Cycling and Walking Infrastructure Plans (LCWIP's) and to existing and emerging national policy and guidance.

2.2 Our bid is specifically designed to align with the Transforming Cities Fund objectives by:

- Boosting the region's productivity through transformed public and sustainable transport;
- Improved connectivity to improve social and economic benefits for the community;
- Reducing carbon emissions and improving air quality; and
- Supporting housing delivery and fostering an environment for future mobility services.

3. Background to walking and cycling in the region

3.1 The region has a well-established walking and cycling network, which is continually improving due to investment over recent years. There is a core of cycle commuting within parts of Newcastle and to some extent between Newcastle and Gateshead. There are further hotspots of cycle commuting within Durham City, Newton Aycliffe, Ashington and Blyth. This is due to a combination of factors, including convenience, urban density, on and off-road infrastructure and demographic profiles. Cycling is also an important form of transport for people from lower income groups, including students and people in lower supervisory and technical occupations.

3.2 In respect of travel to work, the region's economy is relatively self-contained with 95% of people living and working within the seven authority districts. Due to the polycentricity of the region, travel patterns are complex and applying a modal analysis shows that travel to work is dominated by car use (58%), although travel on foot (10%) over short distances, bus (10%) and Metro (3%) are important contributors. However,

this only represents trips taken for work purposes, which are around 1/6th or 15% of all trips and 20% of distance travelled.

3.3 Annual cycling rates have increased by 18% in Newcastle¹ and by 15% in Gateshead² suggesting that we can increase cycling rates in urban areas with continuing investment. There has been a small downward trend in walking journeys across the country³. Walking data is particularly sparse at the local authority level and generally confined to location specific surveys. The annual Sport England Active Lives Survey collects data on participation in walking and cycling for leisure and for transport. The most recent national report shows a small increase in walking for leisure and travel in 2017⁴. The data is collected by each local authority and may provide additional baseline material on participation in walking and cycling.

4. Active and healthy lifestyles

4.1 There are significant health benefits with increasing active travel as part of everyday journeys. In the North East, life expectancy is increasing but we are now more likely to spend more of our lives suffering from poor health and disability and there is increasing disparity in life expectancy between the rich and poor. Pollution from transport can have a significant impact on air quality, which in turn impacts on quality of life; asthma, rhinitis, cardiovascular disease, cancer, male fertility and a significant number of deaths are attributed to air pollution from transport. This is of particular concern in city centres and close to busy roads where concentrations are elevated.

4.2 The health baseline in the North East is generally challenging when compared with the national average as shown in our strategic case and this disparity is more marked in the Tyne and Wear authorities⁵, where:

- Healthy life expectancy is below the national average;
- Levels of unhappiness are higher than the national average;
- 20.4% of the population of the region walk for travel at least three days per week, 2.5% below the average for England⁶;
- 2.0% of the population of the region cycle at least 3 days per week, 1.3% below the average for England⁷; and
- The proportion of children killed or seriously injured in road traffic collisions is higher than the national average.

4.3 We have the potential to improve the quality, safety, reach and accessibility of our walking and cycling network across the region to ensure it caters for short and long-distance trips for the entire population of the region.

¹ Bike Life, Sustrans 2017

² Gateshead Cycling Strategy 2015

³ National Travel Survey, DfT 2015

⁴ Active Lives Adult Survey, Sport England 2018

⁵ Health and Wealth Closing the Gap in the NE, NECA/NHS 2017

⁶ Public Health England, Physical Activity 2019

⁷ Public Health England, Physical Activity 2019.

5. Transforming the Walking and Cycling Network in the North East

5.1 The existing walking and cycling network across the region is significant and diverse in its nature; through a mix of national cycle routes and trails to local routes. These cover city, countryside and coastline areas linking our main centres of population to areas of employment and leisure opportunities. An abridged map (in appendix 1) shows the cycling and walking network across the region.

5.2 A significant sum of money has been invested in walking and cycling over the last six years in a bid to address public health and tackle pollution. These interventions have been delivered by a range of stakeholders. Through this bid we want to build on those initiatives by articulating a shared vision which justifies further investment in active travel.

5.3 Given the travel to work figures identified above for active travel and that journeys are relatively short in nature, there is great potential to increase the reach of signed cycling and walking routes which traverse boundaries and to agree common standards for the design of infrastructure across the region to deliver a seamless experience. At present 37% of people in the region travel under 5km to work but over half of these are car drivers or passengers. There is therefore much scope to influence this through the design of high-quality measures. This is a challenge that the region is aware of and has addressed through the agreement of design principles for the walking and cycling network, working with local authority partners and campaign groups. This builds on the work our local authority partners are progressing through the development of their LCWIP's and their Infrastructure Delivery Plans.

5.4 In developing these principles, we have used best practice guidance from:

- Local Transport Note 1/07 (traffic calming);
- Local Transport Note 1/08 (traffic management and streetscape);
- Local Transport Note 2/08 (cycle infrastructure design);
- Local Transport Note 1/12 (shared use routes for pedestrians and cyclists);
- Local Transport Note 1/19 (forthcoming);
- Traffic Signs and Regulations and General Directions 2016;
- North Tyneside Council 'Cycling Strategy' and 'Cycling Design Guide 2018';
- Durham County Council, Strategic Cycling and Walking Delivery Plan;
- Sustrans Bike Life reports, including 'Transforming Cities: The Potential of Everyday Cycling';
- Sustrans, Paths for Everyone (2019)
- Global Street Design Guide;
- Manual for Streets;
- Living Streets 'Moving the Nation';
- Draft LCWIP's as they emerge; and
- DfT Cycling and Walking Investment Strategy.

5.5 We will continue to refer to new sets of guidance as they are published. For example, the DfT 'Cycling and Walking Design Guide' and LTN advice note on signage that are about to be published. These documents will seek to strengthen design guidance in respect of infrastructure and future iterations of these principles to make reference to appropriate levels of service or minimum widths.

Schemes in their detailed design stages will be designed in accordance with the latest DfT guidance.

5.6 These interlinking Principles cover four topic areas:

- I. **Connectivity:** Delivering a coherent and comprehensive walk and cycle network across the region that integrates existing and proposed interventions and achieves a mix of routes to meet expectations of current and future users. Furthermore, we are delivering a network that provides connectivity to major employment destinations by safe and accessible walking and cycle routes;
- II. **Quality:** A network that is well maintained with a carefully selected durable materials and treatments to encourage walking and cycling for all users and includes common signage typologies. Route treatments will be selected to ensure they are fit for purpose and provide the highest quality for that environment. For example, some routes might be more prone to flooding or ice than others necessitating a specific treatment. As a standard all treatments should provide a smooth riding surface, with good drainage properties, long-term durability, low-maintenance, using sustainable or recycled materials. Focus should be on preventative surface maintenance rather than responsive action to potholes and other defects, which increases pressures on authorities to find more funding.
- III. **Safe and Accessible:** A network with treatments in the appropriate places to maintain and enhance the safety and accessibility of the cycle and walk network including inclusive design treatments throughout; and
- IV. **Attractive:** Working to deliver a network that encourages the choice of walking and cycling as the journey of choice, that is comfortable and attractive to use for all users and identifies and addresses any pinch points.

I. Connectivity

5.7 The interventions we propose across the region are focused on meeting user expectations through a network of mixed routes suitable for everyday walking and cycling, catering for commuters on direct routes that serve our employment sites, students accessing education and training facilities, and where achievable creating off road links to serve our communities and facilitating longer distance travel to our coast and countryside. The region has a track record in delivering high quality infrastructure including in North Tyneside with award winning cycle segregation. We are also focused on further developing a network of routes, including cross boundary links with consistent design standards. Where this is not possible, measures will be designed to achieve the best possible links, for example through clear signage.

5.8 The region is planning its infrastructure around new developments, to ensure that when housing and employment sites are built that have sustainable transport options. We have examples of this through the works to support cycle access to our International Advanced Manufacturing Park as well as to major new development at Metro Green in Gateshead.



Figure 1: Cycle and walking links will be part of the success of Metro Green in Gateshead

5.9 As part of a whole journey solution we will look to integrate cycling and walking into the public transport network to enable longer journeys to take place. Carrying bikes on trains is already permitted on large sections of the Tyne and Wear Metro network outside of peak periods with cycle infrastructure available at most stations. We will seek to improve the quality of the walking and cycle network around stations on the Metro and Rail network as well as high frequency bus corridors. Where possible we should look to have direct routes to public transport interchanges and stations. It is increasingly important that routes connect with rail stations, including for 'last mile' journeys. 'End of journey' interventions are equally important. A number of authorities are already engaging with businesses at key employment sites across the network to look at this linking in with the wider network and some positive steps in this regard have been made through the Tranche 2 bid. It is essential people cycling or walking to work have access to parking and change facilities to generate modal shift.

II. Quality

5.10 Our designs will take account of the latest DfT Cycling and walking design guidance notes.

5.11 Our design processes will differ from authority to authority regarding implementation of this infrastructure however the needs of the wider public will be at the heart of the process and ensuring the infrastructure encourages travel for all.



Figure 2: Segregated routes in North Tyneside

5.12 Our Bus and Metro 'Streets for People' concepts have been developed in this way to allow members of the community to define their needs and to plan improved links accordingly. This will use community-led small-scale infrastructure investment to deliver transformational changes including walk and cycle friendly interchanges, appropriately wide footways and cycleways and safety improvements along a route.

5.13 The palette of materials used will be designed to be durable to reduce maintenance costs with lane markings and symbols installed supplemented by appropriate signage. Equally materials and designs will be used to encourage use, with simple additions such as markings, adequate width and onward travel information

to connect routes. We will seek to review best practice guidance and case study information to develop schemes and look to undertake our own pilot study based on 'before' and 'after' intervention through improved signage. The purpose would be looking at the effectiveness of the signage strategy used that can then be rolled out more widely. Where possible the region will promote segregated facilities for new cycle infrastructure alongside ensuring a high-quality wide footway of a minimum width of 2m. We will take a sequential approach to planning new infrastructure to ensure the appropriate standards are met. As a last resort cycle infrastructure will be planned on highway delineated by markings and advanced cycle stop lines with where appropriate advanced signals.



Figure 3: John Dobson Street, Newcastle



Figure 4: Sequential approach to infrastructure delivery

5.14 Maintenance of the assets will be achieved through Local Authorities Highway Asset Management Plans unless land ownership is outside of their control. Where works are planned to assets in the future that require a closure, appropriate signed diversion routes will be provided both for pedestrians and cyclists.

5.15 Signage and reference points throughout the network is important as many journeys cross local authority boundaries. The region will work with campaign groups including Sustrans, Cycle UK and Living Streets and local authority and transport organisations to deliver a common signage method including agreeing key destinations. It is important that these signs provide both the right level of detail for those on foot as on a bicycle and can be easily read on the move. Wayfinding strategies and on street mapping infrastructure exists in authority areas across the region as well as walk to maps at bus interchanges and Metro stations, we'll look to work with these designs to boost transport related information to aid users.

III. Safe and Accessible

5.16 We will deliver a network of routes that deploy the highest safety standards and can be accessed by all members of society. Pedestrian and cycle priority will be planned, this is particularly prevalent with side road treatments, often this can be through simple markings but can be materially designed in such as raised tables and crossing infrastructure.

5.17 Rumble strips and tactile paving will be used at key decision points supplemented with signage as a visual aid. Appropriate levels will be designed in, particularly to meet the needs of visually impaired persons including where appropriate installing kerbs. This is particularly important where networks cross roads. Design standards will be deployed when looking at interaction of cycling and street furniture such as bus stops to minimise conflict.

5.18 We will work with Sustrans to deliver the 15 recommendations from their Paths for Everyone document including removing barriers to use, driving up standards in safety and quality and reviewing the network's role for users and wider society.

5.19 Interaction points between cycling and walking routes with other transport modes (as well as opportunities for cyclists to interact with pedestrians) needs to be considered. This includes seeking to make these points as safe as possible for pedestrians and cyclists, such as highly visible crash barriers, signage, and priority given to active travel.

5.20 The walking and cycling network must also be perceived to be safe, where networks do share space with general traffic effort will be made to reduce speeds and ensure increased awareness of cyclists using routes through adequate signage and design in accordance with Table 1.3 of LTN 2/08.

5.21 Good quality lighting will be used throughout the network, maintained by the highway's asset management team. This is a critical point around encouraging use throughout the winter months but also ensuring safety and security for those utilising the infrastructure. We will aim to install CCTV at appropriate locations.

5.22 In the design of infrastructure schemes, the region will encourage street audits to be undertaken and participation by a wider stakeholder to ensure the design meets requirements of a cross section of society; this includes engagement with the Police regarding 'secure by design' standards.

IV. Attractive

5.23 In order to be transformational in nature we must seek to design infrastructure that makes cycling and walking the journey of choice for large sections of society. It must be easy to navigate to home, places of employment, schools and colleges as well as leisure and recreational opportunities via signed high-quality walking and cycling routes right across the region. Critically there should be a number of options available with a mix of design typologies, linking back to earlier points around designing with different groups in mind.

5.24 Comfort and quality can be used interchangeably but by comfort we refer to a journey experience that can be made seamlessly using connected continuous infrastructure that is designed to address pinch points along the route and meets design standards for width, gradient and surface quality. The attractiveness of the route is also an important design factor given the influence this can have for a user deciding whether to cycle or not.

5.25 Behaviour change initiatives have historically been successful at promoting sustainable transport. Our Go Smarter programme is still active in certain parts of the region and we will continue to look for funding opportunities to widen its reach as this can be a critical way of delivering the benefits of the new infrastructure delivered through awareness raising and targeted behaviour change activities.

5.26 We are keen that the principles of delivering quality and comfort continue to apply within our towns and cities and part of the design principles we commit to apply is improving the quality of the pedestrian and cycle environment within our town and city centres delivering liveable places. This includes pedestrian, public transport and cyclist priority and addressing key flows of movement.

6. Summary

6.1 In summary these principles have been developed to set out the consideration of design typologies for Transforming Cities Fund projects. They merge best practice guidance with Government policy and principles at a local level through emerging Local Cycling and Walking Strategies and alike. We commit through our walking and cycling interventions delivered in the bid, to uphold these principles.

7. The resultant network enhancements

7.1 Through applying these principles, we have developed a network of enhancements that will make a transformative difference across the region. We aim to make cycling and walking the everyday mode, whether that be as a primary journey purpose or as part of a staged journey.

7.2 The plans we have developed below, integrate with the wider National Cycle network and designated walking routes and have been designed to,

- Provide a mix of links between centres of employment, residential areas and leisure opportunities;
- Interact with our established transport network;
- Provide a coherent network approach through connecting to existing assets;

- Improving connections within centres to deliver a step change in the quality of our places and spaces;
- Delivering comfortable well-designed durable links that exceed national design standards;
- Addressing any existing constraints with the network to encourage increased use of assets;
- Ensuring the navigability of our network; and
- Working with our sustainable transport community and user groups to design our infrastructure.

7.3 The current network enhancements package within the TCF bid for Walking and Cycling consists of a mix of new and significantly upgraded infrastructure right across the city region. As Appendix 2 shows the geographic coverage includes interventions that we are confident will meet the four principles set out above through delivering a consistent accessible and safe network that caters for journeys irrespective of length and integrating with our public transport network. We have highlighted areas of demand and will link these places through sustainable modes to key opportunity whether that be employment, training, education or leisure / recreation.

7.4 Applying our sequential process to design, we plan to deliver 65.2km of segregated infrastructure (79%) and 16.9km of on road non segregated. This will cater for a mix of journeys as is Appendix 2.

Appendix 1: Existing Walk and Cycle Network

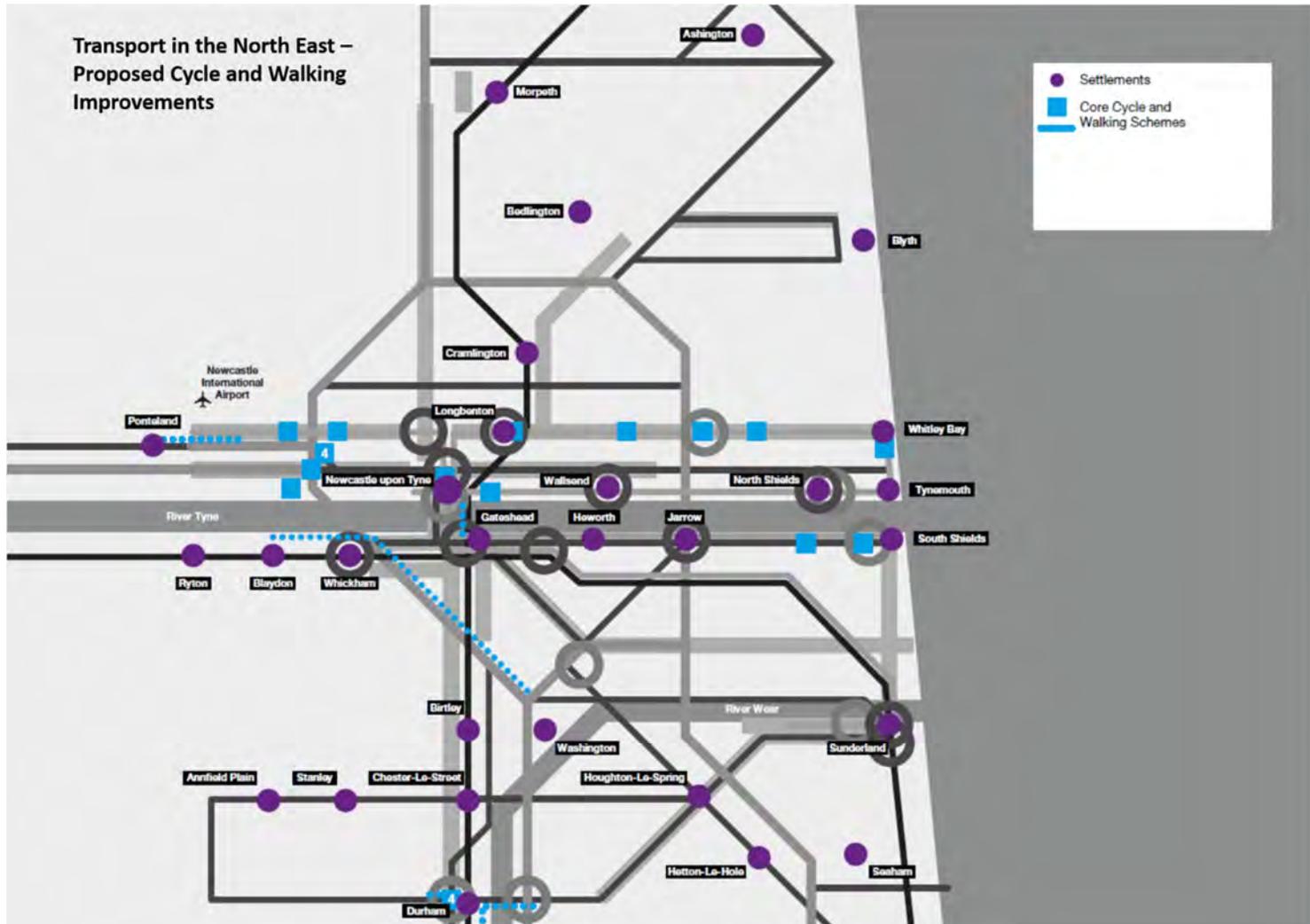
Existing Cycling and Walking Network



Figure 5: Transforming Walking and Cycling (Preferred programme)



Appendix 2: Transforming Walking and Cycling Corridors



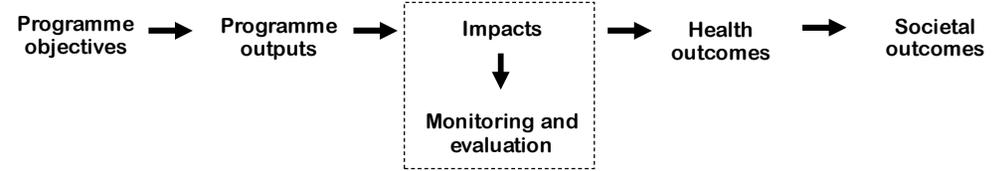
APPENDIX

Health Impact Assessment



Health Impact Assessment

Programme Objectives	Programme Outputs	Impacts	Health Impacts Monitoring / Evaluation	Health Outcomes	Societal Outcomes
What do we want to achieve	What will we deliver in order to achieve the objectives	What are the expected results	What will we use to measure the results	What will be the longer term effects on public health	What will be the longer term effects on wider society
Improved capacity, reach, reliability and affordability of the public transport network with a particular focus on identified congested corridors into employment centres to encourage increased patronage	Re-opening railways, re-introducing passenger services. Twin tracking of Metro line to increase frequency of service	Mobility ↑ Increased use of the PT network ↑ Physical activity ↑ Use of private car ↓ Encourage employers to promote sustainable travel to work ↑	Patronage figures on public transport (bus, rail, Metro) Participation in workforce wellbeing programmes at major employers Census travel to work statistics	Risk of cardiovascular disease ↓ Reduced sedentary time ↓ Mental wellbeing ↑	Increased participation in the labour market ↑ Reduced journey times ↓ More productivity ↑ Improved skills ↑ Reduced transport costs ↓ Reduced inequality in life expectancy compared to national average ↓
Affordable, accessible and sustainable cycling and walking links	82.1km of new or upgraded signed cycle and walking routes, 58% of which is segregated. New City Centre secure cycle provision	Physical activity ↑ Encourage active travel ↑ Encourage employers to promote sustainable travel to work ↑	Cycle counters / Google Analytics (TADU) Physical activity dataset – walking and cycling for travel at least three days per week Affordable travel distance (NTS) Participation in workforce wellbeing programmes at major employers Census travel to work statistics	Risk of cardiovascular disease ↓ Reduced sedentary time ↓ Mental wellbeing ↑	Improved safety ↑ Recreational walking and cycling benefits ↑ Improved perceptions around safety, navigability and comfort of the network ↑ Improved living environment ↑ Reduced inequality in life expectancy compared to national average ↓
Provision for the introduction of Future Mobility Services	Regional ITS package consisting of junction upgrades and real time information. New and improved interchanges / bus stations	Mobility ↑ Social participation among older/vulnerable people ↑ Use of private car ↓ Encourage employers to promote sustainable travel to work ↑	Fewer pedestrian/cyclist KSI (Killed and Seriously Injured) in the region Cycle counters / Google Analytics (TADU)	Mental wellbeing ↑ Risk of road traffic collisions ↓ Risk of pedestrian / NMU injury ↓	Improved perceptions around reliability of public and sustainable transport ↑ Increased access to social and recreational opportunities ↑ Increased skills through innovation linked to improved data sources ↑
Reduced carbon emissions from local transport through increased proportion of journeys made by low carbon modes	Increased choice through a network of bus priority measures, additional Park and Ride spaces for onward interchange and more frequent / expanded local rail services.	Increased use of the PT network ↑ Pedestrian activity ↑ Use of private car ↓ Traffic congestion ↓ Emissions ↓	Fewer pedestrian/cyclist KSI in the region	Risk of cardiovascular disease ↓ Reduced sedentary time ↓ Mental wellbeing ↑ Risk of pedestrian / NMU injury ↓ Risk of road traffic collisions ↓ Improved air quality ↑	Increased awareness of personal contribution towards the environment ↑ Reduced reliance on the car for switchable journeys ↓
Reduction in NO2 emissions	Access improvements to metro stations, three mainline station upgrades and associated City Centre infrastructure improved for users, together with corridor improvements to public transport services and increased walking and cycling infrastructure.	Increased use of the PT network ↑ Pedestrian activity ↑ Cycle activity ↑ Traffic congestion ↓ Emissions ↓	Fewer pedestrian/cyclist KSI in the region	Risk of cardiovascular disease ↓ Reduced sedentary time ↓ Mental wellbeing ↑ Risk of pedestrian / NMU injury ↓ Risk of road traffic collisions ↓ Improved air quality ↑	Improved perceptions around reliability and accessibility of public and sustainable transport ↑ Reduced reliance on the car for switchable journeys ↓ Reduced inequality in life expectancy compared to national average ↓
Improved accessibility of major housing development sites	Delivery of expanded and improved local rail and Metro services with more reliable and resilient bus network complemented with a network of safe signed cycle and walking links	Mobility ↑ Increased use of the PT network ↑ Physical activity ↑ Pedestrian activity ↑ Cycle activity ↑ Use of private car ↓ Emissions ↓	Travelling distances from deprived communities (accessibility analysis)	Risk of cardiovascular disease ↓ Reduced sedentary time ↓ Mental wellbeing ↑ Improved air quality ↑	Improved living environment ↑ Sustainable developments ↑ Reduced reliance on the car for switchable journeys ↑
Reduced journey times to further and higher education providers	Expanded more frequent public transport services planned around current and future employment and training opportunities	Mobility ↑ Physical activity ↑ Physical activity among young people ↑	Travelling distances from deprived communities (accessibility analysis) IMD health indicator	Risk of cardiovascular disease ↓ Reduced sedentary time ↓ Mental wellbeing ↑ Risk of childhood obesity ↓	Improved skills ↑ Increased participation in the labour market ↑



Programme level measures of success:

1. Increase the proportion of households that can reach two or more city centres or centres of employment within 30 minutes by public or sustainable transport
- 2.a) Increase Metro patronage by 3% by 2030
- 2.b) Increase daytime frequency of Metro service by 20% network-wide
- 2.c) Achieve and exceed a moving annual average of 87.2% charter punctuality on Metro
3. Improve bus punctuality to 95% for services on corridors where investment is focused
4. Increase local rail patronage by at least 5% by 2023
5. Increase percentage of adults cycling for travel at least three days per week
6. Increase percentage of adults walking for travel at least three days per week
7. Create a conducive environment for the development, trial and introduction of Future Mobility Services
8. Deliver efficiency improvements to the public and sustainable transport network including enhanced information services
9. Reduce the number of private car trips along our identified congested corridors, contributing to increased modal share of public and sustainable transport
10. Deliver improved strategic sustainable transport links (a regular bus service, a rail/Metro service or a segregated walking/cycling link) to at least 30,000 new housing units in the region
11. Increase the number of households in England's top 10% most deprived areas that can access further or higher education within 30 minutes travel time

Health specific measures of success:

- Increased patronage on public transport (linking back to programme measures of success)
- Increased percentage of adults walking/cycling for travel at least three times per week (linking back to programme measures of success)
- Reduced number of private car trips along congested corridors (linking back to programme measures of success)
- Increased affordable travel distance by income quintile (National Travel Survey 0705)
- Increased promotion of workforce wellbeing programmes at major employment sites and business parks, particularly around active travel
- Fewer pedestrians and cyclists killed or seriously injured in the region
- Lower rates of health inequality between the North East and the England average (as measured by IMD rank for Health Deprivation and Disability)

APPENDIX-

Programme of Schemes



Details of North East TCF Schemes (all cost scenarios, scheme descriptions, costs and objective rating)

Code	Scheme name	Scheme promoter	Summary	Total cost	TCF ask	Objective Rating/ Cost Scenarios
DU01	Walking and cycling improvements	Durham County Council	Improved walking and cycling links into the city as well as links to Sunderland and Newcastle: <ul style="list-style-type: none"> • Pedestrian bridge at Milburngate House • Pedestrian improvements along South Road corridor • North West residential cycling links and A691 links • Sunderland Road cycling links and Belmont Business Park walking and cycling links 	£7,506,478	£3,992,319	9 H-M-L
DU02	Park and ride expansion, Durham City	Durham County Council	Expansion of existing Sniperley bus-based park and ride site and the creation of an additional site at Stonebridge to meet forecast demand and inclusion of EV charging	£4,500,000	£2,700,000	10 H-M-L
DU03	Bus priority measures	Durham County Council	Bus priority measures on the approaches to Durham City in Gilesgate (102m bus lane extension) and Shincliffe (252m inbound bus lane)	£349,080	£232,720	8 H-M
DU04	Durham rail station access improvements	Durham County Council	Improving the pedestrian access to Durham City - new stair facilities linking the A691 with the rail station southbound platform	£200,000	£133,333	8 H-M
DU07	Durham bus station	Durham County Council	Demolition of existing life-expired bus station and replaced with a new building on the current site. Improved facilities including new toilets, increased floor to ceiling height to provide more light and space, removal of retail units to provide more passenger circulation space, and relocation of DIRO stands away from a retaining wall which currently impacts on bus manoeuvres	£8,500,000	£4,250,000	9 H-M-L
GA01	West Tyneside cycle route (upgrading existing routes)	Gateshead Council	Upgrading of existing cycle routes along A1 corridor. Links the North/South Great North cycle route in Harlow Green area to East/West Keelmans Way, via Team Valley and Metrocentre / MetroGreen area, continuing to Blaydon	£2,300,000	£2,070,000	9 H-M-L
GA05	MetroGreen sustainable access	Gateshead Council	Sustainable transport package to support development around the Metrocentre. A range of new and improved walking and cycling facilities and improved conditions for buses, including specific bus priority measures on Metrocentre access loop and at Handy Drive.	£5,000,000	£4,500,000	10 H-M-L
GA07	Askew Road	Gateshead Council	Provision of new pedestrian cycle facilities to provide access to housing development sites – access to bus stops and removal of existing concrete footbridge	£720,000	£648,000	9 H-M-L
GA08	Gateshead Quays	Gateshead Council	Upgrading of pedestrian, cycle and public transport environment on key link to Tyne Bridge:	£4,575,000	£3,875,000	10 H-M-L

Code	Scheme name	Scheme promoter	Summary	Total cost	TCF ask	Objective Rating/ Cost Scenarios
	sustainable access		<ul style="list-style-type: none"> Major upgrade of bus priority measures, including bus only links, that dovetail with Air Quality mitigation proposals for the Tyne Bridge Provision of a segregated cycleway alongside a new north/south road through the Baltic quarter Improved pedestrian/cycle provision in the Tyne Bridgehead area including Hills Street Improvements to the pedestrian, cycle and public transport environment on Hawks Road 			
GA09	Great North Cycleway – A167 Birtley to Eighton Lodge	Gateshead Council	Upgrading of cycle links on main Great North cycle route corridor from borough boundary with County Durham to Kells Lane. Creation of shared use footway on one or both sides of carriageway. Improvements to junctions, side roads and crossings along the route. Vigo Lane roundabout converted to signalised junction incorporating toucan facilities	£5,000,000	£4,500,000	6 H
GA11	A195 bus lane	Gateshead Council	Northbound and southbound bus lanes on A195 north of A194(M) on approaches to New Road junction and A194(M) roundabout. Buses using the route link Heworth interchange with Follingsby/ Washington/ Houghton le Spring	£1,200,000	£1,080,000	10 H-M-L
GA13	Keelmans Way improvements	Gateshead Council	Western section of the route is in danger of being lost due to river erosion in two locations – major bank stabilisation works (possibly river dredging) are required to protect and reinstate the route. Improvements also required immediately east of Wylam railway station where the gradient and alignment of the route is poor and an old set of barriers impede movement	£1,000,000	£900,000	5 H
GA16	Gateshead Interchange bus lane	Gateshead Council	A reconfiguration of the north bound bus lane out of Gateshead interchange towards Newcastle. Current arrangement causes delays to GNE buses due to need to switch lanes under traffic signal control on the approach to Askew Road. This route carries almost all Gateshead to Newcastle buses. Scheme works in tandem with Gateshead Quays bus priority project (GA08)	£500,000	£450,000	9 H-M-L
NE01	Transforming Newcastle City Centre	Newcastle City Council	Significant upgrades to Newcastle City Centre. This includes: <ul style="list-style-type: none"> Restriction of vehicles on Blakett Street Public transport priority improvements on Percy Street Improvements to Gallowgate/Percy Street Junction 	£15,000,000	£12,250,000	11 H-M-L

Code	Scheme name	Scheme promoter	Summary	Total cost	TCF ask	Objective Rating/ Cost Scenarios
			<ul style="list-style-type: none"> • Improvements to junctions at Market St/John Dobson St and Market Street / Pilgrim Street • Restriction of vehicles on New Bridge Street West/Pilgrim Street • Continued restrictions on through traffic on Neville Street and Strawberry Place • Provision of cycle infrastructure linking east to west infrastructure • Upgrades to Intelligent Transport Systems to place all junctions within the urban core on UTC • New and enhanced bus stop provision throughout the Bus Loop, including improvements to Market Street • Potential upgrade to New Bridge Street 'hole in the wall' access from Central Motorway, pending discussions with developers • Cycling upgrade between St Nicholas St/Bigg Market Junction and Swan House Roundabout to provide continuous segregated cycling between Jesmond and Gateshead • Improvements to Cycling provision on Claremont Road and access from Town Moor 			
NE02	Newcastle Central Station – Central Gateway	Newcastle City Council	Provision of a new East Concourse to improve connectivity between the railway station and existing/new developments to the East. The current car park within the eastern curtilage of the station will be relocated to facilitate this new concourse. A number of junction improvements will be included to facilitate vehicular and pedestrian access.	£21,725,000	£18,400,000	10 H-M-L
NE03	Newcastle – North Tyneside strategic cycling infrastructure	Newcastle City Council	New cycling infrastructure providing a link between A1058 Coast Road Cycle Route to Newcastle urban core (Newcastle/North Tyneside Boundary to John Dobson Street) and secondary link between A1058 and Haddricks Mill	£5,600,000	£5,000,000	6 H
NE04	Newcastle Outer West	Newcastle City Council	Improvements to junctions (typically the replacement of roundabouts with signalised controls and links to UTMC). Particularly around Stamfordham Road and Ponteland Road. These would be able to give increased priority to public transport using the corridor	£12,000,000	£4,100,000	9 H-M-L
NE08	Newcastle Streets for People	Newcastle City Council	Improving cycling and walking corridors to Metro stations and major bus interchanges, using the format of the successful Streets for People Programme funded by the Cycle City Ambition Fund. Proposed at Fawdon/Kingston Park Metro, Byker Metro and Ouseburn Valley, and Denton or Lemington bus routes	£4,204,000	£4,004,000	10 H-M-L

Code	Scheme name	Scheme promoter	Summary	Total cost	TCF ask	Objective Rating/ Cost Scenarios
NX02	Park and ride enhancements	Nexus	<p>New smart / digital ticket solutions to enhance the attractiveness of park and ride and facilitate integration between modes and enhancing information provision to encourage use. Provision of data to support UTMC data and VMS. Improvements to car parks to enhance perceptions of safety and security including improved CCTV and lighting. At following sites:</p> <ul style="list-style-type: none"> • Northumberland Park • Four Lane Ends • Callerton • Regent Centre • Stadium of Light • Bank Foot 	£3,563,000	£3,225,185	8 H-M
NX03	Metro Flow	Nexus	<p>Metro Flow entails Nexus taking ownership of the existing single-track freight line that runs parallel to the remaining single-track sections of Metro between Pelaw and Tyne Dock. This will enable Metro trains to operate on two tracks, as elsewhere across the network, bringing extra capacity and resilience to the entire network. Completing this project will enable Nexus to increase the daytime frequency of Metro trains from five per hour to six per hour across the network. The cost of the scheme covers the physical track works required to allow Metro trains to access both lines, the erection of overhead catenary on the current freight line and the provision of four new Metro trains. Freight trains will still be able to run along the tracks to access the Jarrow Oil Terminal.</p>	£103,829,572	£94,685,572	12 H-M-L
NX04 a	Callerton Parkway Park & Ride	Nexus	<p>Provision of additional parking capacity at existing park and ride site at Callerton Metro station, increasing provision for disabled parking, electric vehicle charging points, cycle infrastructure, and providing enhanced walking and cycling routes on the site. The scheme will also include enhanced bus facilities to enable local bus services to drop off and pick up from the site.</p>	£2,200,000	£2,070,302	12 H-M-L
NX04 b	Follingsby Park & Ride and links to IAMP	Nexus	<p>Development of a bus-based park and ride site at Follingsby, linking IAMP and Follingsby business parks with the wider region - 600 space car park with bus waiting facilities and provision for new mobility services. The scheme builds on the TCF Tranche 1 investment along Follingsby Lane, and is a step on the journey to create a full multi-modal hub at Follingsby that will include rail access via the reopened Leamside Line.</p>	£7,174,753	£6,550,861	12 H-M-L
NO01	Northumberland Line	Northumberland County Council	<p>The Northumberland Line proposals will provide the necessary track, signalling, station and level crossing infrastructure to introduce passenger trains on the existing freight railway between South East Northumberland and Newcastle Central station, via the East Coast</p>	£117,216,520	£99,546,520	12 H-M-L

Code	Scheme name	Scheme promoter	Summary	Total cost	TCF ask	Objective Rating/ Cost Scenarios
			Main Line at Benton. Trains will operate hourly between Newcastle and Ashington, more regularly in peak hours, serving stations at Ashington, Bedlington Station, Newsham (for Blyth) and Northumberland Park (integrating with Metro services).			
NE07 / NO02	Callerton - Airport -Ponteland cycle route	Northumberland County Council (lead); Newcastle City Council	Cycling connection between Newcastle Airport, Callerton and Ponteland using existing disused rail alignment in Northumberland and off-road alignments where possible. Links into development in Ponteland and Airport Enterprise Zone	£1,010,000	£960,000	8 H-M
NT02	North Shields Transport Hub	North Tyneside Council	Redevelopment of Wellington Street West site and former Co-op site to secure step-free, covered access between Metro and bus, including reprovision of current retail units, improved public realm and a cycle hub. The scheme also provides for improved cycling and walking links into interchange from key development sites on the Tyne, and bus priority measures on approaches to the new interchange to facilitate reliable and quick access for buses	£25,000,000	£22,500,000	8 H-M
NT08	Bus priority improvements along A188/A189 corridor	North Tyneside Council	Bus priority improvements along A188/A189 corridor including Four Lane Ends interchange, and enhancement of existing park and ride facility at Four Lane Ends interchange.	£6,219,000	£4,500,000	10 H-M-L
NT10	Healthy bus and Metro	North Tyneside Council	Infrastructure measures to deliver high quality cycling and walking linkages to Bus and Metro stations (Four Lane Ends, Palmersville, Northumberland Park, Shiremoor, Whitley Bay)	£5,000,000	£4,500,000	10 H-M-L
ST04	Healthier Metro stations	South Tyneside Council	Develop Chichester and Tyne Dock Metro stations to improve connections through on carriageway solutions to improve walking and cycling routes to the metro stations and public realm improvements to improve access to stations. Schemes looks at measures to improve the car parking offer, where possible looking to introduce EV charging points	£3,450,000	£2,800,000	10 H-M-L
ST08 a	Bus corridor improvements	South Tyneside Council	South Shields to Newcastle City Centre and to Durham City Centres: <ul style="list-style-type: none"> Whiteleas Way Bus Lane Stanhope Road / Boldon Lane Junction Boldon / Tiledshed Level Crossing Removal - New Bridge New Road / Boker Lane Junction Boldon ASDA/ New Road / Junction Improvements 	£17,500,000	£11,000,000	10 H-M-L
ST08 b		South Tyneside Council	South Shields to Sunderland City Centre: <ul style="list-style-type: none"> Westoe Fountain / Dean Road / Sunderland Road Junction The Nook PT Improvements A183 Bus Lane into Whitburn 	£2,500,000	£2,000,000	10 H-M-L

Code	Scheme name	Scheme promoter	Summary	Total cost	TCF ask	Objective Rating/ Cost Scenarios
SU03	Sunderland Central Station redevelopment	Sunderland City Council	The project comprises the construction of a new railway station building on the footprint of the existing site which incorporates access to the Metro and heavy rail services. TCF bid comprises the southern access element of the scheme. Subsequent phases consist of northern access and reopening of a third platform. Scheme will also incorporate proposed new station car park (SU07).	£15,235,416	£13,764,816	11 H-M-L
SU04	Holmeside bus rationalisation and priority measures	Sunderland City Council	Reassigning of highway use and provision of improved pedestrians and cyclist facilities, reducing through vehicle movements in the City Centre core: <ul style="list-style-type: none"> • Super crossing provision • Signalised shuttle working • Potential one way system 	£1,135,000	£1,035,000	10 H-M-L
SU05	Inner ring road improvements (bus priority)	Sunderland City Council	Removal of congestion pinch points on St Michaels Way, providing bus priority measures, improved public transport links, journey time saving and congestion relief. Includes Trimdon Street roundabout, High Street West junction, Chester Road junction, Priestman Roundabout and Park Lane Interchange access junction	£7,945,000	£7,245,000	10 H-M-L
SU07	Sunderland station car park	Sunderland City Council	To provide a 160 multi storey car parking facility for national and local rail passengers using Sunderland station, encouraging modal transfer. Includes electric vehicle charging infrastructure. The location of the scheme is approximately 150m from the southern entrance to Sunderland Station	£5,863,200	£5,443,200	10 H-M-L
SU09	Chester Road bus corridor	Sunderland City Council	To provide bus priority measures resulting in journey saving time (particularly public transport). Includes junctions at the Royalty, Broadway, Grindon Lane and Greenwood Road. To improve pedestrian links. To provide a gateway to the University and the City. Better CCTV and UTMC connectivity	£6,356,000	£5,796,000	10 H-M-L
SU10	A690 route action plan	Sunderland City Council	To provide bus priority measures, improve journey times and reliability, and reduce junction delays. Provide safety improvements for vulnerable road users. Junctions include, Barnes Gyratory, Grindon Lane, North Moor Road, Board Inn roundabout. Better CCTV and UTMC connectivity.	£6,810,000	£6,210,000	10 H-M-L
SU15	Strategic cycle network A690 corridor	Sunderland City Council	Construction of new cycleways links into employment areas, including provision of a crossing over the A19 by raising the parapets on the existing Herrington accommodation bridge	£5,609,000	£5,184,000	7 H
IN01	Intu cycle storage	Intu	<ul style="list-style-type: none"> • Secure cycle storage facility for use by all staff working across intu Eldon Square plus access for the wider cycling population in the city • Potential for providing a changing facility for walkers, joggers and runners coming into the City Centre 	£602,300	£300,000	10 H-M-L

Code	Scheme name	Scheme promoter	Summary	Total cost	TCF ask	Objective Rating/ Cost Scenarios
			<ul style="list-style-type: none"> Space for Sustrans' activities to further promote active travel opportunities – Dr Bike, maintenance space, public bike hire, guided rides etc Potential for co-location of Tourist Information services for the wider benefit of the those visiting the city 			
ITS01	Regional ITS Package	Regionwide	Intelligent Transport Systems (ITS) Package will provide traffic signal upgrades at 160 junctions, and 165 pedestrian crossings, in order that full UTMC interventions can be enabled remotely. The upgrades will enable buses to be given a hurry call on their approach to the junction, improving bus reliability and journey speeds. The upgrades will also enable optimised traffic flows when buses are not present, delivering improvements to air quality. The package will also provide an improved bus real-time information systems that will enable buses to be accurately located in real-time and ensure they benefit fully from hurry calls at signalised junctions. The package will also enable improved real-time information about buses to be made available to passengers through various channels	£22,079,672	£20,126,103	11 H-M-L

APPENDIX

Appraisal summary tables



Appraisal Summary Table			Date produced:		25 11 2019		Contact:			
Name of scheme:		North East Transforming Cities Fund Preferred Programme					Name		Mike Scott	
Description of scheme:		This package of schemes offers improvements to walking and cycling, rail and bus links, ITS and the introduction of park and ride sites.					Organisation		NE Transport Strategy Unit	
							Role		Promoter/Official	
Impacts		Summary of key impacts			Assessment					
					Quantitative		Qualitative	Monetary £(NPV)	Distributional 7-pt scale/ vulnerable grp	
Economy	Business users & transport providers	Bus journey times will be reduced on the key commuted routes into employment opportunities into the three city centres. A reduction in congestion through Gateshead, North Tyneside and South Tyneside. Better walking and cycling facilities throughout the cities to improve interchange, particularly with the Metro. Those commuting by rail will benefit from enhanced local, regional and national links to high value jobs. The park and ride scheme will offer an alternative mode of transport to educational and employment opportunities along key routes. The ITS scheme will improve highway network efficiency for both buses and private cars. All proposals should improve journeys to employment and educational sites.			Value of journey time changes (£)		Large Beneficial	£34.95m		
			Net journey time changes (£)							
			0 to 2min	2 to 5min	> 5min					
	Reliability impact on Business users	Business users will see improved reliability through better connected infrastructure with fewer delays which will improve onwards connections in particular.			Not assessed.		Moderately Beneficial	-		
	Regeneration	Significant regeneration and wider impacts, valued at over £160m have been identified.					Large Beneficial	>£162m		
	Wider Impacts									
Environmental	Noise	Many of the cycle and walking schemes have a positive impact on noise levels due to modal shift from highway although others, such as the Northumberland Line, may increase noise in proximity to the scheme. Overall benefits can be considered as positive through the effect of modal shift away from highway to sustainable models.					Beneficial	£0.910m		
	Air Quality	The programmes will see a shift to more sustainable modes of transport and improved air quality as a result of this.					Beneficial	£0.177m		
	Greenhouse gases	The programmes will see a shift to more sustainable modes of transport and therefore will reduce greenhouse gas emissions as a result of this.			Change in non-traded carbon over 60y (CO2e) na		Beneficial	£3.133m		
					Change in traded carbon over 60y (CO2e) na					
	Landscape	The programmes will have a neutral impact on landscape.					Neutral	-		
	Townscape	The programmes will have a positive impact on the townscape for schemes which provide urban realm improvements in town and city centres.					Moderately Beneficial	-		
	Historic Environment	Neutral impact on the historic environment.					Neutral	-		
Biodiversity	Neutral impact on biodiversity					Neutral	-			
Water Environment	While the majority of scheme will not have an impact on the water environment, GA13 provides improvements to the river bank to mitigate the impacts of flooding on the cycle route and railway that runs alongside it.					Beneficial	-			
Social	Commuting and Other users	Bus journey times will be reduced on the key commuted routes into employment opportunities into the three city centres. A reduction in congestion through Gateshead, North Tyneside and South Tyneside. Better walking and cycling facilities throughout the cities to improve interchange, particularly with the Metro. Those commuting by rail will benefit from enhanced local, regional and national links to high value jobs. The park and ride scheme will offer an alternative mode of transport to educational and employment opportunities along key routes. The ITS scheme will improve highway network efficiency for both buses and private cars. All proposals should improve journeys to employment and educational sites.			Value of journey time changes (£)		Large Beneficial	£540.151m		
			Net journey time changes (£)							
			0 to 2min	2 to 5min	> 5min					
		Reliability impact on Commuting and Other users	Users will see improved reliability through better connected infrastructure with fewer delays which will improve onwards connections in particular.			Not assessed.		Moderately Beneficial	-	
		Physical activity	The programmes contain a large proportion of active mode schemes with new and improved cycle and pedestrian facilities targeting health benefits.					Large Beneficial	£48.048m	
		Journey quality	The schemes provided in the programmes will enhance journey ambience with less traffic resulting in a safer and more pleasant environment for cycling and walking trips and improved waiting and interchange facilities for public transport users in a number of locations.					Large Beneficial	£227.875m	
		Accidents	The programmes will see a reduction in incidents not only from a modal shift resulting in reduced vehicular traffic, but also from improved cyclists facilities improving cyclist safety.					Beneficial	£16.531m	
		Security	Some of the schemes, e.g. for Durham Bus Station and metro station schemes will provide improved security. Overall the programmes provide a slight beneficial impact on security.					Beneficial	-	
		Access to services	The active mode schemes are an important part of the programmes, to improve access to services in areas of deprivation where car ownership for some is not an option. Overall the programmes provide a slight beneficial impact on access to services.					Slight Beneficial	-	
		Affordability	The programmes are not expected to significantly reduce travel costs as there are no direct impacts on fares or vehicle fuel costs.					Neutral	-	
	Severance	Many active mode schemes provide improvements to and new pedestrian/cyclist crossing facilities. Overall the programmes provide a slight beneficial impact on severance.					Slight Beneficial	-		
	Option and non-use values	No significant impact.					Neutral	-		
Public Account	Cost to Broad Transport Budget	Investment costs. TCF fund and local government contributions.						£282.451m		
	Indirect Tax Revenues	Reduced tax revenue due to reduction in car usage and fuel consumption.						-£33.776m		

Appraisal Summary Table			Date produced:		25 11 2019		Contact:		
Name of scheme:		North East Transforming Cities Fund Medium Cost Programme					Name		Mike Scott
Description of scheme:		This package of schemes offers improvements to walking and cycling, rail and bus links, ITS and the introduction of park and ride sites.					Organisation		NE Transport Strategy Unit
							Role		Promoter/Official
Impacts		Summary of key impacts		Assessment					
				Quantitative		Qualitative	Monetary £(NPV)	Distributional 7-pt scale/ vulnerable grp	
Economy	Business users & transport providers	Bus journey times will be reduced on the key commuted routes into employment opportunities into the three city centres. A reduction in congestion through Gateshead, North Tyneside and South Tyneside. Better walking and cycling facilities throughout the cities to improve interchange, particularly with the Metro. Those commuting by rail will benefit from enhanced local, regional and national links to high value jobs. The park and ride scheme will offer an alternative mode of transport to educational and employment opportunities along key routes. The ITS scheme will improve highway network efficiency for both buses and private cars. All proposals should improve journeys to employment and educational sites.		Value of journey time changes (£)		Large Beneficial	£34.63m		
			Net journey time changes (£)						
			0 to 2min	2 to 5min	> 5min				
	Reliability impact on Business users	Business users will see improved reliability through better connected infrastructure with fewer delays which will improve onwards connections in particular.		Not assessed.		Moderately Beneficial	-		
	Regeneration	Significant regeneration and wider impacts, valued at over £160m have been identified.				Large Beneficial	>£162m		
	Wider Impacts								
Environmental	Noise	Many of the cycle and walking schemes have a positive impact on noise levels due to modal shift from highway although others, such as the Northumberland Line, may increase noise in proximity to the scheme. Overall benefits can be considered as positive through the effect of modal shift away from highway to sustainable models.				Beneficial	£0.90m		
	Air Quality	The programmes will see a shift to more sustainable modes of transport and improved air quality as a result of this.				Beneficial	£0.176m		
	Greenhouse gases	The programmes will see a shift to more sustainable modes of transport and therefore will reduce greenhouse gas emissions as a result of this.		Change in non-traded carbon over 60y (CO2e) na		Beneficial	£3.108m		
					Change in traded carbon over 60y (CO2e) na				
	Landscape	The programmes will have a neutral impact on landscape.				Neutral	-		
	Townscape	The programmes will have a positive impact on the townscape for schemes which provide urban realm improvements in town and city centres.				Moderately Beneficial	-		
	Historic Environment	Neutral impact on the historic environment.				Neutral	-		
Biodiversity	Neutral impact on biodiversity				Neutral	-			
Water Environment	While the majority of scheme will not have an impact on the water environment, GA13 provides improvements to the river bank to mitigate the impacts of flooding on the cycle route and railway that runs alongside it.				Beneficial	-			
Social	Commuting and Other users	Bus journey times will be reduced on the key commuted routes into employment opportunities into the three city centres. A reduction in congestion through Gateshead, North Tyneside and South Tyneside. Better walking and cycling facilities throughout the cities to improve interchange, particularly with the Metro. Those commuting by rail will benefit from enhanced local, regional and national links to high value jobs. The park and ride scheme will offer an alternative mode of transport to educational and employment opportunities along key routes. The ITS scheme will improve highway network efficiency for both buses and private cars. All proposals should improve journeys to employment and educational sites.		Value of journey time changes (£)		Large Beneficial	£539.305m		
			Net journey time changes (£)						
			0 to 2min	2 to 5min	> 5min				
		Reliability impact on Commuting and Other users	Users will see improved reliability through better connected infrastructure with fewer delays which will improve onwards connections in particular.		Not assessed.		Moderately Beneficial	-	
		Physical activity	The programmes contain a large proportion of active mode schemes with new and improved cycle and pedestrian facilities targeting health benefits.				Large Beneficial	£30.394m	
		Journey quality	The schemes provided in the programmes will enhance journey ambience with less traffic resulting in a safer and more pleasant environment for cycling and walking trips and improved waiting and interchange facilities for public transport users in a number of locations.				Large Beneficial	£222.991m	
		Accidents	The programmes will see a reduction in incidents not only from a modal shift resulting in reduced vehicular traffic, but also from improved cyclists facilities improving cyclist safety.				Beneficial	£16.391m	
		Security	Some of the schemes, e.g. for Durham Bus Station and metro station schemes will provide improved security. Overall the programmes provide a slight beneficial impact on security.				Beneficial	-	
		Access to services	The active mode schemes are an important part of the programmes, to improve access to services in areas of deprivation where car ownership for some is not an option. Overall the programmes provide a slight beneficial impact on access to services.				Slight Beneficial	-	
		Affordability	The programmes are not expected to significantly reduce travel costs as there are no direct impacts on fares or vehicle fuel costs.				Neutral	-	
	Severance	Many active mode schemes provide improvements to and new pedestrian/cyclist crossing facilities. Overall the programmes provide a slight beneficial impact on severance.				Slight Beneficial	-		
	Option and non-use values	No significant impact.				Neutral	-		
Public Account	Cost to Broad Transport Budget	Investment costs. TCF fund and local government contributions.					£272.212m		
	Indirect Tax Revenues	Reduced tax revenue due to reduction in car usage and fuel consumption.					-£33.679m		

Appraisal Summary Table			Date produced: 25 11 2019			Contact:														
Name of scheme:		North East Transforming Cities Fund Low Cost Programme				Name: Mike Scott														
Description of scheme:		This package of schemes offers improvements to walking and cycling, rail and bus links, ITS and the introduction of park and ride sites.				Organisation: NE Transport Strategy Unit														
						Role: Promoter/Official														
Impacts	Summary of key impacts	Assessment																		
		Quantitative			Qualitative	Monetary £(NPV)	Distributional 7-pt scale/ vulnerable grp													
Economy	Business users & transport providers	Bus journey times will be reduced on the key commuted routes into employment opportunities into the three city centres. A reduction in congestion through Gateshead, North Tyneside and South Tyneside. Better walking and cycling facilities throughout the cities to improve interchange, particularly with the Metro. Those commuting by rail will benefit from enhanced local, regional and national links to high value jobs. The park and ride scheme will offer an alternative mode of transport to educational and employment opportunities along key routes. The ITS scheme will improve highway network efficiency for both buses and private cars. All proposals should improve journeys to employment and educational sites.			<table border="1"> <tr><td colspan="3">Value of journey time changes (£)</td></tr> <tr><td colspan="3">Net journey time changes (£)</td></tr> <tr> <td>0 to 2min</td> <td>2 to 5min</td> <td>> 5min</td> </tr> <tr><td colspan="3">Not assessed.</td></tr> </table>	Value of journey time changes (£)			Net journey time changes (£)			0 to 2min	2 to 5min	> 5min	Not assessed.			Large Beneficial	£34.478m	
	Value of journey time changes (£)																			
	Net journey time changes (£)																			
0 to 2min	2 to 5min	> 5min																		
Not assessed.																				
Reliability impact on Business users	Business users will see improved reliability through better connected infrastructure with fewer delays which will improve onwards connections in particular.				Moderately Beneficial	-														
Regeneration Wider Impacts	Significant regeneration and wider impacts, valued at over £160m have been identified.				Large Beneficial	>£162m														
Environmental	Noise	Many of the cycle and walking schemes have a positive impact on noise levels due to modal shift from highway although others, such as the Northumberland Line, may increase noise in proximity to the scheme. Overall benefits can be considered as positive through the effect of modal shift away from highway to sustainable models.			Beneficial	£0.898m														
	Air Quality	The programmes will see a shift to more sustainable modes of transport and improved air quality as a result of this.			Beneficial	£0.177m														
	Greenhouse gases	The programmes will see a shift to more sustainable modes of transport and therefore will reduce greenhouse gas emissions as a result of this.			Beneficial	£3.104m														
	Landscape	The programmes will have a neutral impact on landscape.			Neutral	-														
	Townscape	The programmes will have a positive impact on the townscape for schemes which provide urban realm improvements in town and city centres.			Moderately Beneficial	-														
	Historic Environment	Neutral impact on the historic environment.			Neutral	-														
	Biodiversity	Neutral impact on biodiversity			Neutral	-														
	Water Environment	While the majority of scheme will not have an impact on the water environment, GA13 provides improvements to the river bank to mitigate the impacts of flooding on the cycle route and railway that runs alongside it.			Beneficial	-														
Social	Commuting and Other users	Bus journey times will be reduced on the key commuted routes into employment opportunities into the three city centres. A reduction in congestion through Gateshead, North Tyneside and South Tyneside. Better walking and cycling facilities throughout the cities to improve interchange, particularly with the Metro. Those commuting by rail will benefit from enhanced local, regional and national links to high value jobs. The park and ride scheme will offer an alternative mode of transport to educational and employment opportunities along key routes. The ITS scheme will improve highway network efficiency for both buses and private cars. All proposals should improve journeys to employment and educational sites.			<table border="1"> <tr><td colspan="3">Value of journey time changes (£)</td></tr> <tr><td colspan="3">Net journey time changes (£)</td></tr> <tr> <td>0 to 2min</td> <td>2 to 5min</td> <td>> 5min</td> </tr> <tr><td colspan="3">Not assessed.</td></tr> </table>	Value of journey time changes (£)			Net journey time changes (£)			0 to 2min	2 to 5min	> 5min	Not assessed.			Large Beneficial	£536.650m	
	Value of journey time changes (£)																			
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	Not assessed.																			
	Reliability impact on Commuting and Other users	Users will see improved reliability through better connected infrastructure with fewer delays which will improve onwards connections in particular.			Moderately Beneficial	-														
	Physical activity	The programmes contain a large proportion of active mode schemes with new and improved cycle and pedestrian facilities targeting health benefits.			Large Beneficial	£27.776m														
	Journey quality	The schemes provided in the programmes will enhance journey ambience with less traffic resulting in a safer and more pleasant environment for cycling and walking trips and improved waiting and interchange facilities for public transport users in a number of locations.			Large Beneficial	£201.917m														
	Accidents	The programmes will see a reduction in incidents not only from a modal shift resulting in reduced vehicular traffic, but also from improved cyclists facilities improving cyclist safety.			Beneficial	£16.356m														
	Security	Some of the schemes, e.g. for Durham Bus Station and metro station schemes will provide improved security. Overall the programmes provide a slight beneficial impact on security.			Beneficial	-														
Access to services	The active mode schemes are an important part of the programmes, to improve access to services in areas of deprivation where car ownership for some is not an option. Overall the programmes provide a slight beneficial impact on access to services.			Slight Beneficial	-															
Affordability	The programmes are not expected to significantly reduce travel costs as there are no direct impacts on fares or vehicle fuel costs.			Neutral	-															
Severance	Many active mode schemes provide improvements to and new pedestrian/cyclist crossing facilities. Overall the programmes provide a slight beneficial impact on severance.			Slight Beneficial	-															
Option and non-use values	No significant impact.			Neutral	-															
Public Account	Cost to Broad Transport Budget	Investment costs. TCF fund and local government contributions.				£256.283m														
	Indirect Tax Revenues	Reduced tax revenue due to reduction in car usage and fuel consumption.				-£33.665m														

APPENDIX

Whole Life Costs



Scheme Details:	Whole Life Costs:										
Durham- DU01 (Walking and Cycling Improvements)	<p>Durham County Council envisage the following whole life costs for the walking and cycling improvements scheme:</p> <table border="1"> <tr> <td>Street lighting, footway resurfacing and drainage repairs</td> <td>£60k every 20 years per link</td> </tr> <tr> <td>Road markings for on road sections</td> <td>£10k every 5 years</td> </tr> <tr> <td>Signals replacement for New Inn/South Road</td> <td>£40k every 15 years</td> </tr> <tr> <td>Surface replacement</td> <td>£200k after 30 years</td> </tr> <tr> <td>Maintenance of hydraulics</td> <td>£10k every four years</td> </tr> </table> <p>In addition, Durham Council do not anticipate any significant structural maintenance costs during 60 years.</p>	Street lighting, footway resurfacing and drainage repairs	£60k every 20 years per link	Road markings for on road sections	£10k every 5 years	Signals replacement for New Inn/South Road	£40k every 15 years	Surface replacement	£200k after 30 years	Maintenance of hydraulics	£10k every four years
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Surface replacement	£200k after 30 years										
Maintenance of hydraulics	£10k every four years										
Durham- DU02 (Park and Ride expansion, Durham City)	<p>Durham City Council expect the following whole life costs for the park and ride expansion:</p> <table border="1"> <tr> <td>Street lighting, carriageway and footway resurfacing, drainage repairs</td> <td>£180k every 20 years</td> </tr> <tr> <td>Road markings for the bays and the bus turning area</td> <td>£5k every 5 years</td> </tr> <tr> <td>Bus shelter</td> <td>Option 1- £3k to refurb after 5 years Option 2- £25k to replace after 20/25 years</td> </tr> <tr> <td>Signals replacement</td> <td>£50k every 15 years</td> </tr> </table>	Street lighting, carriageway and footway resurfacing, drainage repairs	£180k every 20 years	Road markings for the bays and the bus turning area	£5k every 5 years	Bus shelter	Option 1- £3k to refurb after 5 years Option 2- £25k to replace after 20/25 years	Signals replacement	£50k every 15 years		
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Signals replacement	£50k every 15 years										
DU03 (Bus Priority Measures)	Durham City Council anticipate the whole life costs will be in the region of £10k for every 5 years as a result of replacing road markings.										
DU04 (Durham Rail Station access improvements)	Durham City Council foresee the following whole life costs for the rail station access scheme; Street lighting, footway resurfacing and drainage repairs - £15k every 20 years.										
DU07 (Durham Bus Station)	<p>Durham City Council envisage the following whole life costs for the bus station scheme:</p> <table border="1"> <tr> <td>New Roof</td> <td>£75k in 40 years</td> </tr> <tr> <td>New Windows</td> <td>£50k every 20 years</td> </tr> <tr> <td>New Concourse (bus stands area)</td> <td>£260,347 every 35 years</td> </tr> </table> <p>DCC confirms it will cover the day to day operating costs from their own revenue streams for the lifetime of the building. No capital funding is sought for this.</p>	New Roof	£75k in 40 years	New Windows	£50k every 20 years	New Concourse (bus stands area)	£260,347 every 35 years				
New Roof	£75k in 40 years										
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Scheme Details:	Whole Life Costs:
<p>Newcastle-NE01 (Transforming Newcastle City Centre),</p> <p>NE03 (Newcastle-North Tyneside Strategic Cycling Infra),</p> <p>NE04 (Newcastle Outer West),</p> <p>NE07 / NO02 (Airport-Ponteland Cycle route),</p> <p>NE08 (Newcastle Streets for People)</p>	<p>Newcastle City Council envisage the assets created as part of this project on the highway will be incorporated into the highway asset base and thus not have whole life cost implications.</p>
<p>Newcastle-NE02 (Newcastle Central Station-Central Gateway)</p>	<p>Newcastle City Council envisage the assets created as part of this project on the highway will be incorporated into the highway asset base and thus not have whole life cost implications.</p> <p>The assets created as part of this project outside the highway will be incorporated into the station lease agreement and incorporated into the ongoing costs borne by the station operator (currently LNER).</p> <p>The responsibilities for maintenance, repairs and renewals within the station lease area will remain as per the Station Access Conditions.</p>

Scheme Details:	Whole Life Costs:																								
Intu	<p>Intu have had early engagement with Sustrans regarding potential partnership arrangement whereby they will provide daytime staffing as per their arrangement in Stockton. They also propose to operate maintenance sessions, guided rides and other potential income stream to support this cost.</p> <p>Intu will continue to work closely with Sustrans to draw up arrangements and manage ongoing costs, the aim is to replicate the successful model of operation in Stockton.</p> <p>Intu Eldon Square will address periodic cleaning, security access control and maintenance, which the proposed annual subscription for the access cards will help cover in terms of costs.</p> <p>Indicative (OpEx) costs are as follows:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Whole Life Costs</th> <th>Quantity</th> <th>Cost</th> <th>Total</th> </tr> </thead> <tbody> <tr> <td>Staffing (annual) – to be discussed with Sustrans in due course</td> <td style="text-align: center;">1</td> <td style="text-align: right;">£25,000</td> <td style="text-align: right;">£25,000</td> </tr> <tr> <td>Electricity (annual)</td> <td style="text-align: center;">1</td> <td style="text-align: right;">£5,000</td> <td style="text-align: right;">£5,000</td> </tr> <tr> <td>Cleaning (annual)</td> <td style="text-align: center;">1</td> <td style="text-align: right;">£12,000</td> <td style="text-align: right;">£12,000</td> </tr> <tr> <td>Security monitoring (CCTV - annual)</td> <td style="text-align: center;">1</td> <td style="text-align: right;">£500</td> <td style="text-align: right;">£500</td> </tr> <tr> <td>Repair/maintenance budget (annual)</td> <td style="text-align: center;">1</td> <td style="text-align: right;">£5,000</td> <td style="text-align: right;">£5,000</td> </tr> </tbody> </table>	Whole Life Costs	Quantity	Cost	Total	Staffing (annual) – to be discussed with Sustrans in due course	1	£25,000	£25,000	Electricity (annual)	1	£5,000	£5,000	Cleaning (annual)	1	£12,000	£12,000	Security monitoring (CCTV - annual)	1	£500	£500	Repair/maintenance budget (annual)	1	£5,000	£5,000
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Scheme Details:	Whole Life Costs:												
North Tyneside-NT02 – North Shields Interchange	<p>North Tyneside Council envisage the whole life costs for the North Shields Interchange scheme to be managed in the following way. The highway infrastructure improvements will become adopted as a Council asset and thereafter maintained through existing Council Highway budgets. The bus interchange facility will incur on-going revenue costs associated with maintenance and management of the facility. These revenue costs will be offset against the additional income generated through leased retail floor space integrated within the facility. The site earmarked for the interchange facility is part-occupied by several retailers whom will be offered alternative retail space within the interchange, including a small local food store.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Item</th> <th>Replacement Rate (Yrs)</th> <th>Cost</th> <th>60 Years</th> </tr> </thead> <tbody> <tr> <td>Comms, Information systems, screens, RTPI, 5G etc.</td> <td style="text-align: center;">8</td> <td style="text-align: right;">£200,000</td> <td style="text-align: right;">£1,500,000</td> </tr> <tr> <td>Internal Refurbishment (inc lighting)</td> <td style="text-align: center;">15</td> <td style="text-align: right;">£400,000</td> <td style="text-align: right;">£1,600,000</td> </tr> </tbody> </table>	Item	Replacement Rate (Yrs)	Cost	60 Years	Comms, Information systems, screens, RTPI, 5G etc.	8	£200,000	£1,500,000	Internal Refurbishment (inc lighting)	15	£400,000	£1,600,000
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Internal Refurbishment (inc lighting)	15	£400,000	£1,600,000										
NT08 – A189 Bus Corridor NT10 – Metro walking/cycling links	<p>Due to the nature of the schemes they will create additional highway, footway / cycle path and ITS infrastructure that will become adopted as a Council asset and thereafter maintained through existing Council Highway budgets.</p>												

Scheme Details:	Whole Life Costs:
Nexus - NX02-Smart and Digital Car park	<p>Nexus foresee the Digital Car Park project will give rise to additional revenue liabilities for maintenance, licencing, data storage and day to day operational costs. All maintenance obligations and renewals will be met as part of the maintenance regime operated by Nexus.</p> <p>Capital Renewal Costs:</p> <p>The latest estimate shows that £3,098, 674 (excluding Optimism Bias) will be required for the purposes of renewing the additional infrastructure over a 40year period. Due to the short asset life of digital technology a further commitment of £80,000 will be required every 5 years to upgrade data storage and software. Additionally, every 10 years there will be a requirement to upgrade electrical installations for CCTV and ANPR cameras at an estimated cost of £282,000 . These capital renewals will be incorporated in the future Asset Renewal Plans for Metro infrastructure.</p> <p>Annual Maintenance and Operating Costs:</p> <p>It is estimated that an additional £83,689 (at current 2019 prices) will be required to meet annual infrastructure maintenance. The majority of the routine and reactive repair maintenance will be carried out by the internal Nexus resource, with a small element of the estimate relating to specialist external repairs. Other annual costs relate to the technological solution for app support, CCTV and ANPR storage and licencing costs.</p>

Scheme Details:	Whole Life Costs:														
Nexus - NX03-Metro Flow	<p>Nexus expect the South Tyneside Track Dualling Capital scheme will give rise to additional revenue liabilities for capital renewals and maintenance and for the cost of day to day operation of the Metro services, when compared to a future scenario in which the Metro Flow Project and increased network wide frequency of operations does not exist.</p> <p>Approximately £29.1 million will be required for the purposes of renewing the additional new infrastructure (the track currently the responsibility of Network Rail) over a 40-year period. It is anticipated that the increased frequency of Metro services will not result in a reduction to existing infrastructure asset life, therefore avoiding any increase in expected renewal costs. Gross tonnage impacts both maintenance and the asset lifetime. The increase in gross tonnage affects maintenance (on some sections) by potentially increasing the track classification. However, the increase is marginal over the lifetime of the asset and therefore no early renewal costs have been included, but an uplift in maintenance has been taken into account. Such capital renewals will be incorporated with the future Asset Renewal Plans for Metro infrastructure. The divestment of the asset from NR to us at a nil value assumes that all future liabilities are also transferred to Nexus.</p> <p>The whole life costs identified have been factored into the economic appraisal, contained within the Economic Case and have therefore had an impact on the estimated BCR and NPV.</p> <table border="1" data-bbox="1398 764 1892 935"> <thead> <tr> <th colspan="2">Annual Net Variation in Revenue Costs</th> </tr> <tr> <th></th> <th>£m</th> </tr> </thead> <tbody> <tr> <td>Infrastructure Maintenance</td> <td>0.091</td> </tr> <tr> <td>Energy Consumption</td> <td>0.325</td> </tr> <tr> <td>Additional Operations</td> <td>0.672</td> </tr> <tr> <td>Fleet Maintenance (heavy)</td> <td>0.143</td> </tr> <tr> <td>Fleet Maintenance (operational)</td> <td>0.443</td> </tr> </tbody> </table>	Annual Net Variation in Revenue Costs			£m	Infrastructure Maintenance	0.091	Energy Consumption	0.325	Additional Operations	0.672	Fleet Maintenance (heavy)	0.143	Fleet Maintenance (operational)	0.443
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Nexus- NX04-Callerton and Follingsby	<p>Nexus envisage the scheme will not give rise to additional revenue liabilities for maintenance and operational costs as car parking fees generated are estimated to exceed the marginal increase in operational costs. The following whole life costs (given at 2019 prices) have been identified:</p> <p>£0.070m per year for a secured bus service to the Follingsby car park site (discussions with local bus operators suggest that existing commercial services would be re-routed to provide connectivity which would remove the need for a secured service);</p> <p>£0.030m per year for operational costs (marginal increase in current cash collection or digital interface cost and maintenance resource); less</p> <p>£0.109m per year in additional car parking revenue (assuming parking at Callerton doubles in line with increased capacity and Follingsby demand is 221 per day based on a 30-minute service frequency and excluding any subsequent uplift in Metro patronage from Callerton).</p>														

Scheme Details:	Whole Life Costs:																								
<p>NO01- Reintroduction of passenger rail services between Ashington and Newcastle</p>	<p>Northumberland Council have provided a detailed analysis and breakdown of the operating costs and can be found in the individual Strategic Outline Business Case.</p> <p>The development of the operating costs for the scheme has been undertaken 'bottom-up' through the application of core operating cost rates sourced either from Northern Rail or from data available on the Network Rail website.</p> <p>Operating costs are made up of: Rolling stock running costs: a function of the net additional vehicle or train miles and includes fuel, maintenance and cleaning, variable usage charge;</p> <ul style="list-style-type: none"> Rolling stock leasing costs: a function of the number of trains (units) required to operate the service, including an allowance for spare cover; made up of the capital lease and the non-capital lease costs; Traincrew costs: a function of the driver and conductor staffing requirements, including spare cover, required to operate the new service; Station operating costs: all stations are assumed to be unstaffed, operating costs include utilities, cleaning and retail systems (SISS); Other operating costs: these are other operating cost items not captured by the above such as overheads and administration (typically applied as a percentage add-on), ATOC fees, BTP fees, industry system costs and so on. These tend to be a function of either total costs or overall train km (and get added as a percentage or pro rata). <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th></th> <th>Class 150 (£'000s)</th> <th>Class 170 (£'000s)</th> </tr> <tr> <th></th> <th>Phase 1b</th> <th>Phase 1b</th> </tr> </thead> <tbody> <tr> <td>Running Costs</td> <td>£954</td> <td>£1,372</td> </tr> <tr> <td>Lease Costs</td> <td>£616</td> <td>£826</td> </tr> <tr> <td>Traincrew Costs</td> <td>£1,055</td> <td>£1,055</td> </tr> <tr> <td>Other Costs</td> <td>£262</td> <td>£325</td> </tr> <tr> <td>Station Costs</td> <td>£220</td> <td>£220</td> </tr> <tr> <td>Total</td> <td>£3,107</td> <td>£3,798</td> </tr> </tbody> </table> <p>The funding of these costs will be from farebox revenues and potentially franchise subsidy payments from DfT, made available through future franchise agreements. Discussions between Northumberland County Council and DfT are ongoing, and DfT has confirmed that accommodating any longer-term subsidy requirement into an existing or new franchise could be justified, if there is a strong business case'.</p>		Class 150 (£'000s)	Class 170 (£'000s)		Phase 1b	Phase 1b	Running Costs	£954	£1,372	Lease Costs	£616	£826	Traincrew Costs	£1,055	£1,055	Other Costs	£262	£325	Station Costs	£220	£220	Total	£3,107	£3,798
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	<p>The project aspiration is to examine all potential avenues that would lead to the service being operable without a call on the public purse (including procuring rather than leasing rolling stock). However, should subsidy be required, Northumberland County Council has made provision for revenue support for the first 3 years of operation.</p>
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Scheme Details:	Whole Life Costs:
<p>Gateshead- GA01 (West Tyneside Cycle Route - Upgrade existing routes),</p> <p>GA05 (Metro Green Sustainable Access),</p> <p>GA07 (Askew Road),</p> <p>GA08 (Hills Street and Gateshead Quays sustainable access),</p> <p>GA09 (A167 Birtley to Low Fell),</p> <p>GA11 (A195 bus lane),</p> <p>GA13 (Keelmans Way improvements)</p> <p>GA16 (Gateshead Interchange bus lane).</p>	<p>Gateshead council have identified the schemes falling within adopted highway or PRoW maintained and managed by Gateshead Council will be maintained through existing funding channels. None of the Gateshead schemes are unusual in terms of ongoing maintenance.</p>

Scheme Details:	Whole Life Costs:										
Sunderland-SU03 (Sunderland Central Station redevelopment)	<p>Network Rail and the Station Franchise Operator, or its tenants, are liable for all operational and maintenance costs of the new station building.</p>										
Sunderland - SU04 (Holmeside Bus Rationalisation and priority measures)	<p>Sunderland City Council envisage the scheme is likely to incur cost implications for back office support, civil enforcement officers and highway maintenance. The costs provided are for the lifetime of the scheme before they are likely to be replaced, for these purposes this is 2022-2040</p> <p>The expected whole life costs are as follows:</p> <table border="1" style="margin-left: 40px;"> <tr> <td>Signals Operation</td> <td style="text-align: right;">£2,890</td> </tr> <tr> <td>Signals and sign maintenance:</td> <td style="text-align: right;">£34,000</td> </tr> <tr> <td>Bus shelter maintenance</td> <td style="text-align: right;">*</td> </tr> <tr> <td>Back office support for Camera system</td> <td></td> </tr> <tr> <td>White Line renewal</td> <td style="text-align: right;">£12,000</td> </tr> </table> <p>*General note - Back office support for Camera System (system maintenance and staffing currently estimated at £24,000 per annum but could potentially be applicable to more than just these schemes.): £408,000</p>	Signals Operation	£2,890	Signals and sign maintenance:	£34,000	Bus shelter maintenance	*	Back office support for Camera system		White Line renewal	£12,000
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Sunderland-SU05 (Inner Ring Road Improvements - bus priority)	<p>Sunderland City Council have broken down SU05 into 4 main schemes: Priestman Road Roundabout, Cowan Terrace, High Street West junction and Chester Road junction.</p> <p>It is envisaged that the schemes will incur cost implications for: Usual highway maintenance, Back-office support may be needed for any camera-based systems (would be linked for all schemes). The costs provided are for the lifetime of the schemes before they are likely to be replaced, for these purposes this is 2022-2040</p> <p>SCC have provided a breakdown of whole life costs based on 2019 prices (excluding inflation):</p> <p>Priestman Road Roundabout-</p> <table border="1" style="margin-left: 40px;"> <tr> <td>Signals Operation</td> <td style="text-align: right;">£5,870</td> </tr> <tr> <td>Signals and sign maintenance:</td> <td style="text-align: right;">£68,000</td> </tr> <tr> <td>Bus shelter maintenance</td> <td style="text-align: right;">*</td> </tr> <tr> <td>Back office support for Camera system</td> <td></td> </tr> <tr> <td>White Line renewal</td> <td style="text-align: right;">£12,000</td> </tr> </table>	Signals Operation	£5,870	Signals and sign maintenance:	£68,000	Bus shelter maintenance	*	Back office support for Camera system		White Line renewal	£12,000
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	<p>Cowan Terrace-</p> <table border="1"> <tr><td>Signals Operation</td><td>£2,890</td></tr> <tr><td>Signals and sign maintenance:</td><td>£34,000</td></tr> <tr><td>Bus shelter maintenance</td><td>*</td></tr> <tr><td>Back office support for Camera system</td><td></td></tr> <tr><td>White Line renewal</td><td>£9,000</td></tr> </table> <p>High Street West junction-</p> <table border="1"> <tr><td>Signals Operation</td><td>£2,890</td></tr> <tr><td>Signals and sign maintenance:</td><td>£34,000</td></tr> <tr><td>Bus shelter maintenance</td><td>*</td></tr> <tr><td>Back office support for Camera system</td><td></td></tr> <tr><td>White Line renewal</td><td>£9,000</td></tr> </table> <p>Chester Road junction-</p> <table border="1"> <tr><td>Signals Operation</td><td>£2,890</td></tr> <tr><td>Signals and sign maintenance:</td><td>£34,000</td></tr> <tr><td>Bus shelter maintenance</td><td>*</td></tr> <tr><td>Back office support for Camera system</td><td></td></tr> <tr><td>White Line renewal</td><td>£12,000</td></tr> </table>	Signals Operation	£2,890	Signals and sign maintenance:	£34,000	Bus shelter maintenance	*	Back office support for Camera system		White Line renewal	£9,000	Signals Operation	£2,890	Signals and sign maintenance:	£34,000	Bus shelter maintenance	*	Back office support for Camera system		White Line renewal	£9,000	Signals Operation	£2,890	Signals and sign maintenance:	£34,000	Bus shelter maintenance	*	Back office support for Camera system		White Line renewal	£12,000
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Sunderland - SU07 (Holmeside / Sunderland Station Car Park)	Sunderland City Council foresee the scheme is likely to incur cost implications for staffing in the region of £963,364.																														
Sunderland-SU09 (Chester Road Bus Corridor)	<p>SCC have broken down SU09 into 4 main schemes: Broadway, Grindon Lane, Greenwood Road and Royalty gyratory.</p> <p>It is envisaged that the schemes will incur cost implications for: Usual highway maintenance, Back-office support may be needed for any camera-based systems (would be linked for all schemes). The costs provided are for the lifetime of the schemes before they are likely to be replaced, for these purposes this is 2022-2040</p> <p>SCC have provided a breakdown of whole life costs based on 2019 prices:</p> <p>Broadway-</p> <table border="1"> <tr><td>Signals Operation</td><td>£2,890</td></tr> <tr><td>Signals and sign maintenance:</td><td>£34,000</td></tr> <tr><td>Bus shelter maintenance</td><td>*</td></tr> <tr><td>Back office support for Camera system</td><td></td></tr> <tr><td>White Line renewal</td><td>£12,000</td></tr> </table>	Signals Operation	£2,890	Signals and sign maintenance:	£34,000	Bus shelter maintenance	*	Back office support for Camera system		White Line renewal	£12,000																				
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Sunderland - SU10 (A690 Route Action Plan)	<p>SCC have broken down SU10 into 3 main schemes: North Moor Lane Junction, Grindon Lane Junction and Board Inn Roundabout. The costs provided are for the lifetime of the schemes before they are likely to be replaced, for these purposes this is 2022-2040</p> <p>It is envisaged that the schemes will incur cost implications for: Usual highway maintenance, Back-office support may be needed for any camera-based systems (would be linked for all schemes).</p> <p>Grindon Lane-</p> <table border="1"> <tr><td>Signals Operation</td><td>£2,890</td></tr> <tr><td>Signals and sign maintenance:</td><td>£34,000</td></tr> <tr><td>Bus shelter maintenance</td><td>*</td></tr> <tr><td>Back office support for Camera system</td><td></td></tr> <tr><td>White Line renewal</td><td>£12,000</td></tr> </table> <p>Greenwood road-</p> <table border="1"> <tr><td>Signals Operation</td><td>£5,870</td></tr> <tr><td>Signals and sign maintenance:</td><td>£68,000</td></tr> <tr><td>Bus shelter maintenance</td><td>*</td></tr> <tr><td>Back office support for Camera system</td><td></td></tr> <tr><td>White Line renewal</td><td>£12,000</td></tr> </table>	Signals Operation	£2,890	Signals and sign maintenance:	£34,000	Bus shelter maintenance	*	Back office support for Camera system		White Line renewal	£12,000	Signals Operation	£5,870	Signals and sign maintenance:	£68,000	Bus shelter maintenance	*	Back office support for Camera system		White Line renewal	£12,000										
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Sunderland - SU15 (Strategic Cycle Network A690 Corridor)	Sunderland City Council consider the White Line renewal will incur a cost of £15,000. The cost is for the lifetime of the scheme before they are likely to be replaced, for these purposes this is 2022-2040										

Scheme Details:	Whole Life Costs:
South Tyneside-ST04 (Healthier / Smart Metro Stations)	<p>South Tyneside do not consider the scheme would have whole life cost implications, as the works will be predominantly on the adopted highway. If classified as adopted highway the scheme will become part of the Councils responsibility and managed in accordance with South Tyneside Councils current and future highways maintenance policies/strategy.</p> <p>Any works that are completed on the Nexus owned Metro Asset, will be completed in partnership with Nexus.</p>
South Tyneside-ST08A (South Shields to Newcastle Strategic Bus Corridor)	<p>South Tyneside envisage the following for the scheme whole life costs- private land will be required for the level crossing closure element, South Tyneside are actively working with the Asset Management team on this aspect. The procurement of land will be purchased using South Tyneside Councils procurement framework. STC normally take this approach and it has been historically successful with highways schemes, for example the A194.</p> <p>In addition, Network Rail will be a key consultee in terms of the final scheme designs, with a variety of requirements having to be met from a health and safety perspective in terms of any bridge / highway structure specification.</p>
South Tyneside – ST08B (South Shields to Newcastle Strategic Bus Corridor)	<p>South Tyneside do not consider the scheme would have whole life costs as all the associated works will be within the adopted highway boundary. If classified as adopted highway the scheme will become part of the Councils responsibility and managed in accordance with South Tyneside Councils current and future highways maintenance policies/strategy.</p>

APPENDIX

Procurement Strategy



Scheme Details:	Procurement Strategy:
<p>Newcastle - NE01 (Transforming Newcastle City Centre),</p> <p>NE03 (Newcastle-North Tyneside Strategic Cycling Infra),</p> <p>NE04 (Newcastle Outer West),</p> <p>NE07 / NO02 (Airport- Ponteland Cycle route) and</p> <p>NE08 (Newcastle Streets for People)</p>	<p>Newcastle City Council envisages the design will be undertaken in-house through its Technical Consultancy, which uses market rates for costs and has experience in similar schemes. Delivery will be undertaken through Highways Maintenance and Operations and Framework Contractors for any specialist elements. These will use existing agreed schedules of rates and framework contracts, which were competitively procured in line with the Council's procurement regulations.</p>
<p>Newcastle - NE02 (Newcastle Central Station- Central Gateway)</p>	<p>Newcastle City Council has identified the procurement route for the individual work packages that comprise the overall programme of works is subject to further development alongside the technical design of works through RIBA plan of work stages 3 and 4. This will consist of a range of individual works contracts appointed by Newcastle City Council, Network Rail or LNER to suit the phasing and specific requirements of each element of the programme. Oversight will be provided by the Station Board, comprising of all three parties.</p> <p>Work on Network Rail buildings and structures can be carried out by third parties, subject to entering an asset protection agreement with Network Rail. Most of the works are undertaken within the station and either on or adjacent to Network Rail infrastructure, requirement the appointment of external contractors experienced in the rail regulatory environment.</p> <p>Where Newcastle City Council is undertaking the works, these will be procured through appropriate existing framework agreements of via competition in accordance with approved Council and EU procurement regulations.</p>

Scheme Details:	Procurement Strategy:
<p>North Tyneside-NT02 – North Shields Interchange</p>	<p>North Tyneside Council foresees the procurement of North Shields Interchange to be delivered in phases and sub-divided into the highway's elements and demolition/building construction.</p> <p>The highways elements will be delivered through North Tyneside's partnership arrangement with Capita. In November 2012, North Tyneside Council and Capita entered into a 15-year partnership to deliver a range of services securing multi-million-pound investment in the borough. Capita has developed a construction arm which depending on scheme scale and complexity can self-deliver or sub-contract construction support from the wider construction market. The partnership approach promotes early involvement of the construction partner in the planning and design of complex schemes, delivering cost savings in design, procurement and construction as well as a continued long-term commitment to investment in the borough.</p> <p>Any sub-contractor appointed as a construction partner has been subject to a competitive tendering process to ensure value for money. On more complex schemes, the construction partnership will conduct a comparative market pricing exercise to further benchmark pricing, providing the opportunity for further competitive tendering should this be required. Using the partnership will have a number of key benefits to both successful delivery of the scheme and ensuring that the benefits forecast are monitored and realised;</p> <p>There are a number of benefits arising from existing relationships between the Council and its partners.</p> <ul style="list-style-type: none"> • A reduction in mobilisation of the design and construction stages due to a greatly reduced procurement process. • The potential for reduction in overheads (and therefore project costs) by using established bases and resources • Early constructor and supplier input into design, programming, costing, sourcing and buildability issues with maximum opportunity to optimise value engineering benefits. • Reduction in tender costs for the authority and the supply chain • Benefit of local knowledge and a co-located team within the Council Offices, improving communication and issue escalation and resolution. <p>The demolition of existing buildings and construction of the new bus interchange facility in North Shields will be subject to an open tendering exercise using the Official Journal of the European Union (OJEU), the process will compliant with EU procurement regulations. This approach is applicable due to the value of the Interchange construction work. The Design elements of the Interchange would likely be delivered through the existing Capita partnership arrangements.</p>

Scheme Details:	Procurement Strategy:
<p>NT08 – A189 Bus Corridor</p> <p>NT10 – Metro walking/cycling links</p>	<p>In November 2012, North Tyneside Council and Capita entered into a 15-year partnership to deliver a range of services securing multi-million-pound investment in the borough. Capita has developed a construction arm which depending on scheme scale and complexity can self-deliver or sub-contract construction support from the wider construction market. The partnership approach promotes early involvement of the construction partner in the planning and design of complex schemes, delivering cost savings in design, procurement and construction as well as a continued long term commitment to investment in the borough.</p> <p>Any sub-contractor appointed as a construction partner has been subject to a competitive tendering process to ensure value for money. On more complex schemes, the construction partnership will conduct a comparative market pricing exercise to further benchmark pricing, providing the opportunity for further competitive tendering should this be required. Using the partnership will have a number of key benefits to both successful delivery of the scheme and ensuring that the benefits forecast are monitored and realised;</p> <p>There are a number of benefits arising from existing relationships between the Council and its partners.</p> <ul style="list-style-type: none"> • A reduction in mobilisation of the design and construction stages due to a greatly reduced procurement process. • The potential for reduction in overheads (and therefore project costs) by using established bases and resources • Early constructor and supplier input into design, programming, costing, sourcing and buildability issues with maximum opportunity to optimise value engineering benefits. • Reduction in tender costs for the authority and the supply chain • Benefit of local knowledge and a co-located team within the Council Offices, improving communication and issue escalation and resolution. <p>The A189 Corridor scheme further benefits from Capita already being mobilised along this corridor delivering a combination of major schemes (NPIF – Salters Lane) as well as several S.278 developer schemes programmed over the next 18 months (A188/A189 West Moor Rbt, A1056/A189 Weetslade Rbt, and A1056 Killingworth Way schemes).</p> <p>The walking and cycling links to Metro station scheme does not include any complex infrastructure requirements and is likely to be self-delivered directly through the Capita construction team.</p> <p>The partnership has been in operation for five years now and has successfully delivered a large number of highway improvement schemes within North Tyneside. The “level of certainty” for delivery the partnership offers greatly reduces the risk of failure to deliver against an option of utilising a new supplier outside of the partnership.</p>

Scheme Details:	Procurement Strategy:
<p>Gateshead- GA01 (West Tyneside Cycle Route - Upgrade existing routes),</p> <p>GA05 (Metro Green Sustainable Access),</p> <p>GA07 (Askew Road),</p> <p>GA08 (Hills Street and Gateshead Quays sustainable access),</p> <p>GA09 (A167 Birtley to Low Fell),</p> <p>GA11 (A195 bus lane),</p> <p>GA16 (Gateshead Interchange bus lane).</p>	<p>Gateshead Council foresees the schemes are standard highway schemes and will be procured through the normal routes via Gateshead’s Direct Labour Organisation (DLO) with input from Newcastle Traffic Signals group where required. Should the level of works in year be beyond the scope of the DLO workforce, it may choose to bring in additional help but would still manage the works. The DLO procures works through the NEPO framework contract. This is already set up for a variety of contractors such as surfacing, labour, earthworks etc. This can typically be procured in a 6-8 week timescale.</p> <p>Gateshead envisage the scheme is likely to involve more specialist work in and around the riverbank. Gateshead has carried out a similar scheme on the Derwent Cycle Underbridge which was subject to open tendering and implemented successfully by a private contractor. Any open tender process will be managed through NEPO, our regional purchasing organisation. The procurement typically follows the approximate timescales below although in the case of Keelman’s Way scheme (GA13) there will be a number of special approvals and issues that will need to be overcome.</p> <p>Approvals/preparation of tender documents- 8-10 weeks Tender period- 6 weeks Tender evaluation -1-2 weeks Award of contract/pre construction meeting/mobilisation- 6-8 weeks</p> <p>Gateshead’s Structural Engineering department have a detailed knowledge of suitable procurement routes to deliver the GA13 scheme.</p>
<p>Gateshead- GA13 (Keelmans Way improvements),</p>	<p>Gateshead envisage the scheme is likely to involve more specialist work in and around the riverbank. Gateshead has carried out a similar scheme on the Derwent Cycle Underbridge which was subject to open tendering and implemented successfully by a private contractor. Any open tender process will be managed through NEPO, our regional purchasing organisation. The procurement typically follows the approximate timescales below although in the case of Keelman’s Way scheme (GA13) there will be a number of special approvals and issues that will need to be overcome.</p> <p>Approvals/preparation of tender documents- 8-10 weeks Tender period- 6 weeks Tender evaluation -1-2 weeks Award of contract/pre construction meeting/mobilisation- 6-8 weeks</p> <p>Gateshead’s Structural Engineering department have a detailed knowledge of suitable procurement routes to deliver the GA13 scheme.</p>

Scheme Details:	Procurement Strategy:
South Tyneside-ST04 (Healthier / Smart Metro Stations)	<p>South Tyneside is signed up to the North East Procurement Office (NEPO) and intends to use this route to undertake the detailed designs of the improvements.</p> <p>With regards to the construction element, South Tyneside has appointed Galliford Try as our preferred construction partner, following an internal commissioning process. Where we have certain elements of the schemes that are working directly on the STC highway, it is envisaged that our own construction team would be able to complete this work.</p>
South Tyneside-ST08A (South Shields to Newcastle Strategic Bus Corridor)	<p>South Tyneside is signed up to the North East Procurement Office (NEPO) and intends to use this route to undertake the detailed designs for the specific junction improvements.</p> <p>For the Level Crossing closure element of the scheme, AECOM have been appointed using the NEPO framework to undertake a phased approach to the designs, with the current phase coming to a conclusion in January 2020.</p> <p>The procurement of land will be purchased using South Tyneside Council's procurement framework. STC normally takes this approach and it has been historically successful with highways schemes, for example the A194.</p> <p>With regards to the construction element, South Tyneside has appointed Galliford Try as our preferred construction partner, following an internal commissioning process. Where we have certain elements of the schemes that are working directly on the STC highway, it is envisaged that our own construction team would be able to complete this work.</p>
South Tyneside-ST08B (South Shields to Sunderland Strategic Bus Corridor)	<p>South Tyneside is signed up to the North East Procurement Office (NEPO) and intends to use this route to undertake the detailed designs for the specific junction improvements.</p> <p>With regards to the construction element, South Tyneside has appointed Galliford Try as our preferred construction partner, following an internal commissioning process. Where we have certain elements of the schemes that are working directly on the STC highway, it is envisaged that our own construction team would be able to complete this work.</p>

Scheme Details:	Procurement Strategy:																		
Intu- IN01 (Intu Cycle Storage)	<p>Intu expect the scheme will be procured in two parts as follows:</p> <p>The Design team will need to make the following appointments:</p> <table border="1"> <thead> <tr> <th>Design Team</th> <th>Status</th> </tr> </thead> <tbody> <tr> <td>Architect</td> <td>we have an architect ready to be appointed</td> </tr> <tr> <td>Mechanical and electrical engineer</td> <td>we will need to confirm the outline proposals and then confirm the scope of works against which an appointment can be made</td> </tr> <tr> <td>Civil engineer</td> <td>we will need to understand the below ground drainage situation and how we connect into it for our requirements</td> </tr> <tr> <td>Planning consultant</td> <td>we can take a view as to whether a formal appointment needs to be made for this or whether we can arrange this via the architect</td> </tr> <tr> <td>Principal Designer (CDM)</td> <td>we will need to appoint a Principal Designer to assist in compliancy with the CDM Regulations</td> </tr> <tr> <td>Intu ICT team</td> <td>we will need to involve our ICT team to oversee any IT/data/CCTV requirements</td> </tr> <tr> <td>Trinity</td> <td>This company are Intu's incumbent provider of fire safety systems and maintenance – we will engage with them to provide details of any fire system requirements</td> </tr> <tr> <td>Project manager</td> <td>intu will be overall project manager</td> </tr> </tbody> </table> <p>The design team will prepare a detailed scope of works which will then be sent out to tender to three or four suitably competent contractors. Intu will oversee the tendering process. The tender process will be the standard Intu approach with approved contractors invited to attend (i.e. the tender process will not be via a public portal or other such vehicle).</p> <p>The second stage of procurement will involve the Contractor:</p> <p>Following on from the tender process and if the costs are in line with expectations, we will formally appoint the contractor using a suitable JCT contract to include the standard Intu contract amendments. The project will then be managed by Intu and involve the on-going liaison with the appointed design team consultants.</p>	Design Team	Status	Architect	we have an architect ready to be appointed	Mechanical and electrical engineer	we will need to confirm the outline proposals and then confirm the scope of works against which an appointment can be made	Civil engineer	we will need to understand the below ground drainage situation and how we connect into it for our requirements	Planning consultant	we can take a view as to whether a formal appointment needs to be made for this or whether we can arrange this via the architect	Principal Designer (CDM)	we will need to appoint a Principal Designer to assist in compliancy with the CDM Regulations	Intu ICT team	we will need to involve our ICT team to oversee any IT/data/CCTV requirements	Trinity	This company are Intu's incumbent provider of fire safety systems and maintenance – we will engage with them to provide details of any fire system requirements	Project manager	intu will be overall project manager
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Scheme Details:	Procurement Strategy:										
Sunderland- SU03 (Sunderland Central Station redevelopment)	Sunderland City Council foresees the scheme would undergo a procurement process through Corporate Assurance and Procurement Team in line with current practice.										
Sunderland - SU04 (Holmeside Bus Rationalisation and priority measures) Sunderland - SU05 (Inner Ring Road Improvements - bus priority) Sunderland - SU09 (Chester Road Bus Corridor)	Sunderland City Council envisages the schemes will be delivered by following the below procurement strategy: <table border="1"> <tr> <td>Civil Works</td> <td>Carried out by SCC Highway Operations</td> </tr> <tr> <td>Bus Shelters</td> <td>Nexus</td> </tr> <tr> <td>Signals</td> <td>Regional TSG</td> </tr> <tr> <td>Signs and lighting</td> <td>Aurora</td> </tr> <tr> <td>Any Additional ITS Technology</td> <td>TBC</td> </tr> </table>	Civil Works	Carried out by SCC Highway Operations	Bus Shelters	Nexus	Signals	Regional TSG	Signs and lighting	Aurora	Any Additional ITS Technology	TBC
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Sunderland - SU07 (Holmeside / Sunderland Station Car Park)	Sunderland City Council envisages schemes which make-up SU07 programme will be delivered under the NEPO Frameworks for both design and Construction work										
Sunderland - SU10 (A690 Route Action Plan) Sunderland - SU15 (Strategic Cycle Network A690 Corridor)	Sunderland City Council expects the schemes will be delivered by following the below procurement strategy: <table border="1"> <tr> <td>Civil Works</td> <td>Carried out by SCC Highway Operations</td> </tr> <tr> <td>Signals</td> <td>Regional TSG</td> </tr> <tr> <td>Signs and lighting</td> <td>Aurora</td> </tr> <tr> <td>Any Additional ITS Technology</td> <td>TBC</td> </tr> </table>	Civil Works	Carried out by SCC Highway Operations	Signals	Regional TSG	Signs and lighting	Aurora	Any Additional ITS Technology	TBC		
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Scheme Details:	Procurement Strategy:
Nexus - NX02- Smart and Digital Car park	Nexus procurement will be aligned with the proven Procurement and Contracting Strategies used consistently by Nexus in the Nexus Asset Renewal Programme (ARP). It is envisaged that the project will be delivered under a Design and Build Contract.
Nexus - NX03- Metro Flow	<p>Nexus undertakes that all works will be procured and managed directly by Nexus in line with its corporate governance structure. Nexus' procurement approach is facilitated and managed through the Corporate Procurement team ensuring compliance with relevant European Procurement Regulations, which demonstrates an open, fair and transparent procurement process. It is a process that has been deployed successfully over many years to deliver Nexus' Asset Renewal Programme (ARP).</p> <p>The procurement strategy for the existing ARP, which is regularly reviewed and optimised to meet the needs of ARP Programme, has been progressed through a combination of dedicated category framework agreements appointing specialist contractors and smaller competitive tenders ensuring compliance with the Official Journal of the European Union (OJEU). Traditional and Design and Build approaches are used – dependent on risk profiles, complexity and timescales. Early Contractor Involvement work packages are used to optimise the delivery of the most complex track renewal schemes.</p> <p>The ARP consists of delivering a programme of multi-disciplinary rail infrastructure projects of up to £40 million annually within tight grant funding profiles defined by DfT. In addition, through long term planning and collaborative working with our Local Authority partners over £16 million of additional funding including Local Growth Fund and Highway Challenge Funding has been secured to augment a number of schemes including Killingworth Road Bridge and Central Station.</p> <p>The Procurement and Contract Strategy for individual schemes is defined at Stage Gate 3 – Option Selection. It forms the output from a workshop involving the Project Manager, Procurement Officer, Quantity Surveyor and Commercial Manager. This will evaluate the optimum Procurement and Contracting approach by taking into consideration a wide range of factors. In the course of the ARP, a variety of procurement approaches have been utilised to ensure efficient delivery of multi-disciplinary schemes, these include OJEU Procurement, Frameworks Agreements, conventional ITT's and an internal Capital Project Delivery team.</p> <p>Procurement will be aligned with the proven Procurement and Contracting Strategies used consistently by Nexus in the Nexus Asset Renewal Programme. This programme has delivered a programme of multi-disciplinary rail infrastructure projects since March 2010 of more than £300 million within tightly-defined grant funding profiles defined by DfT. The Procurement and Contract Strategy for individual schemes is confirmed at Stage Gate 3 (see Management Case) and forms the output from a workshop involving the Project Manager, Procurement Officer, Quantity Surveyor and Commercial Manager. Control and governance of the procurement process will be undertaken by the Nexus Corporate Procurement team, reporting to the Head of Legal Services.</p>

Scheme Details:	Procurement Strategy:
<p>Nexus- NX04- Callerton and Follingsby</p>	<p>Nexus procurement will be aligned with the proven Procurement and Contracting Strategies used consistently by Nexus in the Nexus Asset Renewal Programme. This programme has delivered a programme of multi-disciplinary rail infrastructure projects since March 2010 of more than £300 million within tightly-defined grant funding profiles defined by DfT. The Procurement and Contract Strategy for individual schemes is confirmed at Stage Gate 3 (see Management Case) and forms the output from a workshop involving the Project Manager, Procurement Officer, Quantity Surveyor and Commercial Manager. Control and governance of the procurement process will be undertaken by the Nexus Corporate Procurement team, reporting to the Head of Legal Services.</p>

Scheme Details:	Procurement Strategy:
<p>Northumberland- NO01- Reintroduction of passenger rail services between Ashington and Newcastle</p>	<p>Northumberland County Council will continue to lead the scheme, supported by a governance structure that includes DfT, TfN and Network Rail, up to the conclusion of the development stage. The lead role on the project may change during design and delivery stages depending upon the mechanism for procurement of future phases.</p> <p>Project Phasing The drivers for the proposal to implement the project in two or more phases areas follows:</p> <ol style="list-style-type: none"> 1.Speed of Delivery: <ol style="list-style-type: none"> a. The full half-hourly service with 6 stations may require a full Transport and Works Act process which could take up to 2 years to complete. b. The full half-hourly service requires significant signalling and track work which will add to the design and construction timescales. 2.Opportunity for private investment: <ol style="list-style-type: none"> a. A phase 1 scheme could be designed in such a way that private investment is not required; b. For phase 2, the advancement of digital railway, plus the level of re-signalling/track upgrade project required, combined with some early evidence of passenger demand, will be a more attractive package to private sector investors. 3.Availability of Funding <ol style="list-style-type: none"> a. A higher state of readiness for an early phase is more likely to attract public funding, especially those which are time limited e.g. Transforming Cities Fund. 4.Network Capacity <ol style="list-style-type: none"> a. Capacity on the network north of Newcastle will become more constrained over the next 5 years and so a later delivery increases the risk of paths being unavailable. <p>The key driver dictating procurement is the available options for the future ownership and operating model.</p> <p>The route is relatively self-contained between the point of signalling control interface between Newcastle IECC and Newsham Signal Box, just west of Northumberland Park station, and Ashington. The exception is the freight branch line from West Sleekburn Junction to the Port of Blyth.</p> <p>Currently freight traffic operates over the route between the following places:</p> <ul style="list-style-type: none"> •Benton North Jn. and Lynemouth (Biomass); •BentonN. Jn and Port Of Blyth (Coal); •Bedlington and Port of Blyth (Alcan flow to/from Fort William via Morpeth).

	<p>There are no timetabled passenger services over the route although it is cleared for modern DMU vehicles between Benton North Junction, Bedlington and Morpeth for diversionary purposes.</p> <p>There area number of future ownership and operating options which exist, ranging from the current Network Rail/Train Operating Company (TOC) model to some form of vertical integration on this route. Based on the business case work done to date, there appears to be insufficient operating surplus from the passenger operation in the short term to generate a return on capital so any market led vertical integration proposal would need to be on the basis of a concession/management contract arrangement that reduced the long run cost to the taxpayer compared to other options.</p> <p>Similarly, the lack of operating surplus makes it unlikely that the project can be taken forward as a fully market led proposal (Category 1) and it is therefore assumed to be developed through the RNEP process until such time as a decision is taken on the delivery option.</p> <p>Given that the project involves both a new passenger service and upgraded/new infrastructure, the ownership/procurement options must consider these elements both separately and combined. With this in mind, the procurement strategy options are set out in the following sections.</p> <p>Passenger Service</p> <p>There are two passenger service options to consider:</p> <ol style="list-style-type: none"> 1.The service is added to an existing franchised operator under a Direct Award or single tender action; 2.The service is managed by a non-franchised operator with the relevant Licences, Safety Management System and competencies under a fixed period concession arrangement. <p>The operation of the first phase will need to consider and plan for a level of disruption created by the delivery of the second phase of works. Revenue risk is likely to have to be retained by the promoter/procurer or by DfT.</p> <p>The base case for this SOBC assumes operation by the Northern franchise, initially using Class 15X rolling stock that will be replaced by newer cascaded rolling stock at the beginning of the next franchise.</p> <p>Infrastructure Enhancement and Operation</p> <p>There are four options to consider:</p> <ol style="list-style-type: none"> 1.Network Rail designs and builds under a Development Services Agreement (DSA), Implementation Agreement (IA) and then operates the completed infrastructure as part of the existing network; 2.Other Party designs and builds under asset protection arrangements and Network Rail operates following Handover and Entry into Service Process. Stations could be Network Rail or non-Network Rail owned;
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	<p>3.Other Party Designs, Builds, Finances and Maintains the upgraded infrastructure with the infrastructure remaining on Network Rail's Regulatory Asset Base (DBFM);</p> <p>4.Other Party Designs, Builds, Finances, Maintains and Operates the upgraded infrastructure with the infrastructure transferred from Network Rail to either a sub national body or private owner (DBFMO).</p> <p>Private Investment/Vertical Integration Options</p> <p>The integration of trains and track could take a number of forms depending on the ultimate ownership of the infrastructure. However, it is more likely to attract private investment if it includes wholesale replacement of existing assets, and the consequent significant upfront capital investment, which enables existing asset condition risk to be minimised and overall lifecycle cost benefits to accrue.</p> <p>For that reason, if the Project is phased, Phase 1 may need to be publicly funded as it involves minimal infrastructure investment to get the service operating. This would allow for a more attractive proposition to be developed, including significant signalling and track upgrades, based on initial patronage results. The availability of actual patronage results would reduce the market perception of revenue risk.</p> <p>The option of vertical integration for this part of the network primarily depends upon whether or not a vertically integrated operator could generate significant Operation, Maintenance and Renewals (OMR) cost savings when compared to the current Network Rail operation, without having to take on the full risk of catastrophic events.</p> <p>A view would also need to be taken on whether the Port of Blyth branch would remain with Network Rail or become part of an integrated Northumberland Line operation. The current Freight Operating Companies (FOCs) would then need to have new access agreements with the Northumberland Line(vertically integrated)operator and agreements reached on the relationship in respect of existing privately owned elements of the railway (Port of Blyth, Cambois sidings, Furnace Way sidings, Lynemouth Power station).</p> <p>Clarification of the implications under safety legislation (Licences and ROGS) of operating a privately run, multi-operator main line network would also be required. Further discussions are planned with ORR on this point, although it would appear from the ROGS regulations that a party other than Network Rail could hold a Network Licence.</p> <p>There has already been some market interest in the project along the lines of a joint operating and delivery partner approach, which also reflected the need to have a significant infrastructure modernisation component. The project intends to continue to test the market to gauge the extent of interest before making a decision on the final phase scope and procurement strategy as part of the next stage of the scheme, namely the 'Develop' stage and the production of the Outline Business Case (OBC).</p>
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	Discussions on the procurement strategy have taken place with DfT to ensure that the proposed strategy is broadly in-line with the current 'direction of travel' in respect of RNEP and the wider review of the industry.
Scheme Details:	Procurement Strategy:
Durham- DU01 (Walking and Cycling Improvements)	Durham City Council envisage the Design and Build will be procured through appropriate framework agreements (NEPO civils framework or Scape).
DU07 (Durham Bus Station)	
Durham- DU02 (Park and Ride expansion, Durham City)	Durham City Council envisage the Design and Build will be undertaken internally.
DU03 (Bus Priority Measures)	
DU04 (Durham Rail Station access improvements)	

APPENDIX

Cost Profiles



PREFERRED (HIGH) COST SCENARIOS

Scheme	£m	2020/21	2021/22	2022/23	Total
Newcastle City Council	ITEM 1				
NE01 (Transforming Newcastle City Centre)	Source TCF ask	£5,250,000.00	£4,000,000.00	£3,000,000.00	£12,250,000.00
	Local Contribution	£850,000.00	£1,000,000.00	£900,000.00	£2,750,000.00
	Private Contribution	£0.00	£0.00	£0.00	£0.00
	Total	£6,100,000.00	£5,000,000.00	£3,900,000.00	£15,000,000.00
	ITEM 2				
NE02 (Newcastle Central Station- Central Gateway)	Source TCF ask	£4,000,000.00	£7,000,000.00	£7,400,000.00	£18,400,000.00
	Local Contribution	£3,325,000.00	£0.00	£0.00	£3,325,000.00
	Private Contribution	£0.00	£0.00	£0.00	£0.00
	Total	£7,325,000.00	£7,000,000.00	£7,400,000.00	£21,725,000.00
	ITEM 3				
NE03 (Newcastle-North Tyneside Strategic Cycling Infra)	Source TCF ask	£2,580,000.00	£2,420,000.00	£0.00	£5,000,000.00
	Local Contribution	£300,000.00	£300,000.00	£0.00	£600,000.00
	Private Contribution	£0.00	£0.00	£0.00	£0.00
	Total	£2,880,000.00	£2,720,000.00	£0.00	£5,600,000.00
	ITEM 4				
NE04 (Newcastle Outer West)	Source TCF ask	£4,100,000.00	£0.00	£0.00	£4,100,000.00
	Local Contribution	£1,680,000.00	£2,242,000.00	£2,670,000.00	£6,592,000.00
	Private Contribution	£880,000.00	£428,000.00	£0.00	£1,308,000.00
	Total	£6,660,000.00	£2,670,000.00	£2,670,000.00	£12,000,000.00
	ITEM 5				
NE07 / NO02 (Airport- Ponteland Cycle route)	Source TCF ask	£240,000.00	£720,000.00	£0.00	£960,000.00
	Local Contribution	£0.00	£50,000.00	£0.00	£50,000.00
	Private Contribution	£0.00	£0.00	£0.00	£0.00
	Total	£240,000.00	£770,000.00	£0.00	£1,010,000.00
	ITEM 6				
NE08 (Newcastle Streets for People)	Source TCF ask	£286,000.00	£1,144,000.00	£2,574,000.00	£4,004,000.00
	Local Contribution	£0.00	£0.00	£200,000.00	£200,000.00
	Private Contribution	£0.00	£0.00	£0.00	£0.00
	Total	£286,000.00	£1,144,000.00	£2,774,000.00	£4,204,000.00
Gateshead Council	ITEM 7				
GA01 (West Tyneside Cycle Route - Upgrade existing routes)	Source TCF ask	£690,000.00	£690,000.00	£690,000.00	£2,070,000.00
	Local Contribution	£90,000.00	£70,000.00	£70,000.00	£230,000.00
	Private Contribution	£0.00	£0.00	£0.00	£0.00
	Total	£780,000.00	£760,000.00	£760,000.00	£2,300,000.00
	ITEM 8				
GA05 (Metro Green Sustainable Access)	Source TCF ask	£1,500,000.00	£1,500,000.00	£1,500,000.00	£4,500,000.00
	Local Contribution	£100,000.00	£170,000.00	£190,000.00	£460,000.00
	Private Contribution	£20,000.00	£20,000.00	£0.00	£40,000.00
	Total	£1,620,000.00	£1,690,000.00	£1,690,000.00	£5,000,000.00

PREFERRED (HIGH) COST SCENARIOS

Scheme	£m	2020/21	2021/22	2022/23	Total
Gateshead Council					
ITEM 9					
GA07 (Askew Road)	Source TCF ask	£648,000.00	£0.00	£0.00	£648,000.00
	Local Contribution	£72,000.00	£0.00	£0.00	£72,000.00
	Private Contribution	£0.00	£0.00	£0.00	£0.00
	Total	£720,000.00	£0.00	£0.00	£720,000.00
ITEM 10					
GA08 (Hills Street and Gateshead Quays sustainable access)	Source TCF ask	£0.00	£1,000,000.00	£2,875,000.00	£3,875,000.00
	Local Contribution	£100,000.00	£300,000.00	£300,000.00	£700,000.00
	Private Contribution	£0.00	£0.00	£0.00	£0.00
	Total	£100,000.00	£1,300,000.00	£3,175,000.00	£4,575,000.00
ITEM 11					
GA09 (A167 Birtley to Low Fell)	Source TCF ask	£1,650,000.00	£1,400,000.00	£1,450,000.00	£4,500,000.00
	Local Contribution	£200,000.00	£150,000.00	£150,000.00	£500,000.00
	Private Contribution	£0.00	£0.00	£0.00	£0.00
	Total	£1,850,000.00	£1,550,000.00	£1,600,000.00	£5,000,000.00
ITEM 12					
GA11 (A195 bus lane)	Source TCF ask	£1,080,000.00	£0.00	£0.00	£1,080,000.00
	Local Contribution	£120,000.00	£0.00	£0.00	£120,000.00
	Private Contribution	£0.00	£0.00	£0.00	£0.00
	Total	£1,200,000.00	£0.00	£0.00	£1,200,000.00
ITEM 13					
GA13 (Keelmans Way improvements)	Source TCF ask	£900,000.00	£0.00	£0.00	£900,000.00
	Local Contribution	£100,000.00	£0.00	£0.00	£100,000.00
	Private Contribution	£0.00	£0.00	£0.00	£0.00
	Total	£1,000,000.00	£0.00	£0.00	£1,000,000.00
ITEM 14					
GA16 (Gateshead Interchange bus lane)	Source TCF ask	£450,000.00	£0.00	£0.00	£450,000.00
	Local Contribution	£50,000.00	£0.00	£0.00	£50,000.00
	Private Contribution	£0.00	£0.00	£0.00	£0.00
	Total	£500,000.00	£0.00	£0.00	£500,000.00

PREFERRED (HIGH) COST SCENARIOS

Scheme	£m	2020/21	2021/22	2022/23	Total
North Tyneside Council		ITEM 15			
NT02 (Improvements to North Shields Transport Hub)	Source TCF ask	£4,500,000.00	£7,000,000.00	£11,000,000.00	£22,500,000.00
	Local Contribution	£500,000.00	£1,000,000.00	£1,000,000.00	£2,500,000.00
	Private Contribution	£0.00	£0.00	£0.00	£0.00
	Total	£5,000,000.00	£8,000,000.00	£12,000,000.00	£25,000,000.00
		ITEM 16			
NT08 (Bus priority improvements along A188 / A189 corridor - phase 1)	Source TCF ask	£2,000,000.00	£2,500,000.00	£0.00	£4,500,000.00
	Local Contribution	£1,719,000.00	£0.00	£0.00	£1,719,000.00
	Private Contribution	£0.00	£0.00	£0.00	£0.00
	Total	£3,719,000.00	£2,500,000.00	£0.00	£6,219,000.00
		ITEM 17			
NT10 (Improved cycling / walking links to Metro)	Source TCF ask	£900,000.00	£2,250,000.00	£1,350,000.00	£4,500,000.00
	Local Contribution	£100,000.00	£250,000.00	£150,000.00	£500,000.00
	Private Contribution	£0.00	£0.00	£0.00	£0.00
	Total	£1,000,000.00	£2,500,000.00	£1,500,000.00	£5,000,000.00
South Tyneside Council		ITEM 18			
ST04 (Smart Metro Stations / Healthier Metro Stations)	Source TCF ask	£1,300,000.00	£700,000.00	£800,000.00	£2,800,000.00
	Local Contribution	£250,000.00	£200,000.00	£200,000.00	£650,000.00
	Private Contribution	£0.00	£0.00	£0.00	£0.00
	Total	£1,550,000.00	£900,000.00	£1,000,000.00	£3,450,000.00
		ITEM 19			
ST08a (Bus Corridor Improvements- South Shields to Newcastle)	Source TCF ask	£800,000.00	£1,200,000.00	£9,000,000.00	£11,000,000.00
	Local Contribution	£200,000.00	£300,000.00	£2,000,000.00	£2,500,000.00
	Third Party Contribution	£0.00	£0.00	£4,000,000.00	£4,000,000.00
	Total	£1,000,000.00	£1,500,000.00	£15,000,000.00	£17,500,000.00
		ITEM 20			
ST08b (Bus Corridor Improvements- South Shields to Newcastle)	Source TCF ask	£800,000.00	£400,000.00	£800,000.00	£2,000,000.00
	Local Contribution	£200,000.00	£100,000.00	£200,000.00	£500,000.00
	Private Contribution	£0.00	£0.00	£0.00	£0.00
	Total	£1,000,000.00	£500,000.00	£1,000,000.00	£2,500,000.00

PREFERRED (HIGH) COST SCENARIOS

Scheme	£m	2020/21	2021/22	2022/23	Total
Sunderland City Council	ITEM 21				
SU03 (Sunderland Central Station redevelopment)	Source TCF ask	£13,764,816.00	£0.00	£0.00	£13,764,816.00
	Local Contribution	£1,470,600.00	£0.00	£0.00	£1,470,600.00
	Private Contribution	£0.00	£0.00	£0.00	£0.00
	Total	£15,235,416.00	£0.00	£0.00	£15,235,416.00
	ITEM 22				
SU04 (Holmeside Bus Rationalisation and priority measures)	Source TCF ask	£1,035,000.00	£0.00	£0.00	£1,035,000.00
	Local Contribution	£100,000.00	£0.00	£0.00	£100,000.00
	Private Contribution	£0.00	£0.00	£0.00	£0.00
	Total	£1,135,000.00	£0.00	£0.00	£1,135,000.00
	ITEM 23				
SU05 (Inner Ring Road Improvements - bus priority)	Source TCF ask	£2,415,000.00	£1,955,000.00	£2,875,000.00	£7,245,000.00
	Local Contribution	£230,000.00	£190,000.00	£280,000.00	£700,000.00
	Private Contribution	£0.00	£0.00	£0.00	£0.00
	Total	£2,645,000.00	£2,145,000.00	£3,155,000.00	£7,945,000.00
	ITEM 24				
SU07 (Holmeside / Sunderland Station Car Park)	Source TCF ask	£648,000.00	£4,795,200.00	£0.00	£5,443,200.00
	Local Contribution	£50,000.00	£370,000.00	£0.00	£420,000.00
	Private Contribution	£0.00	£0.00	£0.00	£0.00
	Total	£698,000.00	£5,165,200.00	£0.00	£5,863,200.00
	ITEM 25				
SU09 (Chester Road Bus Corridor)	Source TCF ask	£3,496,000.00	£2,300,000.00	£0.00	£5,796,000.00
	Local Contribution	£360,000.00	£200,000.00	£0.00	£560,000.00
	Private Contribution	£0.00	£0.00	£0.00	£0.00
	Total	£3,856,000.00	£2,500,000.00	£0.00	£6,356,000.00
	ITEM 26				
SU10 (A690 Route Action Plan)	Source TCF ask	£3,910,000.00	£2,300,000.00	£0.00	£6,210,000.00
	Local Contribution	£370,000.00	£230,000.00	£0.00	£600,000.00
	Private Contribution	£0.00	£0.00	£0.00	£0.00
	Total	£4,280,000.00	£2,530,000.00	£0.00	£6,810,000.00
	ITEM 27				
SU15 (Strategic Cycle Network A690 Corridor)	Source TCF ask	£2,592,000.00	£2,592,000.00	£0.00	£5,184,000.00
	Local Contribution	£200,000.00	£225,000.00	£0.00	£425,000.00
	Private Contribution	£0.00	£0.00	£0.00	£0.00
	Total	£2,792,000.00	£2,817,000.00	£0.00	£5,609,000.00

PREFERRED (HIGH) COST SCENARIOS

Scheme	£m	2020/21	2021/22	2022/23	Total
Northumberland					
ITEM 28					
NO01 (Reintroduction of passenger rail services between Ashington and Newcastle)	Source TCF ask	£11,731,708	£39,407,609	£48,407,203	£99,546,520
	Local Contribution	£6,611,000	£10,512,000	£547,000	£17,670,000
	Private Contribution	£0	£0	£0	£0
	Total	£18,342,708	£49,919,609	£48,954,203	£117,216,520
Durham Council					
ITEM 29					
DU01 (Walking and Cycling Improvements)	Source TCF ask	£737,000.00	£3,255,319.00	£0.00	£3,992,319.00
	Local Contribution	£289,000.00	£2,475,159.00	£0.00	£2,764,159.00
	Private Contribution	£300,000.00	£450,000.00	£0.00	£750,000.00
	Total	£1,326,000.00	£6,180,478.00	£0.00	£7,506,478.00
ITEM 30					
DU02 (Park and Ride expansion, Durham City)	Source TCF ask	£1,800,000.00	£900,000.00	£0.00	£2,700,000.00
	Local Contribution	£1,250,000.00	£550,000.00	£0.00	£1,800,000.00
	Private Contribution	£0.00	£0.00	£0.00	£0.00
	Total	£3,050,000.00	£1,450,000.00	£0.00	£4,500,000.00
ITEM 31					
DU03 (Bus Priority Measures)	Source TCF ask	£0.00	£232,720.00	£0.00	£232,720.00
	Local Contribution	£21,360.00	£95,000.00	£0.00	£116,360.00
	Private Contribution	£0.00	£0.00	£0.00	£0.00
	Total	£21,360.00	£327,720.00	£0.00	£349,080.00
ITEM 32					
DU04 (Durham Rail Station access improvements)	Source TCF ask	£53,333.00	£80,000.00	£0.00	£133,333.00
	Local Contribution	£46,667.00	£20,000.00	£0.00	£66,667.00
	Private Contribution	£0.00	£0.00	£0.00	£0.00
	Total	£100,000.00	£100,000.00	£0.00	£200,000.00
ITEM 33					
DU07 (Durham Bus Station)	Source TCF ask	£4,000,000.00	£250,000.00	£0.00	£4,250,000.00
	Local Contribution	£2,250,000.00	£2,000,000.00	£0.00	£4,250,000.00
	Private Contribution	£0.00	£0.00	£0.00	£0.00
	Total	£6,250,000.00	£2,250,000.00	£0.00	£8,500,000.00

PREFERRED (HIGH) COST SCENARIOS

Scheme	£m	2020/21	2021/22	2022/23	Total
NEXUS					
ITEM 34					
NX02 (Park and Ride Enhancements)	Source TCF ask	£270,000.00	£600,000.00	£2,355,184.60	£3,225,184.60
	Local Contribution	£180,000.00	£0.00	£157,815.40	£337,815.40
	Private Contribution	£0.00	£0.00	£0.00	£0.00
	Total	£450,000.00	£600,000.00	£2,513,000.00	£3,563,000.00
ITEM 35					
NX03 (Twin tracking of metro line between Pelaw and Bede/ Metro Capacity Enhancement)	Source TCF ask	£1,902,101.28	£20,467,570.79	£72,315,899.93	£94,685,572.00
	Local Contribution	£744,000.00	£0.00	£8,400,000.00	£9,144,000.00
	Private Contribution	£0.00	£0.00	£0.00	£0.00
	Total	£2,646,101.28	£20,467,570.79	£80,715,899.93	£103,829,572.00
ITEM 36					
NX04A (Callerton Parkway)	Source TCF ask	£100,302.00	£1,020,000.00	£950,000.00	£2,070,302.00
	Local Contribution	£129,698.00	£0.00	£0.00	£129,698.00
	Private Contribution	£0.00	£0.00	£0.00	£0.00
	Total	£230,000.00	£1,020,000.00	£950,000.00	£2,200,000.00
ITEM 37					
NX04B (Follingsby)	Source TCF ask	£6,550,861.00	£0.00	£0.00	£6,550,861.00
	Local Contribution	£623,892.00	£0.00	£0.00	£623,892.00
	Private Contribution	£0.00	£0.00	£0.00	£0.00
	Total	£7,174,753.00	£0.00	£0.00	£7,174,753.00
Intu					
ITEM 38					
IN01 (Intu Cycle Storage)	Source TCF ask	£300,000.00	£0.00	£0.00	£300,000.00
	Local Contribution	£0.00	£0.00	£0.00	£0.00
	Private Contribution	£110,100.00	£96,100.00	£96,100.00	£302,300.00
	Total	£410,100.00	£96,100.00	£96,100.00	£602,300.00
ITS					
ITEM 39					
ITS 01	Source TCF ask	£6,641,466.22	£7,325,611.86	£6,159,025.67	£20,126,103.75
	Local Contribution	£725,279.03	£757,529.03	£470,760.03	£1,953,568.09
	Private Contribution	£0.00	£0.00	£0.00	£0.00
	Total	£7,366,745.25	£8,083,140.89	£6,629,785.70	£22,079,671.84
Programme Delivery Support					
ITEM 40					
Total		£394,925.00	£324,896.00	£290,757.00	£1,010,578.00
TOTALS					
	£m	2020/21	2021/22	2022/23	Total
	Total Dft funding requested	£96,016,512.50	£121,729,926.65	£175,792,070.20	£393,538,509.35
	Local Contribution	£25,607,496.03	£23,756,688.03	£17,885,575.43	£67,249,759.49
	Private Contribution	£1,310,100.00	£994,100.00	£4,096,100.00	£6,400,300.00
	Total private / local contribution (match funding)	£26,917,596.03	£24,750,788.03	£21,981,675.43	£73,650,059.49
	Total (DfT and Match)	£122,934,108.53	£146,480,714.68	£197,773,745.63	£467,188,568.84

MEDIUM COST SCENARIOS

	£m	2020/21	2021/22	2022/23	Total
Newcastle City Council					
ITEM 1					
NE01 (Transforming Newcastle City Centre)	Source TCF ask	£5,250,000.00	£4,000,000.00	£3,000,000.00	£12,250,000.00
	Local Contribution	£850,000.00	£1,000,000.00	£900,000.00	£2,750,000.00
	Private Contribution	£0.00	£0.00	£0.00	£0.00
	Total	£6,100,000.00	£5,000,000.00	£3,900,000.00	£15,000,000.00
ITEM 2					
NE02 (Newcastle Central Station- Central Gateway)	Source TCF ask	£4,000,000.00	£7,000,000.00	£7,400,000.00	£18,400,000.00
	Local Contribution	£3,325,000.00	£0.00	£0.00	£3,325,000.00
	Private Contribution	£0.00	£0.00	£0.00	£0.00
	Total	£7,325,000.00	£7,000,000.00	£7,400,000.00	£21,725,000.00
ITEM 4					
NE04 (Newcastle Outer West)	Source TCF ask	£4,100,000.00	£0.00	£0.00	£4,100,000.00
	Local Contribution	£1,680,000.00	£2,242,000.00	£2,670,000.00	£6,592,000.00
	Private Contribution	£880,000.00	£428,000.00	£0.00	£1,308,000.00
	Total	£6,660,000.00	£2,670,000.00	£2,670,000.00	£12,000,000.00
ITEM 5					
NE07 / NO02 (Airport- Ponteland Cycle route)	Source TCF ask	£240,000.00	£720,000.00	£0.00	£960,000.00
	Local Contribution	£0.00	£50,000.00	£0.00	£50,000.00
	Private Contribution	£0.00	£0.00	£0.00	£0.00
	Total	£240,000.00	£770,000.00	£0.00	£1,010,000.00
ITEM 6					
NE08 (Newcastle Streets for People)	Source TCF ask	£286,000.00	£1,144,000.00	£2,574,000.00	£4,004,000.00
	Local Contribution	£0.00	£0.00	£200,000.00	£200,000.00
	Private Contribution	£0.00	£0.00	£0.00	£0.00
	Total	£286,000.00	£1,144,000.00	£2,774,000.00	£4,204,000.00
Gateshead Council					
ITEM 7					
GA01 (West Tyneside Cycle Route - Upgrade existing routes)	Source TCF ask	£690,000.00	£690,000.00	£690,000.00	£2,070,000.00
	Local Contribution	£90,000.00	£70,000.00	£70,000.00	£230,000.00
	Private Contribution	£0.00	£0.00	£0.00	£0.00
	Total	£780,000.00	£760,000.00	£760,000.00	£2,300,000.00
ITEM 8					
GA05 (Metro Green Sustainable Access)	Source TCF ask	£1,500,000.00	£1,500,000.00	£1,500,000.00	£4,500,000.00
	Local Contribution	£100,000.00	£170,000.00	£190,000.00	£460,000.00
	Private Contribution	£20,000.00	£20,000.00	£0.00	£40,000.00
	Total	£1,620,000.00	£1,690,000.00	£1,690,000.00	£5,000,000.00
ITEM 9					
GA07 (Askew Road)	Source TCF ask	£648,000.00	£0.00	£0.00	£648,000.00
	Local Contribution	£72,000.00	£0.00	£0.00	£72,000.00
	Private Contribution	£0.00	£0.00	£0.00	£0.00
	Total	£720,000.00	£0.00	£0.00	£720,000.00
ITEM 10					
GA08 (Hills Street and Gateshead Quays sustainable access)	Source TCF ask	£0.00	£1,000,000.00	£2,875,000.00	£3,875,000.00
	Local Contribution	£100,000.00	£300,000.00	£300,000.00	£700,000.00
	Private Contribution	£0.00	£0.00	£0.00	£0.00
	Total	£100,000.00	£1,300,000.00	£3,175,000.00	£4,575,000.00

MEDIUM COST SCENARIOS

	£m	2020/21	2021/22	2022/23	Total
Gateshead Council					
ITEM 12					
GA11 (A195 bus lane)	Source TCF ask	£1,080,000.00	£0.00	£0.00	£1,080,000.00
	Local Contribution	£120,000.00	£0.00	£0.00	£120,000.00
	Private Contribution	£0.00	£0.00	£0.00	£0.00
	Total	£1,200,000.00	£0.00	£0.00	£1,200,000.00
ITEM 14					
GA16 (Gateshead Interchange bus lane)	Source TCF ask	£450,000.00	£0.00	£0.00	£450,000.00
	Local Contribution	£50,000.00	£0.00	£0.00	£50,000.00
	Private Contribution	£0.00	£0.00	£0.00	£0.00
	Total	£500,000.00	£0.00	£0.00	£500,000.00
North Tyneside Council					
ITEM 15					
NT02 (Improvements to North Shields Transport Hub)	Source TCF ask	£4,500,000.00	£7,000,000.00	£11,000,000.00	£22,500,000.00
	Local Contribution	£500,000.00	£1,000,000.00	£1,000,000.00	£2,500,000.00
	Private Contribution	£0.00	£0.00	£0.00	£0.00
	Total	£5,000,000.00	£8,000,000.00	£12,000,000.00	£25,000,000.00
ITEM 16					
NT08 (Bus priority improvements along A188 / A189 corridor - phase 1)	Source TCF ask	£2,000,000.00	£2,500,000.00	£0.00	£4,500,000.00
	Local Contribution	£1,719,000.00	£0.00	£0.00	£1,719,000.00
	Private Contribution	£0.00	£0.00	£0.00	£0.00
	Total	£3,719,000.00	£2,500,000.00	£0.00	£6,219,000.00
ITEM 17					
NT10 (Improved cycling / walking links to Metro)	Source TCF ask	£900,000.00	£2,250,000.00	£1,350,000.00	£4,500,000.00
	Local Contribution	£100,000.00	£250,000.00	£150,000.00	£500,000.00
	Private Contribution	£0.00	£0.00	£0.00	£0.00
	Total	£1,000,000.00	£2,500,000.00	£1,500,000.00	£5,000,000.00
South Tyneside Council					
ITEM 18					
ST04 (Smart Metro Stations / Healthier Metro Stations)	Source TCF ask	£1,300,000.00	£700,000.00	£800,000.00	£2,800,000.00
	Local Contribution	£250,000.00	£200,000.00	£200,000.00	£650,000.00
	Private Contribution	£0.00	£0.00	£0.00	£0.00
	Total	£1,550,000.00	£900,000.00	£1,000,000.00	£3,450,000.00
ITEM 19					
ST08a (Bus Corridor Improvements- South Shields to Newcastle)	Source TCF ask	£800,000.00	£1,200,000.00	£9,000,000.00	£11,000,000.00
	Local Contribution	£200,000.00	£300,000.00	£2,000,000.00	£2,500,000.00
	Third Party Contribution	£0.00	£0.00	£4,000,000.00	£4,000,000.00
	Total	£1,000,000.00	£1,500,000.00	£15,000,000.00	£17,500,000.00
ITEM 20					
ST08b (Bus Corridor Improvements- South Shields to Newcastle)	Source TCF ask	£800,000.00	£400,000.00	£800,000.00	£2,000,000.00
	Local Contribution	£200,000.00	£100,000.00	£200,000.00	£500,000.00
	Private Contribution	£0.00	£0.00	£0.00	£0.00
	Total	£1,000,000.00	£500,000.00	£1,000,000.00	£2,500,000.00

MEDIUM COST SCENARIOS

	£m	2020/21	2021/22	2022/23	Total
Sunderland City Council	ITEM 21				
SU03 (Sunderland Central Station redevelopment)	Source TCF ask	£13,764,816.00	£0.00	£0.00	£13,764,816.00
	Local Contribution	£1,470,600.00	£0.00	£0.00	£1,470,600.00
	Private Contribution	£0.00	£0.00	£0.00	£0.00
	Total	£15,235,416.00	£0.00	£0.00	£15,235,416.00
	ITEM 22				
SU04 (Holmeside Bus Rationalisation and priority measures)	Source TCF ask	£1,035,000.00	£0.00	£0.00	£1,035,000.00
	Local Contribution	£100,000.00	£0.00	£0.00	£100,000.00
	Private Contribution	£0.00	£0.00	£0.00	£0.00
	Total	£1,135,000.00	£0.00	£0.00	£1,135,000.00
	ITEM 23				
SU05 (Inner Ring Road Improvements - bus priority)	Source TCF ask	£2,415,000.00	£1,955,000.00	£2,875,000.00	£7,245,000.00
	Local Contribution	£230,000.00	£190,000.00	£280,000.00	£700,000.00
	Private Contribution	£0.00	£0.00	£0.00	£0.00
	Total	£2,645,000.00	£2,145,000.00	£3,155,000.00	£7,945,000.00
	ITEM 24				
SU07 (Holmeside / Sunderland Station Car Park)	Source TCF ask	£648,000.00	£4,795,200.00	£0.00	£5,443,200.00
	Local Contribution	£50,000.00	£370,000.00	£0.00	£420,000.00
	Private Contribution	£0.00	£0.00	£0.00	£0.00
	Total	£698,000.00	£5,165,200.00	£0.00	£5,863,200.00
	ITEM 25				
SU09 (Chester Road Bus Corridor)	Source TCF ask	£3,496,000.00	£2,300,000.00	£0.00	£5,796,000.00
	Local Contribution	£360,000.00	£200,000.00	£0.00	£560,000.00
	Private Contribution	£0.00	£0.00	£0.00	£0.00
	Total	£3,856,000.00	£2,500,000.00	£0.00	£6,356,000.00
	ITEM 26				
SU10 (A690 Route Action Plan)	Source TCF ask	£3,910,000.00	£2,300,000.00	£0.00	£6,210,000.00
	Local Contribution	£370,000.00	£230,000.00	£0.00	£600,000.00
	Private Contribution	£0.00	£0.00	£0.00	£0.00
	Total	£4,280,000.00	£2,530,000.00	£0.00	£6,810,000.00
Northumberland	ITEM 28				
NO01 (Reintroduction of passenger rail services between Ashington and Newcastle)	Source TCF ask	£11,731,708	£39,407,609	£48,407,203	£99,546,520
	Local Contribution	£6,611,000	£10,512,000	£547,000	£17,670,000
	Private Contribution	£0	£0	£0	£0
	Total	£18,342,708	£49,919,609	£48,954,203	£117,216,520

MEDIUM COST SCENARIOS

	£m	2020/21	2021/22	2022/23	Total
Durham Council	ITEM 29				
DU01 (Walking and Cycling Improvements)	Source TCF ask	£737,000.00	£3,255,319.00	£0.00	£3,992,319.00
	Local Contribution	£289,000.00	£2,475,159.00	£0.00	£2,764,159.00
	Private Contribution	£300,000.00	£450,000.00	£0.00	£750,000.00
	Total	£1,326,000.00	£6,180,478.00	£0.00	£7,506,478.00
	ITEM 30				
DU02 (Park and Ride expansion, Durham City)	Source TCF ask	£1,800,000.00	£900,000.00	£0.00	£2,700,000.00
	Local Contribution	£1,250,000.00	£550,000.00	£0.00	£1,800,000.00
	Private Contribution	£0.00	£0.00	£0.00	£0.00
	Total	£3,050,000.00	£1,450,000.00	£0.00	£4,500,000.00
	ITEM 31				
DU03 (Bus Priority Measures)	Source TCF ask	£0.00	£232,720.00	£0.00	£232,720.00
	Local Contribution	£21,360.00	£95,000.00	£0.00	£116,360.00
	Private Contribution	£0.00	£0.00	£0.00	£0.00
	Total	£21,360.00	£327,720.00	£0.00	£349,080.00
	ITEM 32				
DU04 (Durham Rail Station access improvements)	Source TCF ask	£53,333.00	£80,000.00	£0.00	£133,333.00
	Local Contribution	£46,667.00	£20,000.00	£0.00	£66,667.00
	Private Contribution	£0.00	£0.00	£0.00	£0.00
	Total	£100,000.00	£100,000.00	£0.00	£200,000.00
	ITEM 33				
DU07 (Durham Bus Station)	Source TCF ask	£4,000,000.00	£250,000.00	£0.00	£4,250,000.00
	Local Contribution	£2,250,000.00	£2,000,000.00	£0.00	£4,250,000.00
	Private Contribution	£0.00	£0.00	£0.00	£0.00
	Total	£6,250,000.00	£2,250,000.00	£0.00	£8,500,000.00
NEXUS	ITEM 34				
NX02 (Park and Ride Enhancements)	Source TCF ask	£270,000.00	£600,000.00	£2,355,184.60	£3,225,184.60
	Local Contribution	£180,000.00	£0.00	£157,815.40	£337,815.40
	Private Contribution	£0.00	£0.00	£0.00	£0.00
	Total	£450,000.00	£600,000.00	£2,513,000.00	£3,563,000.00
	ITEM 35				
NX03 (Twin tracking of metro line between Pelaw and Bede/ Metro Capacity Enhancement)	Source TCF ask	£1,902,101.28	£20,467,570.79	£72,315,899.93	£94,685,572.00
	Local Contribution	£744,000.00	£0.00	£8,400,000.00	£9,144,000.00
	Private Contribution	£0.00	£0.00	£0.00	£0.00
	Total	£2,646,101.28	£20,467,570.79	£80,715,899.93	£103,829,572.00
	ITEM 36				
NX04A (Callerton Parkway)	Source TCF ask	£100,302.00	£1,020,000.00	£950,000.00	£2,070,302.00
	Local Contribution	£129,698.00	£0.00	£0.00	£129,698.00
	Private Contribution	£0.00	£0.00	£0.00	£0.00
	Total	£230,000.00	£1,020,000.00	£950,000.00	£2,200,000.00
	ITEM 37				
NX04B (Follingsby)	Source TCF ask	£6,550,861.00	£0.00	£0.00	£6,550,861.00
	Local Contribution	£623,892.00	£0.00	£0.00	£623,892.00
	Private Contribution	£0.00	£0.00	£0.00	£0.00
	Total	£7,174,753.00	£0.00	£0.00	£7,174,753.00

MEDIUM COST SCENARIOS

	£m	2020/21	2021/22	2022/23	Total
Intu	ITEM 36				
IN01 (Intu Cycle Storage)	Source TCF ask	£300,000.00	£0.00	£0.00	£300,000.00
	Local Contribution	£0.00	£0.00	£0.00	£0.00
	Private Contribution	£110,100.00	£96,100.00	£96,100.00	£302,300.00
	Total	£410,100.00	£96,100.00	£96,100.00	£602,300.00
ITS	ITEM 39				
ITS 01	Source TCF ask	£6,641,466.22	£7,325,611.86	£6,159,025.67	£20,126,103.75
	Local Contribution	£725,279.03	£757,529.03	£470,760.03	£1,953,568.09
	Private Contribution	£0.00	£0.00	£0.00	£0.00
	Total	£7,366,745.25	£8,083,140.89	£6,629,785.70	£22,079,671.84
Programme Delivery Support	ITEM 40				
Total		£394,925.00	£324,896.00	£290,757.00	£1,010,578.00
TOTALS					
	£m	2020/21	2021/22	2022/23	Total
	Total Dft funding requested	£88,294,512.50	£115,317,926.65	£174,342,070.20	£377,954,509.35
	Local Contribution	£24,807,496.03	£23,081,688.03	£17,735,575.43	£65,624,759.49
	Private Contribution	£1,310,100.00	£994,100.00	£4,096,100.00	£6,400,300.00
	Total private / local contribution (match funding)	£26,117,596.03	£24,075,788.03	£21,831,675.43	£72,025,059.49
	Total (DfT and Match)	£114,412,108.53	£139,393,714.68	£196,173,745.63	£449,979,568.84

LOW COST SCENARIOS

	£m	2020/21	2021/22	2022/23	Total
Newcastle City Council	ITEM 1				
NE01 (Transforming Newcastle City Centre)	Source TCF ask	£5,250,000.00	£4,000,000.00	£3,000,000.00	£12,250,000.00
	Local Contribution	£850,000.00	£1,000,000.00	£900,000.00	£2,750,000.00
	Private Contribution	£0.00	£0.00	£0.00	£0.00
	Total	£6,100,000.00	£5,000,000.00	£3,900,000.00	£15,000,000.00
	ITEM 2				
NE02 (Newcastle Central Station- Central Gateway)	Source TCF ask	£4,000,000.00	£7,000,000.00	£7,400,000.00	£18,400,000.00
	Local Contribution	£3,325,000.00	£0.00	£0.00	£3,325,000.00
	Private Contribution	£0.00	£0.00	£0.00	£0.00
	Total	£7,325,000.00	£7,000,000.00	£7,400,000.00	£21,725,000.00
	ITEM 4				
NE04 (Newcastle Outer West)	Source TCF ask	£4,100,000.00	£0.00	£0.00	£4,100,000.00
	Local Contribution	£1,680,000.00	£2,242,000.00	£2,670,000.00	£6,592,000.00
	Private Contribution	£880,000.00	£428,000.00	£0.00	£1,308,000.00
	Total	£6,660,000.00	£2,670,000.00	£2,670,000.00	£12,000,000.00
	ITEM 6				
NE08 (Newcastle Streets for People)	Source TCF ask	£286,000.00	£1,144,000.00	£2,574,000.00	£4,004,000.00
	Local Contribution	£0.00	£0.00	£200,000.00	£200,000.00
	Private Contribution	£0.00	£0.00	£0.00	£0.00
	Total	£286,000.00	£1,144,000.00	£2,774,000.00	£4,204,000.00
Gateshead Council	ITEM 7				
GA01 (West Tyneside Cycle Route - Upgrade existing routes)	Source TCF ask	£690,000.00	£690,000.00	£690,000.00	£2,070,000.00
	Local Contribution	£90,000.00	£70,000.00	£70,000.00	£230,000.00
	Private Contribution	£0.00	£0.00	£0.00	£0.00
	Total	£780,000.00	£760,000.00	£760,000.00	£2,300,000.00
	ITEM 8				
GA05 (Metro Green Sustainable Access)	Source TCF ask	£1,500,000.00	£1,500,000.00	£1,500,000.00	£4,500,000.00
	Local Contribution	£100,000.00	£170,000.00	£190,000.00	£460,000.00
	Private Contribution	£20,000.00	£20,000.00	£0.00	£40,000.00
	Total	£1,620,000.00	£1,690,000.00	£1,690,000.00	£5,000,000.00
	ITEM 9				
GA07 (Askew Road)	Source TCF ask	£648,000.00	£0.00	£0.00	£648,000.00
	Local Contribution	£72,000.00	£0.00	£0.00	£72,000.00
	Private Contribution	£0.00	£0.00	£0.00	£0.00
	Total	£720,000.00	£0.00	£0.00	£720,000.00
	ITEM 10				
GA08 (Hills Street and Gateshead Quays sustainable access)	Source TCF ask	£0.00	£1,000,000.00	£2,875,000.00	£3,875,000.00
	Local Contribution	£100,000.00	£300,000.00	£300,000.00	£700,000.00
	Private Contribution	£0.00	£0.00	£0.00	£0.00
	Total	£100,000.00	£1,300,000.00	£3,175,000.00	£4,575,000.00

LOW COST SCENARIOS

	£m	2020/21	2021/22	2022/23	Total
Gateshead Council	ITEM 12				
GA11 (A195 bus lane)	Source TCF ask	£1,080,000.00	£0.00	£0.00	£1,080,000.00
	Local Contribution	£120,000.00	£0.00	£0.00	£120,000.00
	Private Contribution	£0.00	£0.00	£0.00	£0.00
	Total	£1,200,000.00	£0.00	£0.00	£1,200,000.00
	ITEM 14				
GA16 (Gateshead Interchange bus lane)	Source TCF ask	£450,000.00	£0.00	£0.00	£450,000.00
	Local Contribution	£50,000.00	£0.00	£0.00	£50,000.00
	Private Contribution	£0.00	£0.00	£0.00	£0.00
	Total	£500,000.00	£0.00	£0.00	£500,000.00
North Tyneside Council					
NT08 (Bus priority improvements along A188 / A189 corridor - phase 1)	Source TCF ask	£2,000,000.00	£2,500,000.00	£0.00	£4,500,000.00
	Local Contribution	£1,719,000.00	£0.00	£0.00	£1,719,000.00
	Private Contribution	£0.00	£0.00	£0.00	£0.00
	Total	£3,719,000.00	£2,500,000.00	£0.00	£6,219,000.00
	ITEM 17				
NT10 (Improved cycling / walking links to Metro)	Source TCF ask	£900,000.00	£2,250,000.00	£1,350,000.00	£4,500,000.00
	Local Contribution	£100,000.00	£250,000.00	£150,000.00	£500,000.00
	Private Contribution	£0.00	£0.00	£0.00	£0.00
	Total	£1,000,000.00	£2,500,000.00	£1,500,000.00	£5,000,000.00
South Tyneside Council	ITEM 18				
ST04 (Smart Metro Stations / Healthier Metro Stations)	Source TCF ask	£1,300,000.00	£700,000.00	£800,000.00	£2,800,000.00
	Local Contribution	£250,000.00	£200,000.00	£200,000.00	£650,000.00
	Private Contribution	£0.00	£0.00	£0.00	£0.00
	Total	£1,550,000.00	£900,000.00	£1,000,000.00	£3,450,000.00
	ITEM 19				
ST08a (Bus Corridor Improvements- South Shields to Newcastle)	Source TCF ask	£800,000.00	£1,200,000.00	£9,000,000.00	£11,000,000.00
	Local Contribution	£200,000.00	£300,000.00	£2,000,000.00	£2,500,000.00
	Third Party Contribution	£0.00	£0.00	£4,000,000.00	£4,000,000.00
	Total	£1,000,000.00	£1,500,000.00	£15,000,000.00	£17,500,000.00
	ITEM 20				
ST08b (Bus Corridor Improvements- South Shields to Newcastle)	Source TCF ask	£800,000.00	£400,000.00	£800,000.00	£2,000,000.00
	Local Contribution	£200,000.00	£100,000.00	£200,000.00	£500,000.00
	Private Contribution	£0.00	£0.00	£0.00	£0.00
	Total	£1,000,000.00	£500,000.00	£1,000,000.00	£2,500,000.00
Sunderland City Council	ITEM 21				
SU03 (Sunderland Central Station redevelopment)	Source TCF ask	£13,764,816.00	£0.00	£0.00	£13,764,816.00
	Local Contribution	£1,470,600.00	£0.00	£0.00	£1,470,600.00
	Private Contribution	£0.00	£0.00	£0.00	£0.00
	Total	£15,235,416.00	£0.00	£0.00	£15,235,416.00
	ITEM 22				
SU04 (Holmeside Bus Rationalisation and priority measures)	Source TCF ask	£1,035,000.00	£0.00	£0.00	£1,035,000.00
	Local Contribution	£100,000.00	£0.00	£0.00	£100,000.00
	Private Contribution	£0.00	£0.00	£0.00	£0.00
	Total	£1,135,000.00	£0.00	£0.00	£1,135,000.00

LOW COST SCENARIOS

	£m	2020/21	2021/22	2022/23	Total
Sunderland City Council	ITEM 23				
SU05 (Inner Ring Road Improvements - bus priority)	Source TCF ask	£2,415,000.00	£1,955,000.00	£2,875,000.00	£7,245,000.00
	Local Contribution	£230,000.00	£190,000.00	£280,000.00	£700,000.00
	Private Contribution	£0.00	£0.00	£0.00	£0.00
	Total	£2,645,000.00	£2,145,000.00	£3,155,000.00	£7,945,000.00
	ITEM 24				
SU07 (Holmeside / Sunderland Station Car Park)	Source TCF ask	£648,000.00	£4,795,200.00	£0.00	£5,443,200.00
	Local Contribution	£50,000.00	£370,000.00	£0.00	£420,000.00
	Private Contribution	£0.00	£0.00	£0.00	£0.00
	Total	£698,000.00	£5,165,200.00	£0.00	£5,863,200.00
	ITEM 25				
SU09 (Chester Road Bus Corridor)	Source TCF ask	£3,496,000.00	£2,300,000.00	£0.00	£5,796,000.00
	Local Contribution	£360,000.00	£200,000.00	£0.00	£560,000.00
	Private Contribution	£0.00	£0.00	£0.00	£0.00
	Total	£3,856,000.00	£2,500,000.00	£0.00	£6,356,000.00
	ITEM 26				
SU10 (A690 Route Action Plan)	Source TCF ask	£3,910,000.00	£2,300,000.00	£0.00	£6,210,000.00
	Local Contribution	£370,000.00	£230,000.00	£0.00	£600,000.00
	Private Contribution	£0.00	£0.00	£0.00	£0.00
	Total	£4,280,000.00	£2,530,000.00	£0.00	£6,810,000.00
Northumberland	ITEM 28				
NO01 (Reintroduction of passenger rail services between Ashington and Newcastle)	Source TCF ask	£11,731,708	£39,407,609	£48,407,203	£99,546,520
	Local Contribution	£6,611,000	£10,512,000	£547,000	£17,670,000
	Private Contribution	£0	£0	£0	£0
	Total	£18,342,708	£49,919,609	£48,954,203	£117,216,520
Durham Council	ITEM 29				
DU01 (Walking and Cycling Improvements)	Source TCF ask	£737,000.00	£3,255,319.00	£0.00	£3,992,319.00
	Local Contribution	£289,000.00	£2,475,159.00	£0.00	£2,764,159.00
	Private Contribution	£300,000.00	£450,000.00	£0.00	£750,000.00
	Total	£1,326,000.00	£6,180,478.00	£0.00	£7,506,478.00
	ITEM 30				
DU02 (Park and Ride expansion, Durham City)	Source TCF ask	£1,800,000.00	£900,000.00	£0.00	£2,700,000.00
	Local Contribution	£1,250,000.00	£550,000.00	£0.00	£1,800,000.00
	Private Contribution	£0.00	£0.00	£0.00	£0.00
	Total	£3,050,000.00	£1,450,000.00	£0.00	£4,500,000.00
	ITEM 33				
DU07 (Durham Bus Station)	Source TCF ask	£4,000,000.00	£250,000.00	£0.00	£4,250,000.00
	Local Contribution	£2,250,000.00	£2,000,000.00	£0.00	£4,250,000.00
	Private Contribution	£0.00	£0.00	£0.00	£0.00
	Total	£6,250,000.00	£2,250,000.00	£0.00	£8,500,000.00

LOW COST SCENARIOS

	£m	2020/21	2021/22	2022/23	Total
Nexus	ITEM 35				
NX03 (Twin tracking of metro line between Pelaw and Bede/ Metro Capacity Enhancement)	Source TCF ask	£1,902,101.28	£20,467,570.79	£72,315,899.93	£94,685,572.00
	Local Contribution	£744,000.00	£0.00	£8,400,000.00	£9,144,000.00
	Private Contribution	£0.00	£0.00	£0.00	£0.00
	Total	£2,646,101.28	£20,467,570.79	£80,715,899.93	£103,829,572.00
	ITEM 36				
NX04A (Callerton Parkway)	Source TCF ask	£100,302.00	£1,020,000.00	£950,000.00	£2,070,302.00
	Local Contribution	£129,698.00	£0.00	£0.00	£129,698.00
	Private Contribution	£0.00	£0.00	£0.00	£0.00
	Total	£230,000.00	£1,020,000.00	£950,000.00	£2,200,000.00
	ITEM 37				
NX04B (Follingsby)	Source TCF ask	£6,550,861.00	£0.00	£0.00	£6,550,861.00
	Local Contribution	£623,892.00	£0.00	£0.00	£623,892.00
	Private Contribution	£0.00	£0.00	£0.00	£0.00
	Total	£7,174,753.00	£0.00	£0.00	£7,174,753.00
Intu	ITEM 38				
IN01 (Intu Cycle Storage)	Source TCF ask	£300,000.00	£0.00	£0.00	£300,000.00
	Local Contribution	£0.00	£0.00	£0.00	£0.00
	Private Contribution	£110,100.00	£96,100.00	£96,100.00	£302,300.00
	Total	£410,100.00	£96,100.00	£96,100.00	£602,300.00
ITS	ITEM 39				
ITS 01	Source TCF ask	£6,641,466.22	£7,325,611.86	£6,159,025.67	£20,126,103.75
	Local Contribution	£725,279.03	£757,529.03	£470,760.03	£1,953,568.09
	Private Contribution	£0.00	£0.00	£0.00	£0.00
	Total	£7,366,745.25	£8,083,140.89	£6,629,785.70	£22,079,671.84
Programme Delivery Support	ITEM 40				
Total		£394,925.00	£324,896.00	£290,757.00	£1,010,578.00

TOTALS	£m	2020/21	2021/22	2022/23	Total
	Total Dft funding requested	£83,231,179.50	£106,685,206.65	£160,986,885.60	£350,903,271.75
	Local Contribution	£24,059,469.03	£21,916,688.03	£16,577,760.03	£62,553,917.09
	Private Contribution	£1,310,100.00	£994,100.00	£4,096,100.00	£6,400,300.00
	Total private / local contribution (match funding)	£25,369,569.03	£22,910,788.03	£20,673,860.03	£68,954,217.09
	Total (DfT and Match)	£108,600,748.53	£129,595,994.68	£181,660,745.63	£419,857,488.84

APPENDIX

Sources of Match Funding



Scheme Promoter	Match funding source
NEXUS	
NX02 (Park and Ride Enhancements), NX03 (Twin tracking of metro line between Pelaw and Bede/ Metro Capacity Enhancement), NX04A (Callerton Parkway) and NX04B (Follingsby)	Nexus' ability to resource a local contribution is restricted due to its commitment to provide £25.0m funding towards the Fleet Replacement project. A local contribution of £8.4m will be provided from Nexus' Asset Renewal Programme (ARP) capital grant, funds currently allocated for the renewal of infrastructure which will be superseded by the Metro Flow Project. Existing infrastructure on the South Tyneside section of the Metro network is scheduled for renewal from 2023/24. These renewals are incorporated within the scope of the Metro Flow project. Therefore, a £8.4m contribution from ARP funding will deliver infrastructure enhancements compared to a standard renewal. Such an approach to local contribution has precedent regionally and nationally. Furthermore, approval of both continued ARP grant funding beyond 2020/21 and its subsequent use as a contribution to funding Track Dualling would be required from the Department for Transport but it is understood the ARP approval will be considered by RIB in December 2019.
Newcastle City Council	
NE01 (Transforming Newcastle City Centre)	Local contribution- Local Authority Capital and ADZ (accelerated development zone) funding S106 contributions from developers in the City Centre
NE02 (Newcastle Central Station- Central Gateway)	Local contribution- Local Growth Fund from Central Gateway Scheme
NE03 (Newcastle-North Tyneside Strategic Cycling Infra), NE07 / NO02 (Airport- Ponteland Cycle route), NE08 (Newcastle Streets for People)	Local contribution- Integrated Transport Block Funding
NE04 (Newcastle Outer West)	Private contribution- Section 106 from developer contributions in the Outer West as defined in contribution model. Local contribution- Integrated Transport Block and Housing Infrastructure Fund
Gateshead Council	
GA01 (West Tyneside Cycle Route - Upgrade existing routes), GA07 (Askew Road), GA08 (Hills Street and Gateshead Quays sustainable access), GA09 (A157 Birtley to Low Fell), GA11 (A195 bus lane) and GA16 (Gateshead Interchange bus lane)	Local contribution- Capital / LTP allocation
GA05 (Metro Green Sustainable Access)	Private contribution- Intu / developer Local contribution- Capital / LTP
GA13 (Keelmans Way improvements)	Private contribution- Section 106 Local contribution- Capital / LTP
North Tyneside Council	
NT02 (Improvements to North Shields Transport Hub), NT10 (Improved cycling / walking links to Metro)	Local contribution- Capital
NT08 (Bus priority improvements along A188 / A189 corridor - phase 1)	Local contribution- In kind provision by way of S.278 works at A189/A1056 junction.

South Tyneside Council	
ST04 (Smart Metro Stations / Healthier Metro Stations), ST08b (Bus Corridor Improvements- South Shields to Newcastle)	Local contribution- Capital
ST08a (Bus Corridor Improvements- South Shields to Newcastle)	Third Party contribution- Network rail Local contribution- Capital
Sunderland City Council	
SU03 (Sunderland Central Station redevelopment), SU04 (Holmeside Bus Rationalisation and priority measures), SU05 (Inner Ring Road Improvements - bus priority), SU07 (Holmeside / Sunderland Station Car Park), SU09 (Chester Road Bus Corridor), SU10 (A690 Route Action Plan) and SU15 (Strategic Cycle Network A690 Corridor)	Local contribution- Capital
Northumberland	
NO01 (Reintroduction of passenger rail services between Ashington and Newcastle)	Local contribution- Capital
Durham Council	
DU01 (Walking and Cycling Improvements)	Private contribution- University development Local contribution- Capital
DU02 (Park and Ride expansion, Durham City), DU03 (Bus Priority Measures), DU04 (Durham Rail Station access improvements) and DU07 (Durham Bus Station)	Local contribution- Capital
Intu	
IN01 (Intu Cycle Storage)	Private contribution- Rents in kind

APPENDIX

Project Delivery Plan



ID	Task Name	Duration	Start	Finish	18																													
					Half 1, 2019	Half 2, 2019	Half 1, 2020	Half 2, 2020	Half 1, 2021	Half 2, 2021	Half 1, 2022	Half 2, 2022	Half 1, 2023	Half 2, 2023																				
					N	J	M	M	J	S	N	J	M	M	J	S	N	J	M	M	J	S	N	J	M	M	J	S	N	J	M	M	J	
1	Transforming Cities Fund - Tranche 2	1076 days	Fri 01/02/19	Mon 03/04/23																														
2	DRAFT STRATEGIC OUTLINE BUSINESS CASE	54 days	Mon 01/04/19	Thu 20/06/19																														
55	FINAL STRATEGIC OUTLINE BUSINESS CASE	200 days	Thu 20/06/19	Tue 31/03/20																														
210	DELIVERY	1076 days	Fri 01/02/19	Mon 03/04/23																														
211	Newcastle Schemes	1076 days	Fri 01/02/19	Mon 03/04/23																														
212	NE01 (Transforming Newcastle City Centre)	1075 days	Fri 01/02/19	Fri 31/03/23																														
213	Funding Award	0 days	Tue 31/03/20	Tue 31/03/20																														
214	Assurance Framework Process	108 days	Tue 31/03/20	Tue 01/09/20																														
215	Retail Core Schemes	1075 days	Fri 01/02/19	Fri 31/03/23																														
216	Bus Passenger Survey -evidence collection	41 days	Fri 01/02/19	Fri 29/03/19																														
217	Cycle review process- evidence collection	41 days	Fri 01/02/19	Fri 29/03/19																														
218	Discussions with developer	448 days	Fri 01/02/19	Wed 04/11/20																														
219	Design workshops - Blakett / NBSW / Pilgrim	61 days	Mon 01/04/19	Fri 28/06/19																														
220	Updated Blakett Street Designs	41 days	Wed 01/05/19	Fri 28/06/19																														
221	Proposed public engagement	20 days	Tue 03/09/19	Mon 30/09/19																														
222	Advertisement of TROs (incl. Objection period)	20 days	Tue 01/10/19	Mon 28/10/19																														
223	Potential period for legal challenge	170 days	Tue 29/10/19	Tue 30/06/20																														
224	Enabling Works- e.g. Bus Stop relocations etc	127 days	Mon 30/09/19	Fri 27/03/20																														
225	Construction	674 days	Tue 01/09/20	Fri 31/03/23																														
226	Junctions	125 days	Mon 01/04/19	Fri 27/09/19																														
227	Gallowgate / Percy street - Junction design	105 days	Wed 01/05/19	Fri 27/09/19																														
228	Market Street / John Dobson Street- Developer m	84 days	Mon 01/04/19	Wed 31/07/19																														
229	Market Street / Pilgrim Street- Developer Modellin	84 days	Mon 01/04/19	Wed 31/07/19																														
230	Engagement	144 days	Tue 05/03/19	Fri 27/09/19																														
231	Soft Servicing and Delivery Engagement	19 days	Tue 05/03/19	Fri 29/03/19																														
232	Soft engagement with key stakeholders	125 days	Mon 01/04/19	Fri 27/09/19																														
233	Comms Plan / Strategy development	125 days	Mon 01/04/19	Fri 27/09/19																														
234	Cycling Schemes	576 days	Mon 03/06/19	Wed 25/08/21																														
235	Claremont Road- Detailed design	102 days	Mon 04/11/19	Fri 27/03/20																														
236	Claremont Road- Construction	235 days	Thu 01/10/20	Wed 25/08/21																														
237	St Nicholas / Bigg Market - Design	144 days	Mon 03/06/19	Fri 20/12/19																														
238	St Nicholas / Bigg Market - Detailed design	59 days	Thu 09/01/20	Tue 31/03/20																														
239	St Nicholas / Bigg Market - Construction	195 days	Thu 01/10/20	Wed 30/06/21																														
240	Mitigation Measures- Radial Routes	532 days	Mon 04/03/19	Wed 31/03/21																														
241	Funding Award	10 days	Mon 04/03/19	Fri 15/03/19																														
242	Commission of counts and strategy development	51 days	Mon 18/03/19	Fri 31/05/19																														
243	Infrastructure upgrades	395 days	Wed 18/09/19	Wed 31/03/21																														
244	Mitigation Measures- Bus Loop Designs	145 days	Mon 04/02/19	Fri 30/08/19																														
245	Newgate Street / Clayton Street Junction- indicator position design discussion	39 days	Mon 04/02/19	Thu 28/03/19																														
246	Newgate Street / Clayton Street Junction- Detailed	39 days	Mon 04/02/19	Thu 28/03/19																														

Project: TCF Bid - SOBC (30.10.1
Date: Wed 30/10/19

Task		Project Summary		Manual Task		Start-only		Deadline	
Split		Inactive Task		Duration-only		Finish-only		Progress	
Milestone		Inactive Milestone		Manual Summary Rollup		External Tasks		Manual Progress	
Summary		Inactive Summary		Manual Summary		External Milestone			

APPENDIX

Assurance Framework



Transport North East

Transport Assurance Framework

October 2019

1. Introduction

1.1 Purpose

- 1.1.1 This Transport Assurance Framework explains the arrangements for supervising funding allocated to the North East Joint Transport Committee (JTC) in order to:
- Demonstrate that provisions are in place to ensure accountable and transparent decision-making;
 - Manage the risks to the programme associated with the allocation of devolved funding;
 - Appraise projects and allocate funding; and
 - Monitor and evaluate projects to ensure that they achieve value for money and projected outcomes.
- 1.1.2 This Assurance Framework applies to North East transport projects and programmes where funding is devolved to the JTC. It is supported by two further documents:
- **Transport Scheme Development Process Note**, Transport North East, October 2019
 - **Proportionality Technical Note**, Systra/JMP, October 2016

2. Governance

2.1 Structure and Operating Principles

- 2.1.1 The North East Joint Transport Committee (JTC) consists of the seven local authorities of Durham County Council, Gateshead Council, Newcastle City Council, North Tyneside Council, Northumberland County Council, South Tyneside Council and Sunderland City Council. In Tyne and Wear the Passenger Transport Executive, Nexus, oversees public transport provision and owns and operates the Metro.
- 2.1.2 The JTC has responsibility for local transport funding, including funding for transport schemes that is devolved by Government. The JTC has been charged with overseeing the programme management and delivery of transport schemes which are funded by the Local Growth Fund programme and the Transforming Cities Fund (TCF). The JTC will also be required to oversee the programme management and delivery of future devolved funding streams for transport.

2.2 Support and Administration Arrangements

- 2.2.1 The Transport North East Strategy Unit (TNESU) is a specialist transport resource that provides support to the JTC, the North East Transport Strategy Board and its advisory groups.
- 2.2.2 The JTC seeks specialist advice from the TNESU on matters associated with the region's transport network and can also draw advice from technical officers within the Committee's constituent local authorities. This arrangement ensures that adequate

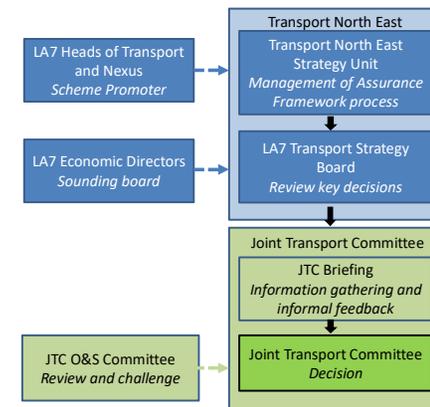
officer resources are in place to underpin legal, financial, programme management, democratic services and audit arrangements.

2.2.3 The TNESU, acting on behalf of the JTC, will provide the following support to the devolved transport funding programmes delivered through this assurance framework:

- Day to day administrative functions such as the preparation of meeting papers, minutes, agendas, working papers, progress reports, information reports, decision reports, etc.;
- Responding to information requests;
- Give notice of meetings and publishing information;
- Advise on scheme priorities, programming and gateway approvals, using advice from independent technical advisors on business case material submitted by scheme promoters. These technical advisors will be procured by the TNESU, and financial resources for this purpose will be identified and agreed;
- Liaise with local highways authority and local transport authority officers to report progress on delivering funding programmes, and receive comments;
- Programme management of prioritised lists of transport schemes;
- Update this Assurance Framework based on evolving governance arrangements in the North East, and changes to Government assurance guidance; and
- Advise JTC members on specific governance, transparency and probity issues, updating guidance as necessary.

2.2.4 The Transport Strategy Board will draw on the expertise of the TNESU and its advisors to provide advice to the JTC, enabling the Committee to:

- Forward manage their Agenda;
- Forward manage the development of a programme of prioritised transport schemes for the North East area;
- Receive regular updates on progress towards targets and objectives; and
- Commission work as appropriate.



2.2.5

Figure 1 shows the governance structure in place, demonstrating how the TNESU reports through the Transport Strategy Board to the JTC. The Transport Strategy Board will meet regularly, in advance of meetings of the JTC.

2.3 Working Arrangements and Meeting Frequency

2.3.1 The JTC will consider key aspects of the business case and decision-making process during its regular meetings, discussing progress on delivering the programme, approving compliant full business cases and releasing funding.

2.3.2 Meeting dates will be published on the JTC's website (<https://northeastca.gov.uk/decision-making/the-north-east-joint-transport-committee/#dates-section>). JTC meetings are open to the public.

2.3.3 Timescales for the completion of business cases, as outlined in paragraph 3.2.22, will be agreed by the JTC. Promoters will be expected to adhere to such timescales and will only be able to draw down funding once their full business case has been approved, unless staged funding has been agreed for the provision of project development funding.

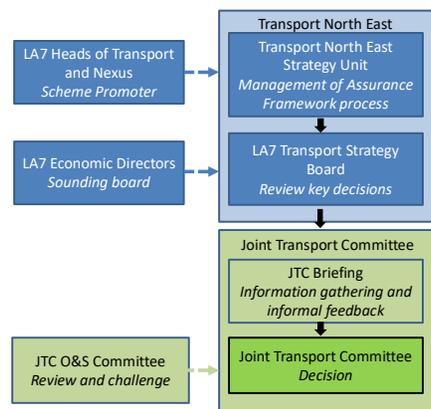


Figure 1: Governance and reporting structure

2.4 Operating Principles

2.4.1 The operating principles are detailed in sections 2.4.2 and 2.4.3 and expand on the following topics:

- Conflicts of interest
- Gifts and hospitality
- Status and role of accountable body
- Audit and scrutiny
- Strategic objectives and purpose
- Transparency and local engagement
- Complaints and whistle blowing

2.4.2 The North of Tyne Combined Authority constitution can be found here:

<https://www.northoftyne-ca.gov.uk/order-and-constitution>

2.4.3 The North East Combined Authority constitution can be found here:

<https://northeastca.gov.uk/about-us/neca-order-and-constitution/>

2.4.4 The Local Growth Fund projects in the North East managed under this Assurance Framework form part of the overarching LEP Assurance Framework for funding received from Central Government (other funding streams are not required to follow the LEP Assurance Framework). To view the LEP Assurance Framework visit:

<https://www.nelep.co.uk/wp-content/uploads/2016/11/North-East-LEP-Assurance-Framework-Feb-2017.pdf>

3. Programme Assembly and Assurance

3.1 Introduction

3.1.1 The prioritisation process, through which preferred local transport investments are identified, is an important element of this Assurance Framework. The process is robust and transparent, and intended to support decision making.

3.1.2 This process is based on the Region's transport, economic and environmental objectives and priorities, which will be reviewed from time to time to ensure these priorities are fully reflected in the Assurance Framework. The particular objectives and priorities of each funding stream made available by Government will also be taken into account.

3.1.3 To enable prioritisation for devolved funding streams, a transparent and robust framework for prioritising local transport schemes has been developed. This framework is clearly linked to delivering the priority outcomes of the North East area and is designed to be simple and evidence based. The criteria upon which priorities will be based are:

- A qualitative assessment of how the project achieves regional and/or programme objectives;
- Value for money, measured either through an economic appraisal that provides a benefit:cost ratio (BCR), or a qualitative statement of value for money when an economic appraisal has yet to be conducted;
- Deliverability to timescales/funding window; and
- Risk profile.

3.1.4 The **Transport Scheme Development Process Note**, which accompanies this assurance framework, guides scheme promoters in providing evidence on value for money, deliverability and strategic fit, as well as the form of business case and supporting documents required to progress a scheme to full approval and funding release. This guidance identifies appropriate and acceptable sources of evidence and data, helping to support data quality and the rigour of the process.

3.1.5 Promoters should also use the **Proportionality Technical Note** that accompanies this assurance framework to guide the level of analysis required for each scheme. It is recommended that the level of analysis is agreed with the TNESU before the scheme promoter proceeds with preparing its business case.

3.2 Gateway Process

3.2.1 The process for the JTC assessment and approval of a transport scheme will comprise of three gateways as set out in Figure 2. Full scheme approval will require a robust business case and Value for Money statement to be developed as part of Gateway 2, with further refinement as part of Gateway 3. To pass each gateway, the scheme promoter requirements and gateway actions listed below it in Figure 2 must be completed satisfactorily.

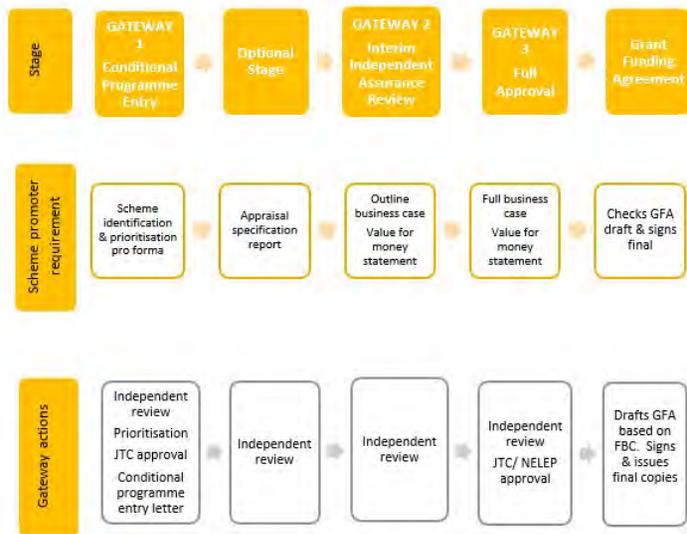


Figure 2: Gateway Process

- 3.2.2 At Gateway 1 scheme promoters are required to complete the scheme identification and prioritisation pro forma issued by the TNESU. The information provided in these pro formas will be used to both prioritise candidate schemes and also to sift out schemes that do not meet the requirements of the particular funding stream. The TNESU will report the findings of Gateway 1 reviews to the Joint Transport Committee, which will judge whether the proposal is suitable for inclusion in the programme. Those prioritised schemes will then proceed through Gateways 2 and 3.
- 3.2.3 Schemes fall into two categories based on their overall capital cost – major schemes are those where the capital sum bid for is over £1.5 million, minor schemes are those where the capital sum bid for is below £1.5 million. Table 1 outlines the criteria that major schemes will need to meet in order to be considered for programme entry. Table 2 sets out the equivalent criteria for minor schemes.

Table 1: Major Scheme Eligibility Criteria

Purpose of scheme

Schemes are required to make a significant contribution towards achieving the objectives of the funding stream, the JTC and its constituent authorities. Proposals considered via this Assurance Framework should be transport schemes that can be realistically appraised using a recognised transport appraisal methodology – normally TAG.

Cost Threshold

In order to be eligible as a distinct standalone project, schemes must have a total net cost to the JTC of at least £1.5m. This will prevent funding from being spread too thinly to be effective.

Strategic Impact

Promoters are required to demonstrate how their scheme will have a positive impact on the transport, economic and social challenges within the North East region. It is desirable that schemes will have an impact on a wide area however this does not preclude localised issues being addressed, given that localised solutions can frequently have wider social, environmental and economic impacts.

Value for Money

Scheme promoters will be expected to meet requirements set out in section 4.2 (in outline form only for Gateway 1, in line with paragraphs 4.2.4 and 4.2.5).

Deliverability

Proposed schemes need to have a reasonable degree of support and must be deliverable within the relevant investment period. An assessment of deliverability must be undertaken in accordance with broad deliverability areas set out in section 4.3.

Local Contribution

Scheme promoters should normally provide a local contribution of at least 10% per scheme, although this may vary according to the funding opportunity available. Different requirements are set out for small schemes as part of mini-programmes (see Table 2 below).

Table 2: Minor Scheme Eligibility and Special Conditions

Purpose of minor schemes within mini-programmes or sub-blocks

This Assurance Framework is largely pitched towards the conditions, governance and delivery associated with major transport schemes. However, various opportunities will exist within future JTC funding programmes to identify and deliver mini-programmes of, typically, smaller transport schemes. The assurance conditions and processes outlined here generally apply to individual schemes within these mini-programmes, albeit via exercising proportional approaches (a technical note on proportionality accompanies this Assurance Framework) to appraisal and business case development, but with some special parameters and conditions as follows:

Cost Threshold

Smaller schemes within mini-programmes will have a total net cost to the JTC of less than £1.5m. However, only in rare and exceptional circumstances will specific schemes of a total net cost to JTC of between £1m and £1.5m be considered within these mini-programmes. This is so the limited funding resources allocated to these blocks can be used to address a range of local problems or challenges across a reasonable geographical spread.

Local Contribution

Scheme promoters should normally provide a local contribution of at least 20% per minor scheme, although this may vary according to the funding opportunity available. This is reflective of the greater opportunity to identify a higher percentage match contribution from local budgets for these types of schemes, and the importance of local leverage to JTC funding bids that have been secured / are being bid-for under competition.

Relaxation of Gateway 2 (Interim Independent Assurance Review)

Minor schemes are not required to submit an interim (or outline) business case for independent review. After passing through Gateway 1, a minor scheme can move towards full business case submission (with accompanying VFM statement) and independent review at Gateway 3 (Full Approval). A light-touch interim business case review may be requested by a scheme promoter if felt necessary to help guide full business case development.

3.2.4 Schemes will be assessed to ensure they meet regional policy objectives and the specific objectives set out for the funding stream available. Policy objectives have been developed based upon the key themes agreed by partner organisations in the region and incorporated into policy and strategy documents including the Strategic Economic Plan, the Local Industrial Strategy and the North East Transport Plan. These policy objectives are:

- Economic Growth and Jobs
- Access to Opportunity
- Quality of Life
- Health and Environmental benefits

As strategic documents are refreshed and new documents are developed, these policy objectives will be kept under review.

3.2.5 These themes have been broken down into policy challenges and defined criteria, in order to develop fully the component parts of the key themes and ensure the policy criteria fully reflect the themes that apply in the North East. For each proposal or scheme assessed, each component criterion is independently scored using quantitative and qualitative evidence provided by the scheme promoter, reflecting the range of impacts likely from the transport schemes under consideration.

3.2.6 The overall assurance framework is an open framework, with the intention that decision makers should see exactly how and where each proposed scheme contributes to the delivery of the North East's agreed policy outcomes and its strategic objectives. This is one of the key features of the approach and is designed to ensure transparency both to stakeholders and the JTC. Where a scheme will deliver positively against a number of these key outcomes, it will be clear that it does so, and a scheme will be credited accordingly. There is scope within the process for the JTC to be made aware of where such benefits are complementary.

3.2.7 A Process Note has been produced for scheme promoters to ensure that schemes are identified in the context of strategic objectives and related challenges, whilst also following a consistent and understandable approach to appraising and developing the business case for each scheme, as well as ensuring that fundamental legislative and assurance requirements are met.

3.2.8 All schemes submitted for consideration will be scrutinised independently on behalf of the TNESU, the Transport Strategy Board and the JTC. The verified information will be used to rate projects and place them on the prioritised list. For consistency the scheme assessment is undertaken by a sole independent assessor. The promoter(s) of each scheme or proposal will be required to attend a clarification meeting. Each meeting will allow the independent assessors to verify scheme evidence and data, and to cross examine scheme sponsors to clarify any issues which are unclear within the evidence presented, and to enable the scheme assessors to gain a clear understanding of the scheme and what it is trying to achieve.

3.2.9 Where there is good cause for doing so the JTC will consider the possibility of the release of 'development' or 'interim' funding through a Gateway 1 Grant Funding Agreement. Such circumstances where a Gateway 1 Grant Funding Agreement could be explored relates to schemes that have been given programme entry status, are considered to have a low risk to overall delivery, where there is sound and progressive development of a scheme business case and early deliverables but

where there is still a significant time gap to achieving a full business case and full funding release.

3.2.10 For a scheme to complete the transition from concept to fully funded proposal, the following process applies:

Gateway 1: Conditional Programme Entry

Requirements to be fulfilled by Promoter:

- Promoter prepares Scheme Identification and Prioritisation Pro Forma and submits to TNESU, using guidance provided in the Transport Scheme Development Process Note.
- Promoter should normally produce and submit an Appraisal Specification Report to the TNESU (see 3.2.11)

Gateway actions undertaken:

- Consultation held
- Optional Appraisal Specification Report Review

Gateway 2: Interim Independent Assurance Review

Requirements to be fulfilled by Promoter:

- Promoter prepares Outline Business Case using template and guidance provided in the Transport Scheme Development Process Note;
- Outline Business Case is submitted to TNESU;
- Value for Money Statement prepared and submitted

Gateway actions undertaken:

- Outline Business Case undergoes independent assessment;
- Value for Money Statement undergoes independent review;
- The TNESU reviews independent advice;
- Advice from independent assessor is considered by Scheme Promoter

Gateway 3: Full Approval

Requirements to be fulfilled by Promoter:

- Final Business Case submitted to the TNESU using template and guidance provided in the Transport Scheme Development Process Note;
- Value for Money Statement finalised and submitted.

Gateway actions undertaken:

- Final Business Case undergoes independent assessment;
- Value for Money Statement undergoes independent assessment;
- The JTC reviews independent advice and considers Full approval;
- If approval is granted, the scheme moves to Grant Funding Agreement development and signing.

Grant Funding Agreement

Gateway actions undertaken:

- Grant funding agreement proforma completed by TNESU in consultation with Scheme Promoter;
 - Final Grant funding agreement issued by TNESU;
 - Grant funding agreement signed by TNESU and Scheme Promoter as a Deed.
- 3.2.11 Prior to progression to Gateway 2, Scheme Promoters are strongly encouraged to produce an Appraisal Specification Report (ASR). This will allow the TNESU and the scheme promoter to agree the approach for developing a business case and appraisal, reducing the risk to the scheme promoter of producing a non-compliant business case. It is however permissible for promoters to move directly to outline or full business case submission at their own risk, without agreeing an ASR in advance. Progression directly from Gateway 1 to Gateway 3, however, should be agreed in advance with TNESU.
- 3.2.12 At Gateways 2 to 3 the promoter will be required to provide evidence that the scheme offers value for money, in the form of a Value for Money Statement, and demonstrate that the scheme is deliverable and should remain in the prioritised programme.
- 3.2.13 At Gateway 2 the Value for Money Statement will be reviewed by the independent technical specialist. Should the Value for Money Statement demonstrate a Poor or Low BCR as set out in paragraph 4.2.3, officers will recommend a review of the scheme.
- 3.2.14 At Gateway 3 the JTC will consider a full value for money statement and approve schemes based on the stipulations contained in paragraph 4.2.3. These Gateway 3 Value for Money Statements will be produced by the Scheme Promoter in line with the Department for Transport's guidance found on the DfT website¹ and will be signed off as true and correct by JTC Chief Finance Officer, taking specialist advice as appropriate. In the event of any perceived conflict of interest, the JTC Chief Finance Officer will nominate an alternative senior officer to sign-off a Value for Money Statement. The JTC will publish a Value for Money Statement for schemes that have received full approval at Gateway 3.
- 3.2.15 The JTC will need to approve the promoter's Full Business Case before funding can be released and construction commenced. The production of a Value for Money Statement in Gateways 2 and 3 will identify whether the scheme continues to offer good value for money. If a business case does not provide the required assurance of value for money the JTC may decide to withdraw a scheme from the programme.
- 3.2.16 The scheme promoter is responsible for all costs associated with producing a business case and Value for Money Statement for each scheme. This applies to each scheme that is successful in attracting funding and in circumstances where a scheme is withdrawn by the JTC or the scheme promoter at any point in the process.
- 3.2.17 Assessment and approval decisions made by the JTC will be based on advice provided by the TNESU and by independent technical specialists procured and managed by the TNESU, to ensure that scrutiny of business cases is quality assured.

¹ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/630704/value-for-money-framework.pdf

- 3.2.18 Scheme promoters are responsible for informing the TNESU of any changes to the scope of a scheme, its costs and implementation timescales. Scheme promoters will also be responsible for updating pro formas and business cases in order to reflect any new information. The TNESU will be responsible for assessing the impact of any changes on the overall scheme programme, working with the promoter to address any specific issues.
- 3.2.19 Once a scheme has passed Conditional Programme Entry Gateway 1, the JTC will not normally meet any scheme cost increases either in full or part, other than in exceptional circumstances where additional funding may be available due to reprogramming or savings from other schemes. Addressing cost increases will be the sole responsibility of the scheme promoter. Scheme costs for the purpose of allocating devolved fund monies will be fixed at Gateway 1. Design and development costs for schemes that receive Full Approval will be eligible as a local contribution.
- 3.2.20 Delays to a scheme may mean that it is not possible to allocate funding within the available funding period. In this case, the JTC reserves the right to re-prioritise the programme and bring forward another scheme that is deliverable within the timescales.
- 3.2.21 As part of Full Approval, the JTC will clearly set out the conditions under which the devolved funding will be spent – specifically to meet the grant conditions of the funding stream in question and deliver a capital asset based on an approved scheme design which has a contractor's price and spending profile. These conditions will be set out in the Grant Funding Agreement.
- 3.2.22 As a guide it is assumed the following durations will apply to the gateway review process. The actual durations will be dependent on the size and complexity of the scheme, the quality of materials submitted and the level of engagement and discussions with the TNESU that has happened prior to each submission:

Scheme Promoter: Prepare and submit to TNESU a Scheme Identification and Prioritisation Pro Forma	
TNESU: Receipt of Scheme Identification Pro Forma, JTC to grant Conditional Programme Entry	1 month
Scheme Promoter: Prepare an Outline Business Case and VFM Statement	
TNESU: Receipt of Outline Business Case/VFM Statement, Complete Independent Review, JTC to grant approval	2 months
Scheme Promoter: Prepare a Full Business Case and VFM Statement	
TNESU: Receipt of Full Business Case/VFM Statement Review, Complete Independent Review, JTC to approve to release funding	2 months

3.3 Programme Management

- 3.3.1 The TNESU will carry out programme management of agreed transport schemes, on behalf of the JTC, to ensure their delivery by scheme promoters. The identification of schemes, development of scheme proposals and completion of business cases is the responsibility of scheme promoters. This working arrangement will be underpinned by the establishment of formal grant funding agreements that protect the financial

interests of the JTC and enables the JTC to fulfil its responsibility to deliver value for money while setting out respective responsibilities including reporting and audit requirements.

3.4 Release of Funding, Cost Control and Approval Conditions

- 3.4.1 No funding will be allocated to a scheme promoter via the JTC until a business case has received a Stage 1 (development works) or Full Approval and the Grant Funding Agreement has been signed as a deed. The approval will contain:
- General conditions of approval (such as the condition that monies may only be used for capital expenditure);
 - Scheme specific approval conditions (such as those relating to scheme design, matched or third party contributions);
 - The agreed allocation for the scheme;
 - An agreed funding profile to ensure delivery in the funding period; and
 - Provision for 'clawback' and recovery of non-delivery or money not spent for purposes intended.
- 3.4.2 Before any funding is released, the scheme promoter will need to 'accept' the funding (and the conditions for its use) by signing a Grant Funding Agreement issued by TNESU.
- 3.4.3 This agreement will also address the issue of 'clawback'. It will ensure a working arrangement is in place that protects the financial interests of the JTC as the Accountable Body and enables it to fulfil its responsibility to deliver value for money while setting out respective responsibilities including reporting and audit requirements.
- 3.4.4 Funds will normally be released to scheme promoters quarterly in arrears. Release of funds will be based on defrayed expenditure and made upon receipt of grant claim forms and evidence of eligibility of expenditure and delivery progress (which may include invoices, valuations of capital works, etc). Scheme promoters will be required to retain evidence for audit purposes.
- 3.4.5 Finance reports will be provided to the JTC on a quarterly basis (or more frequently if required) in line with payment of claims to scheme promoters. There will be a named finance officer at an appropriate grade who will also act as a point of contact for ad hoc finance-related queries from the JTC or scheme promoters and to attend meetings as required.

4 Further Guidance

4.1 Introduction

- 4.1.1 This section provides further guidance on detailed matters associated with the assembly of a programme of schemes and the assurance of those schemes through the gateway process in readiness for funding.

4.2 Value for Money

- 4.2.1 Value for Money is the core of the Economic Case.
- 4.2.2 Independent assessment of value for money (VfM) will be based upon the [estimated] BCR of the scheme and also take into account both qualitative and quantitative evidence of both monetised and non-monetised costs and benefits. A value for money assessment compares the economic, social and environmental impacts of a scheme with the costs of its construction and ongoing maintenance. This assessment of value for money will reflect guidance from the DfT's Transport Business Case Guidance and from TAG². It is expected that scheme sponsors will reference appropriate and proportionate use of the DfT's guidelines in presenting value for money evidence. Scheme promoters should also reference detailed locally-set guidance on proportionate approaches to scheme development set in the Proportionality Technical Note, which accompanies this assurance framework.
- 4.2.3 The independent assessment will establish an initial value for money category from DfT Guidance³ based upon the [estimated] Benefit Cost Ratio (BCR) of the scheme⁴. These categories are:
- Poor VfM if the BCR is less than 1.0;
 - Low VfM if the BCR is between 1.0 and 1.5;
 - Medium VfM if the BCR is between 1.5 and 2.0;
 - High VfM if the BCR is between 2.0 and 4.0; and
 - Very high VfM if the BCR is greater than 4.0.
- Schemes are usually expected to achieve high or very high value for money for inclusion in the programme and awarded funding, but this will be assessed on a case by case basis (see paragraph 4.3.4 for further details).
- 4.2.4 As part of the prioritisation process it will be necessary to provide in the Scheme Identification and Prioritisation Pro Forma an estimate of the Value for Money (VfM) that a scheme is likely to offer. At the first stage in the scheme development process not all schemes will have a fully worked up business case that will include all aspects of the Benefit to Cost Ratio (BCR).

² <https://www.gov.uk/guidance/transport-analysis-guidance-webtag>

³ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/630704/value-for-money-framework.pdf

⁴ For certain schemes the Present Value of Costs may be a positive number and a negative obtained (typically when revenues are received as a result of private sector operations using the new infrastructure). DfT guidance on how to interpret such appraisal outcomes should be used, as set out in Box 1.1 of "Value for Money: Supplementary Guidance on Categories" - https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/627490/value-for-money-supplementary-guidance-on-categories.pdf

- 4.2.5 For schemes that have not yet been fully assessed, evidence from other previous comparable schemes will be examined and likely sources of benefit for each appraisal criteria identified. This approach is consistent with the DfT's Early Assessment and Sifting Tool (EAST) Guidance. A Value for Money Statement must be provided by scheme promoters for each scheme at both Gateway 2 and Gateway 3. An independent review of VfM will take place at each of these stages and reported to the TNESU. If satisfactory, the VfM Statement will be sent for approval by the JTC Chief Finance Officer.
- 4.2.6 Use of the TAG toolkit is mandatory, although proportionate application of its modules and principles is permissible and must be used to conduct appraisals and value for money assessments.
- 4.2.7 Scheme benefits potentially encompass a wide range of economic impacts including:
- Journey time savings for individuals.
 - Reduction in costs to businesses, transport operators and passengers.
 - Increasing access to education and jobs.
 - Increasing inward economic investment.
 - Keeping roads open to traffic (especially freight).
 - Reducing accidents / improving safety and security.
 - Health benefits.
- 4.2.8 Central case assessments will be based on forecasts that are consistent with the definitive version of NTEM (DfT's planning dataset) included within TAG. The JTC and individual promoters reserve the right to use alternative planning assumptions as sensitivity tests and considering the results of these when coming to a decision about whether to approve a scheme.

4.3 Deliverability

- 4.3.1 Deliverability is a key element of assembling and managing a programme of schemes. Potential schemes will be assessed in relation to the level of risk associated with their deliverability. Assessments of deliverability based around four areas will be used, with each of these areas broken down into several components to ensure that all critical aspects of deliverability are examined:
- Risk to programme;
 - Risk to cost;
 - Risk to quality; and
 - Risk to acceptability.
- 4.3.2 A number of key deliverability criteria have been developed in order to assess the potential for scheme delivery in the appropriate funding period. These are outlined in the Transport Scheme Process Development Note. Schemes which perform well against the deliverability criteria will also have:
- Recently calculated outturn costs that meet the requirements of TAG including acceptable level of risk allowance;
 - A committed local contribution;
 - Established credible and realistic milestones for delivery;
 - An established process for undertaking detailed design;

- Established realistic timescales for obtaining statutory consents, carrying out / illustrating public consultation and acceptance and procuring contractors;
 - A comprehensive risk assessment in accordance with TAG;
 - A detailed governance and project management structure; and
 - An established approach to benefits realisation and monitoring and evaluation.
- 4.3.3 The JTC will require that scheme promoters invite Highways England and Network Rail to comment on any strategic road or rail schemes that are to be considered for funding. This will allow for their views on deliverability and impact on the wider network to be taken into account during the prioritisation process.
- 4.3.4 Apart from in exceptional circumstances, the prioritisation process will only consider schemes with a net requirement from public sector sources of at least £1.5m that have an adjusted BCR greater than 2 (i.e. offering 'high' value for money). The circumstances under which schemes with lower than 'high' value for money would be considered are set out below and are where at least one of the below criteria is met (where such circumstances arise, the criteria selected by the JTC to justify approval will be recorded):
- Where a project has very high level of strategic fit for the objectives of JTC
 - Where a project has significant positive Wider Economic Impacts to the JTC
 - Other significant positive wider impacts which can be quantified and attributed to the JTC area and which are in particular accordance with the objectives of the Committee. These will include health impacts, air quality, social & distributional impacts.
 - Where the investment will unlock significant development sites in the JTC area
 - Where the promoter is providing a very high proportion of scheme funding as match funding
- 4.3.5 Scheme promoters are required to maintain any asset that is created and this should be done in accordance with their Asset Management Plan or, in the case of a Passenger Transport Executive or other potential transport delivery agent, an equivalent document. The ongoing revenue costs of a scheme should be identified and a robust funding plan put in place, presented in the form of an analysis of Whole Life Costs.
- ### 4.4 The Transport Business Case
- 4.4.1 Following completion of Gateway 1 (Conditional Programme Entry), Scheme Promoters are required to prepare a business case for investment and update that business case as the scheme is developed further. Guidance on the preparation of a business case is provided in the Transport Scheme Development Process Note.
- 4.4.2 The Transport Scheme Development Process Note sets out the minimum requirements of the development of a major scheme and assists with the production of outline and full business cases and the development of a Value for Money Statement. The Process Note and accompanying Proportionality Technical Note also guides the development of business cases for minor schemes. Use of the Process Note will ensure that the information and assessment of a scheme is set out according to five cases:
- The strategic case;

- The economic case;
- The commercial case;
- The financial case; and
- The management case.

4.4.3 The monitoring and evaluation section of business cases will demonstrate how the outcomes of the scheme will be measured and outline the programme for measuring and evaluating outcomes. This will assist with scheme evaluation.

4.5 External Views on Business Cases

4.5.1 It is the responsibility of scheme promoters to undertake appropriate and proportionate consultation of affected members of the public and other stakeholders in the refinement of their scheme proposals and development of their business case. A consultation plan should form part of all stages of scheme development and be reflected in project documentation.

4.5.2 In order to ensure external comment is possible, promoters will be required to share their business case with key stakeholders for consultation, before a funding approval decision is made so that external comments can be incorporated. Any comments received should be forwarded to the TNESU for inclusion in the Decision Report to the relevant approval body.

4.6 Monitoring and Evaluation

4.6.1 Scheme promoters will be required to put in place mechanisms to ensure as a minimum that schemes are monitored and evaluated in line with both DfT guidance on the evaluation of local major schemes⁵ and any additional guidance provided for specific funding streams. This will be enforced as part of the gateway process, and schemes that do not have a robust monitoring and evaluation strategy as part of their business case will not receive Full Approval at Gateway 3. All monitoring and evaluation strategies will be expected to contain a specific budget, logic map, list of metrics to be monitored and a named officer responsible for monitoring and evaluation.

4.6.2 Scheme promoters will be encouraged to share monitoring and evaluation plans with the TNESU at an early stage, in order to aid with establishing programme-wide baselines and in providing early review.

4.6.3 Monitoring metrics should at least be those set out in DfT guidance on the evaluation of local major schemes standard and enhanced monitoring measures, with appropriate additional metrics where required by specific funding streams. Where core individual metrics are not being used, this must be justified in advance of grant award.

4.6.4 A monitoring and evaluation strategy should at a minimum provide and budget for an evaluation report to be written one and five years after the opening of a scheme. There may be additional requirements in line with funding streams and these should

be adhered to. It is expected that these reports would be shared with the funding body.

4.6.5 The principle of proportionality will be adhered to. Larger and more complex schemes will be expected to provide more detailed impact assessment of the transport, employment and economic impacts of investment. These may be, but are not limited to, assessments of the type identified under DfT guidance on the evaluation of local major schemes 'Fuller Evaluation'. This may also include provision for control areas, process evaluation and use of non-transport datasets.

4.6.6 Evaluation Plans and Reports will be published on the scheme promoter's website. The scheme promoter will be required to ensure an independent review of the monitoring and evaluation of their scheme, and this will be ensured as part of the grant award process.

⁵ Monitoring and Evaluation Framework for Local Authority Major Schemes, 2012

APPENDIX

Programme Risk Register



Reference	Status	Threat or Opportunity	Risk / Opportunity Title	Risk / Opportunity Level	Risk / Opportunity Owner	Risk Event "<Uncertain event> might occur"	Risk Cause "As a result of <one or more definite causes>"	Risk Effect "Which would lead to <one or more impacts that affect the objectives>"	Pre - mitigation / realisation			Total Risk Allocated in Target Cost	Post - mitigation / realisation		
									Impact	Probability	Risk Rating	Mitigating / Realisation Action	Impact 2	Probability2	Risk Rating 2
R001	Open	Threat	Network Planning	Programme Delivery	Delivery Team and Scheme Promoters	A number of large projects being delivered in parallel; third party works (Network Rail, Highways England).	Deliverability of the individual schemes needs to be assessed	Schemes being removed if they are not able to meet the key dates	High	High	High	Individual schemes will identify risks and mitigation at project level. Dependencies to be detailed further during detailed design and delivery phase.	Medium	Medium	Medium
R002	Open	Threat	TCF funding envelope	Programme Delivery	Delivery Team and Scheme Promoters	TCF funding envelope being fixed	If cost over run occurs	Programme delivery team and scheme promoters to source additional match funding or reduce costs in other ways, through redesign or reducing project scope.	High	High	High	To provide realistic cost estimates for SOBC submission and to proactively manage finances once schemes are being delivered.	Medium	Medium	Medium
R003	Open	Threat	Comms.	Programme Delivery	Delivery Team and Scheme Promoters	Complaints from the stakeholders may occur	Poor communication and disruption during delivery of schemes	Poor public satisfaction scores and a complaints being issued	Medium	Medium	Medium	A communications and stakeholder engagement strategy has been developed and included in the SOBC submission. A regional steering group has been created for all scheme promoters to ensure a consistent approach to communications	Low	Low	Low
R004	Open	Threat	Procurement	Programme Delivery	Delivery Team and Scheme Promoters	Unsatisfactory delivery of end product in terms of time, quality, cost and environment.	A lack of procurement strategy for the programme	Poor quality work	High	Medium	Medium	Assurance framework ensures procurement is identified in project plans and ongoing dialogue with scheme promoters and a clear strategy implemented	Medium	Low	Low
R005	Open	Threat	Design Standards	Programme Delivery	Delivery Team and Scheme Promoters	Non standard designs presented in various schemes	No consistency between schemes	Variation in pricing strategy from promoters	Medium	Medium	Medium	Assurance framework ensures schemes comply with agreed design standard / regional best practice.	Low	Low	Low
R006	Open	Threat	Delivery timescales	Programme Delivery	Delivery Team and Scheme Promoters	Scheme promoter and contractors fail to meet timescales	Lack of monitoring of timescales and key dates	Delay to delivery date	High	Medium	High	Assurance framework ensures a robust project plan is developed.	Medium	Medium	Medium
R007	Open	Threat	Delivery risk	Programme Delivery	Delivery Team and Scheme Promoters	Process for descopeing	Eliminating projects which are no longer viable	Remove scheme from bid and delivery	High	Medium	High	Assurance framework ensures early review of scheme designs and design review stages to be identified in project plan	Low	Medium	Medium
R008	Open	Threat	Monitoring and evaluation	Programme Delivery	Delivery Team and Scheme Promoters	Unclear strategy on monitoring and evaluating interventions	The effectiveness and benefit of schemes are not fully understood and realised	Government holding back future funds	Medium	Medium	Medium	Assurance framework ensures a clear monitoring and evaluation strategy to be developed for all schemes.	Low	Low	Low
R009	Open	Threat	Consents and Permissions	Programme Delivery	Delivery Team and Scheme Promoters	Permissions or consents rejected	Lack of detail in application	Delay to delivery of scheme	High	Medium	High	Early engagement to secure necessary consents and permissions. To be included within individual project plans	Medium	Low	Medium

Reference	Status	Threat or Opportunity	Risk / Opportunity Title	Risk / Opportunity Level	Risk / Opportunity Owner	Risk Event "<Uncertain event> might occur"	Risk Cause "As a result of <one or more definite causes>"	Risk Effect "Which would lead to <one or more impacts that affect the objectives>"	Impact	Probability	Risk Rating	Mitigating / Realisation Action	Impact 2	Probability2	Risk Rating 2
R010	Open	Threat	Clean Air Zone	Programme Delivery	Delivery Team and Scheme Promoters	Changes in flow of traffic	The implementation of a Clean Air Zone as a result of a legal directive from JAQU	Revised flows would need to be calculated	High	High	High	Early engagement with Air Quality colleagues from Newcastle, North Tyneside and Gateshead Council to assess the impact on the TCF schemes. Sensitivity tests to be carried out.	Medium	Medium	Medium
R011	Open	Threat	Match Funding	Programme Preparation and Delivery	Delivery Team and Scheme Promoters	Schemes submitted do not have available match funding or it is not confirmed risking delivery and overall financial consequences for the region	No match funding identified or lower amount than required has been allocated for the scheme. Lack of robust and achievable funding strategy	Unable to demonstrate that projects are financially viable and deliverable within the TCF timescales.	High	Medium	High	Scheme promoters have been required at each review point to provide detail on match funding and demonstrate that match funding is in place. Projects without match funding rejected. Further analysis on spend profiles for match funding to be carried out	Low	Medium	Medium
R012	Open	Threat	Third parties	Programme Delivery	Delivery Team and Scheme Promoters	Third parties may object to individual schemes	Scheme promoters may need to clarify project in further detail and publish information.	Scheme may not be delivered	Medium	Medium	Medium	Early coordination with key stakeholders. Development of a stakeholder engagement strategy which is included in the SOBC submission	Low	Low	Low
R013	Open	Threat	Resources	Programme Delivery	Delivery Team and Scheme Promoters	Practicalities of resourcing schemes	Large number of schemes being delivered in a short timescale	Delay to delivery of schemes	High	High	High	Early engagement with contractors and coordination with other local authorities delivering similar schemes	Medium	Medium	Medium

APPENDIX-

Scheme Risks



North East Transforming Cities Fund

Summary of Risks (collated from scheme proformas)

Code	Scheme name	Scheme promoter	Risks
DU01	Walking and cycling improvements- refer to appendix H for further details	Durham County Council	<p>Land Issues- Durham confirm no land issues for any of the packages within DU01.</p> <p>Third Party Funding from the University – Promoter continuously engaging with University</p> <p>QRAs to be undertaken for all elements at the end of detailed design. Early risks identified, but standard in their nature, and can be mitigated.</p> <p>Environment Agency approval for Milburngate Bridge, although positive dialogue has already taken place. Planning approval would be needed, although not thought to be contentious.</p> <p>Potential delays/unexpected costs relating to statutory undertaker’s apparatus and diversions</p> <p>Openreach apparatus along Carrville High Street to be diverted/lowered. Cost estimate for this within overall estimate</p> <p>Planning Application required for areas with change of use</p> <p>Unknown outcome of consultation required for shared-use areas, especially in built-up areas.</p>
DU02	Park and ride expansion, Durham City- refer to appendix H for further details	Durham County Council	<p>Land acquisition, although willing sellers at both sites. Planning permission would be needed, although not thought to be contentious.</p> <p>Aiming to submit planning applications for both sites by the end of the year (2019). The scheme designs are well progressed. Discussion ongoing with land agents / owners for both sites. Anticipate an agreement by the end of the year (2019).</p>

Code	Scheme name	Scheme promoter	Risks
DU03	Bus priority measures- refer to appendix H for further details	Durham County Council	Objections to Bus Lane TRO's could lead to Highways Committee. However strong justification for the proposals.
DU04	Durham rail station access improvements- refer to appendix H for further details	Durham County Council	<p>Network Rail GRIP approval. Not thought to be contentious, given we have recently provided similar facilities linking to the northbound platform.</p> <p>Dialogue held with LNER, who are supportive of the principle of the project. Further discussions required regarding the detail of the project.</p>
DU07	Durham bus station- refer to appendix H for further details	Durham County Council	<p>Below risks not high risk and can be managed.</p> <p>Party walls Grade II listed building consent – current station attached to manse.</p> <p>Network management clashes/events</p> <p>Planning application scheduled to be submitted in November. Design now within RIBA 2, with relevant pre planning app discussions undertaken.</p>

Code	Scheme name	Scheme promoter	Risks
GA01	West Tyneside cycle route (upgrading existing routes) - refer to appendix H for further details	Gateshead Council	Progressing detailed design – current proposals are in outline only and delivery timescales could be affected if detailed design was delayed.
GA05	MetroGreen sustainable access-- refer to appendix H for further details	Gateshead Council	The majority of the package can be delivered within existing highway boundaries and without significant statutory procedures. Some elements may require some land acquisition and there will be risks associated with these elements.
GA07	Askew Road- refer to appendix H for further details	Gateshead Council	There are no major risks other than the possibility of unforeseen problem during the removal of the concrete footbridge. A developer of the site will be in place prior to final submission of the bid in November. The main risks relate to the introduction of the signalised junction, which does not form part of this bid.
GA08	Hills Street and Gateshead Quays sustainable access- refer to appendix H for further details	Gateshead Council	Delays to Quays development. The detailed nature of the measures will need to be determined in tandem with the planning application for the Gateshead Quays development – if this were delayed it could delay implementation of the measures.
GA09	Great North Cycleway – A167 Birtley to Eighton Lodge- refer to appendix H for further details	Gateshead Council	No obvious risks. Improvements to crossings on Eighton Lodge roundabout will be subject to discussions with Highways England in relation to the A1 improvement scheme in the area.

Code	Scheme name	Scheme promoter	Risks
GA11	A195 bus lane- refer to appendix H for further details	Gateshead Council	The proposed delivery timescales are dependant on not requiring third party land purchase for the scheme. If that is the case, the scheme would be delivered within the existing highway and risks should be relatively minimal. If not, there would be an impact on timescales, cost and the statutory processes involved.
GA13	Keelmans Way improvements- refer to appendix H for further details	Gateshead Council	Legal issues regarding possible closure of the route due to further erosion and the legal requirement to re-open the PRow. Access issues may also increase costs.
GA16	Gateshead Interchange bus lane- refer to appendix H for further details	Gateshead Council	Risk register to be further explored during design

Code	Scheme name	Scheme promoter	Risks
NE01	Transforming Newcastle City Centre- refer to appendix H for further details	Newcastle City Council	<p>Consultation process- Newcastle City Council have already commenced early engagement on the proposals with key stakeholders such as Bus Operators as well as learning a number of lessons from temporary closures of Blakett Street. This will allow the authority to understand and mitigate against concerns and issues of businesses, operators etc on a practical level in advance of publicising the permanent TRO, thus reducing the potential for objections.</p> <p>Long lead-in times for high-quality materials required within conservation area (Mitigation: Programme works based on materials available, agreement to procure materials in batches)</p> <p>Objections to Traffic Regulation Orders and potential Public Inquiry process for pedestrianisation (Mitigation: Public Inquiry accounted for in project plan/timescales and budget, supporting data collection in advance of any Inquiry)</p> <p>Risk of utilities discovery within congested urban environment (Mitigation: Intensive detailed design process and engagement with statutory undertakers)</p> <p>Dependencies between individual elements of schemes (Mitigation: Programming of works to minimise dependences)</p>
NE02	Newcastle Central Station – Central Gateway- refer to appendix H for further details	Newcastle City Council	<p>Delivery of works within Network Rail land rather than highway land (Mitigation: Formation of Station Board, including Network Rail)</p> <p>Delivery of works on/proximate to historic and listed structures (Mitigation: Early engagement of Historic England and consultation as part of development of Business Case)</p> <p>Delivery of works on or around ECML, introducing delay risk (Mitigation: Station Board and integration with Network Change process)</p> <p>Availability of match funding from LGF (Mitigation: Agreement that LGF is eligible source of match funding).</p>

Code	Scheme name	Scheme promoter	Risks
NE03	Newcastle – North Tyneside strategic cycling infrastructure- refer to appendix H for further details	Newcastle City Council	<p>Long lead-in times for high-quality materials (Mitigation: Programme works based on materials available, develop lower cost option which prioritises delivery)</p> <p>Objections to Traffic Regulation Orders or poor response to consultation(Mitigation: extensive consultation with statutory consultees and intense consultation process)</p> <p>Risk of utilities discovery within congested urban environment (Mitigation: Intensive detailed design process and engagement with statutory undertakers)</p>
NE04	Newcastle Outer West- refer to appendix H for further details	Newcastle City Council	<p>Availability of S106 match funding (Mitigation: Detailed examination of relevant trigger points and phasing of construction)</p> <p>Development of improvements on Highways England land (A1/A696/A167) (Mitigation: Early engagement with Highways England)</p> <p>Delivery of Scotswood to North Brunton A1 scheme (Mitigation: Early engagement with Highways England)</p> <p>Agreement of develops on most appropriate solution (Mitigation: Previous development of an agreed joint study to propose solutions – completed)</p>
NE08	Newcastle Streets for People- refer to appendix H for further details	Newcastle City Council	<p>Availability of match funding need to confirm with Nexus / third parties. (Mitigation: Early agreement of LTP funding)</p> <p>Method of scheme development is fundamentally bottom-up and community led and therefore proposals can vary (Mitigation: Formation of Stakeholder Reference Groups at earliest stage)</p>

Code	Scheme name	Scheme promoter	Risks
NX02	Park and ride enhancements- refer to appendix H for further details	Nexus	Risk Register available in scheme business case
NX03	Twin tracking of Metro line between Pelaw and Bede / Metro capacity enhancement- refer to appendix H for further details	Nexus	Risk Register available in scheme business case
NX04	Strategic park and ride sites – Follingsby park and ride and links to IAMP and Callerton Parkway- refer to appendix H for further details	Nexus	Risk Register available in scheme business case

Code	Scheme name	Scheme promoter	Risks
NO01	Northumberland Line- refer to appendix H for further details	Northumberland County Council	Risk Register available in scheme business case
NE07 / NO02	Callerton - Airport - Ponteland cycle route- refer to appendix H for further details	Northumberland County Council (lead); Newcastle City Council	<p>Multi agency approach required (mitigation: Early establishment of a Project Board, which will include Newcastle Airport)</p> <p>Confirmation of role of Highways England and match funding (mitigation: written confirmation from HE on status of works on the A696 for cyclists)</p> <p>Integration with upcoming Newcastle scheme around Callerton Parkway (mitigation: same design team on both schemes)</p> <p>Confirm match funding as this is cross boundary.</p>

Code	Scheme name	Scheme promoter	Risks
NT02	Improvements to North Shields transport hub- refer to appendix H for further details	North Tyneside Council	<p>Availability of match funding need to confirm with Nexus / third parties.</p> <p>Land acquisition.</p> <p>Multiple land uses involved in proximity of sites. Proposed bus facilities and priority measures need to be explored, including its geographical scope and operating model.</p>
NT08	Bus priority improvements along A188/A189 corridor phase 1- refer to appendix H for further details	North Tyneside Council	<p>Availability of match funding.</p> <p>Scheme is at the concept stage of development and needs refinement.</p> <p>Need to understand delivery mechanisms through working with operators.</p>
NT10	Healthy bus and Metro- refer to appendix H for further details	North Tyneside Council	Local contribution.

Code	Scheme name	Scheme promoter	Risks
ST04	Healthier Metro stations- refer to appendix H for further details	South Tyneside Council	<p>Availability of match funding.</p> <p>Delivery requires a multi-agency approach including Nexus, the Constabulary, Council and local user groups. All parties need to be satisfied.</p> <p>Scheme is at early stage development and needs refinement over time</p> <p>Identify Nexus requirements for station improvements (external / internal).</p>

Code	Scheme name	Scheme promoter	Risks																																			
ST08 a	Bus corridor improvements- refer to appendix H for further details	South Tyneside Council	<p>Availability of match funding. Delivery requires a multi-agency approach,</p> <p>Scheme is at early stage development and needs refinement</p> <p>Private Land Take will be required as part of some of the infrastructure improvements.</p> <p>South Tyneside Council has done a significant level of work in support of these proposals. A summary table is shown below. In accordance with this tables, a range of costs have been produced that will seek to influence the bid.</p> <table border="1" data-bbox="801 646 2047 1054"> <thead> <tr> <th data-bbox="801 646 1261 738">Name/Category</th> <th data-bbox="1261 646 1391 738">No Assessment</th> <th data-bbox="1391 646 1543 738">Feasibility Study</th> <th data-bbox="1543 646 1695 738">Indicative Designs</th> <th data-bbox="1695 646 2047 738">Major Assessment</th> </tr> </thead> <tbody> <tr> <td data-bbox="801 738 920 775">UTMC / Traffic Signal Upgrades</td> <td data-bbox="1261 738 1391 775">✓</td> <td data-bbox="1391 738 1543 775"></td> <td data-bbox="1543 738 1695 775"></td> <td data-bbox="1695 738 2047 775"></td> </tr> <tr> <td data-bbox="801 775 920 812">Whiteleas Way Bus Lane</td> <td data-bbox="1261 775 1391 812"></td> <td data-bbox="1391 775 1543 812">✓</td> <td data-bbox="1543 775 1695 812">✓</td> <td data-bbox="1695 775 2047 812"></td> </tr> <tr> <td data-bbox="801 812 920 879">Stanhope Road / Boldon Lane Junction</td> <td data-bbox="1261 812 1391 879"></td> <td data-bbox="1391 812 1543 879">✓</td> <td data-bbox="1543 812 1695 879">✓</td> <td data-bbox="1695 812 2047 879"></td> </tr> <tr> <td data-bbox="801 879 920 946">South Shields to Newcastle Boldon / Tiled Level Crossing Removal - New Bridge</td> <td data-bbox="1261 879 1391 946"></td> <td data-bbox="1391 879 1543 946">✓</td> <td data-bbox="1543 879 1695 946">✓</td> <td data-bbox="1695 879 2047 946">✓</td> </tr> <tr> <td data-bbox="801 946 920 983">New Road / Boker Lane Junction</td> <td data-bbox="1261 946 1391 983"></td> <td data-bbox="1391 946 1543 983">✓</td> <td data-bbox="1543 946 1695 983">✓</td> <td data-bbox="1695 946 2047 983"></td> </tr> <tr> <td data-bbox="801 983 920 1054">Boldon ASDA/ New Road / Junction Improvements</td> <td data-bbox="1261 983 1391 1054"></td> <td data-bbox="1391 983 1543 1054">✓</td> <td data-bbox="1543 983 1695 1054"></td> <td data-bbox="1695 983 2047 1054"></td> </tr> </tbody> </table> <p>The principle risks associated with this scheme are as follows;</p> <p>Land Ownership – it is expected that the majority of works will take place in the adopted highway boundary. However, land take will be required as part of the Level Crossing scheme although discussions with the Council’s Asset Management Team have commenced.</p> <p>Match funding needs to be identified with the Council to support this through existing funding sources, but also through capital investment bids.</p>	Name/Category	No Assessment	Feasibility Study	Indicative Designs	Major Assessment	UTMC / Traffic Signal Upgrades	✓				Whiteleas Way Bus Lane		✓	✓		Stanhope Road / Boldon Lane Junction		✓	✓		South Shields to Newcastle Boldon / Tiled Level Crossing Removal - New Bridge		✓	✓	✓	New Road / Boker Lane Junction		✓	✓		Boldon ASDA/ New Road / Junction Improvements		✓		
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IN01	Intu cycle storage- refer to appendix H for further details	Intu	<p>Agreement on access solution from Percy Street mindful of the wider Newcastle City Centre Transformational scenario.</p> <p>Remodelling of the planted area on Percy Street owned by Newcastle City Council - initial discussions with NCC have taken place and appear positive.</p> <p>Structural considerations in creating the external access door from/to Percy Street.</p>
Code	Scheme name	Scheme promoter	Risks
ITS01	ITS Package of works - Regionwide- refer to appendix H for further details	Regionwide – being developed by Gary Macdonald (AECOM)	<p>Risk- Civil Works (Condition of Sites) - Suitability of the current duct work at identified sites is unknown until detailed designs and investigations have been undertaken. Mitigation- detailed survey planned before upgrade works undertaken.</p> <p>Risk- Signal priority - is the overall strategy a bus priority, cycle priority etc. It's important we are in agreement that the approach we take is consistent and clear from the outset. Mitigation- aim of the scheme will be to advantage buses, however, this strategy needs to be adopted wholly by districts or clear strategy agreed before optimisation work is undertaken.</p> <p>Risk- Signal optimisation – Additional external resource would be required to carry out surveys to ensure correct data sets for the identified signals are up to date. Availability and procurement may be an issue. Mitigation- resourcing skills available in private sector. Price estimation has been included in costs.</p> <p>Risk- Site resurfacing - Sites identified where patching or full resurfacing of the junctions is required would need to be agreed with each district and approval given on the exact extent of the works and contractors, prices, availability agreed. Mitigation- Detailed survey planned before upgrade works undertaken.</p>