INDUSTRIAL STRATEGY
TRANSFORMING CITIES FUND

North East Combined Authority
DURHAM • GATESHEAD • SOUTH TYNESIDE • SUNDERLAND

NORTH OF TYNE COMBINED AUTHORITY

Transforming Cities Fund Tranche 2

NORTH EAST REGION
DRAFT SOBC
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Foreword

Councillor Martin Gannon
Chair of the North East
Joint Transport Committee

On behalf of the North East Joint Transport Committee I am delighted to present our region's Transforming Cities 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;

– Reducing carbon emissions and improving air quality; and

– Supporting housing delivery and fostering an environment for future mobility services.

In our three vibrant city centres of Durham, Newcastle and Sunderland; the surrounding towns and rural villages our economy is growing with a 14.2% growth in the number of businesses in 2018. Whether it's students travelling to university, families travelling to visit our coastline and world heritage sites, or the daily commute for work or college, public and sustainable transport is playing its part in our growth with over 200m passenger journeys on public transport each year. Our economy has grown by 12.2% since 2014 and our transport network, has played its part. It is a factor which helps to draw International events and 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 the foundations of the current network 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 2.6m passenger journeys on the North East Metro and local rail network by 2030;

– Introduce 18km (11 miles) of new or improved bus priority measures across the region, improving bus reliability;

– Create 69km / 42 miles of new or improved walking and cycling infrastructure;

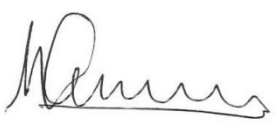
– Provide 2,257 additional carparking spaces in park and ride sites to intercept traffic and encourage modal shift.

The region has a significant track record in the effective and competent management and delivery of major capital projects; this includes our North East Local Enterprise Partnership's Local Growth Fund. A capital programme of £270 million has funded refurbishment projects at stations on the Tyne and Wear Metro and local sustainable transport schemes that enhance our walking and cycling network. Many more projects through the LGF programme are under construction creating employment sites and buildings for business innovation and growth, strategic transport improvements and new educational facilities to support our local communities. In addition, Nexus has managed and is executing a £350m Asset Renewal Programme to modernise and maintain assets on our Metro network reducing delays and helping to deliver high standards of infrastructure reliability, every day.

To assure you of our commitment, our region has identified up to £70.78m as match funding which can be made available to support the bid which when delivered alongside schemes in our higher scenario will generate a BCR of 2.5. I commend this bid for your consideration.

Yours sincerely,

Councillor
Martin Gannon



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Executive Summary

Our Vision

e.i At the commencement of our involvement with the Transforming Cities Fund, in our Expression of Interest, we set a vision that we remain true to in this SOBC:

> **"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 the Department for Transport and the UK Industrial Strategy are seeking to secure through the Transforming Cities Fund:

- "More sustainable connectivity", defined as improved availability of public and sustainable transport between locations in our region, links to the aims and objectives of:
  - Improving capacity on commuting trips, access to employment centres and development sites to support economic growth;
  - Reducing carbon emissions to increase the volume and proportion on journeys made by low carbon, sustainable modes and bringing about improvements in air quality including areas that are in exceedance of target levels, and;
  - Extending the reach of our public and sustainable transport network and supporting housing delivery.

e.iii The "More Mobility" component of the vision, defined as easier access and fewer barriers, including perceived barriers to sustainable and public transport use responds to the aims and objectives of:

- Delivering wide social and economic benefit for the community;
- Future proof 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.

e.iv The Transforming Cities Fund objectives resonate harmoniously with the challenges and aspirations of our region. Locally, the challenges we need to address in our programme include:

- Looking at the wider economic backdrop, the GVA of the region is £40.1bn (2017) which breaks down to a GVA per capita of £20,338, below the national average of £24,181 (2017) which is England excluding London. We have seen improvements in these areas, but performance is stifled and we explore some of the reasons behind this;
- Addressing air quality to bring NO_2 within EU targets across the region by 2023; and
- Currently life expectancy at birth for both men and women is about one year lower in the area compared with England; similarly, healthy life expectancy is about four years lower.

Measures of Success

e.v 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. More detailed information is outlined within our strategic case; however, an overview of Key Performance indicators is:

Key Area	Key Measure
Economy	GVA gap between regional and national average
Air Quality	NO2 area monitoring
Public Health	Increasing the percentage of adults walking or cycling at least three times per week.

e.vi Further 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.

Our Corridors

e.vii 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 1**.

Figure 1 Our challenges

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. Over-crowding 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: Sustainable transport options on this corridor are unattractive compared to cars. Journey times on infrequent buses are affected by traffic congestion

e.viii 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 shown in **Figure 2**, which forms our main medium cost scenario.

e.ix 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.

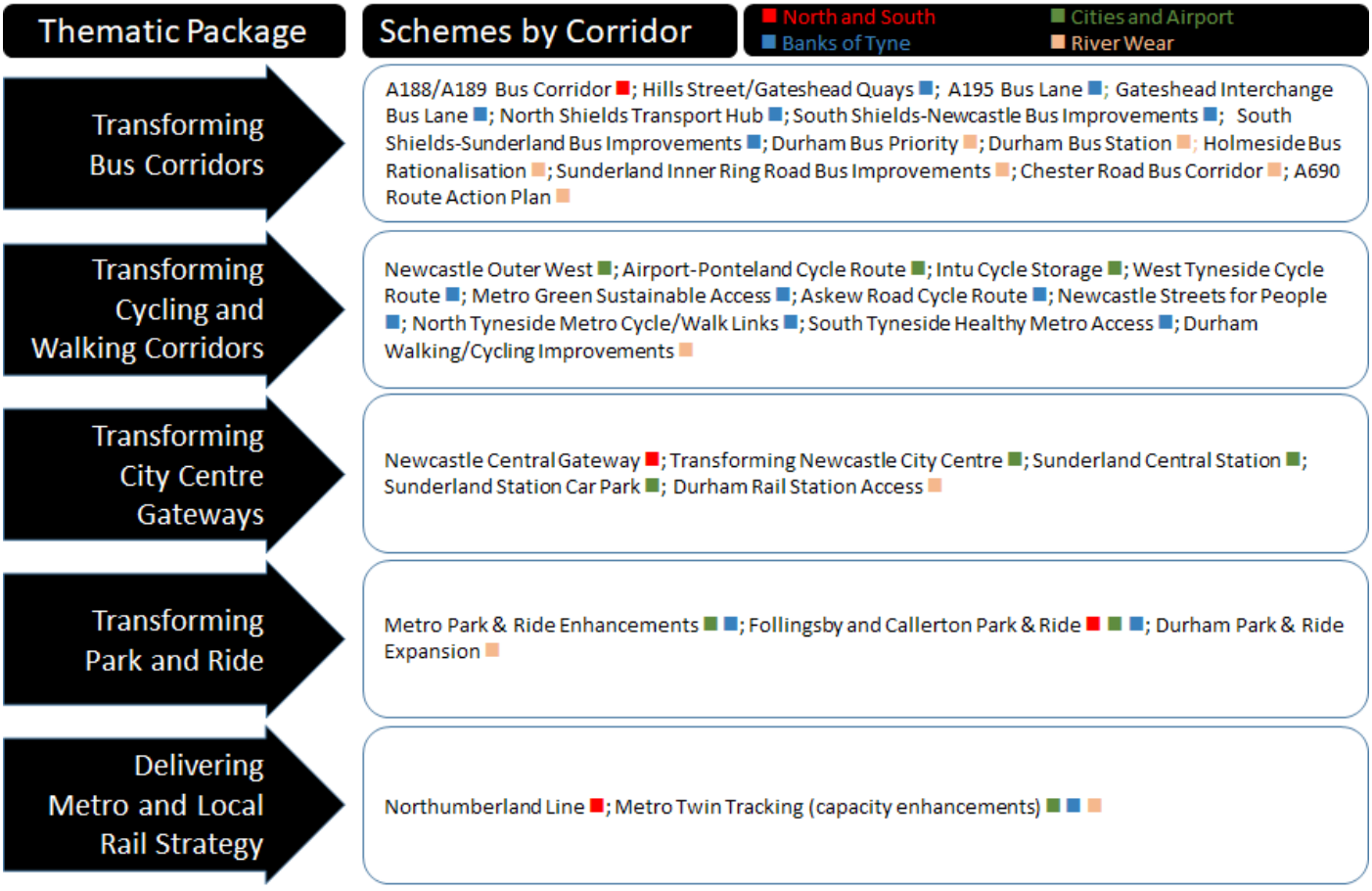
Deliverability

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

e.xii Our region has identified up to £70m as match funding which can be made available to support the programme which when delivered alongside schemes in our higher scenario will generate a BCR of 2.5.

Figure 2 Medium Case Scenario Programme



1 Introduction

1.01 This Strategic Outline Business Case (SOBC) has been commissioned by the North East Joint Transport Committee to investigate the core challenges and opportunities associated with the public and sustainable transport network in the region and to identify opportunities for investment aligned to the objectives of the Transforming Cities Fund. The purpose of this document is to identify these opportunities for investment and look at the associated benefits could be achieved to the North East's economy, society and environment with greater sustainable connectivity.

Study background

1.02 The study has comprised a number of key tasks in relation to the composition of this SOBC:

– Expression of Interest: (Summer 2018), This process identified the structural context of the region's transport network, economy and society and some of the key drivers for investment.

– Tranche 1: (Autumn/Winter 2018/9), in September 2018 the North East was one of ten city regions shortlisted to submit bids for funding from TCF. A tranche 1 programme exemplifying early wins for sustainable transport 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 key employment sites.

– Tranche 2 (Spring 2019): This study follows the themes identified in the original expression of interest and expands on the core challenges and opportunities for sustainable travel. A full Strategic Outline Business Case has been developed in support of this process.

Business Case Scope

1.03 This SOBC has comprised a number of 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 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.

Document Structure

1.04 The remainder of the SOBC is set out as follows:

– Strategic Case;

– Economic Case;

– Commercial Case;

– Finance Case;

– Management Case; and

– Summary and Appendices.

2 Strategic Case

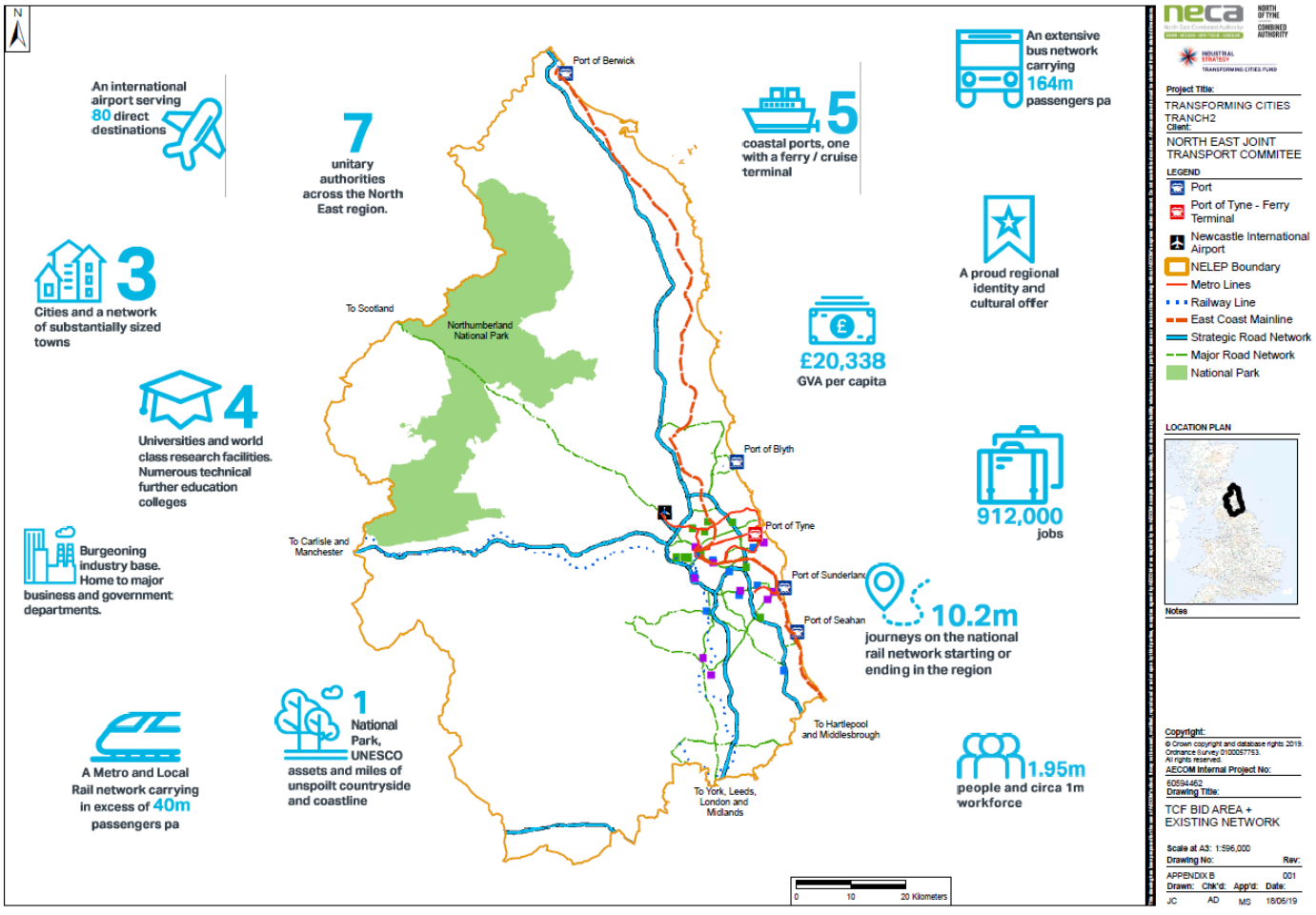
Introduction

2.01 Our city region includes Newcastle, Durham and Sunderland, and their surrounding polycentric, inter-dependent labour markets. This is best demonstrated by the following graphic at Our city region includes Newcastle, Durham and Sunderland, and their surrounding polycentric, inter-dependent labour markets. This is best demonstrated by **Figure 3**.

2.02 We are proud of our vibrant city centres, unspoilt coastline, world heritage sites, and our pioneering spirit. Our industrial innovation, flexibility and resilience have created a growing economy that provides 882,000 jobs. Our ambition is that by 2024 there will be 100,000 more jobs in the regional economy compared to 2014. Our Gross Value Added (GVA) a measure of economic success is £40.1 billion (2.6% of overall English output).

2.03 The 2017 UK Industrial Strategy established the principles of Grand Challenges to set the foundation of future industrial innovation. Future of Mobility as a grand challenge identifies the UK being at the forefront of mobility innovation. The Future Mobility Urban Strategy, (published in March 2019), looks at the significant opportunity to reflect on socio economic and environmental use and demands on the transport network and future requirements mapping to the DfT transport objectives and Industrial strategy opportunities. Through this business case we reflect on these opportunities and identify the current transport challenges faced by the region.

Figure 3 Transport Network in the North East



Our Geography

In this section we

profile the geographic context of the region including the towns and cities (places and spaces) that make up the region

consider its economic structure and the challenges and opportunities to serve our communities that live work and visit by high quality public and sustainable transport services

Places and Spaces

2.04 The North East city region is a diverse region, with a mix of urban and rural communities with a proud heritage and flexible economy. The polycentric nature of the region's economy places interesting challenges to the travel.

2.05 The three vibrant cities of Newcastle, Sunderland and Durham combine to provide a rich resource of employment, cultural, historical and educational assets. These cities are surrounded by a diverse range of sizeable towns and villages, each of which in their own right provide economic systems and community assets.

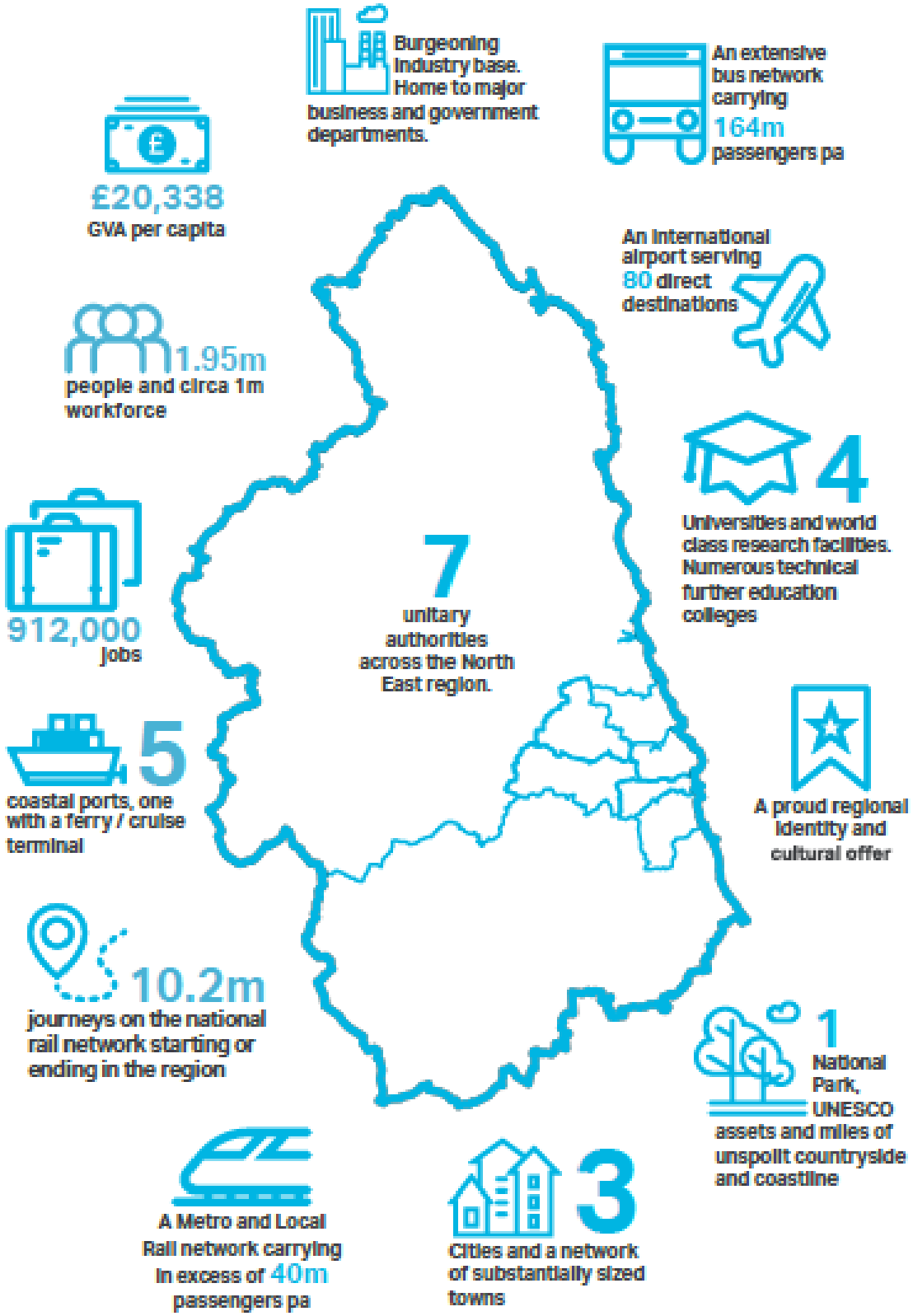
2.06 The geographic nature of the region results in a relatively self-contained economy, albeit with links to the south of the area into Tees Valley. This makes it the ideal testbed for innovation. The region's academic sector includes assets such as the National Innovation Centres for Ageing, Data and Energy Systems together with organisations such as the Urban Observatory and Catapult Centres for Digital, Energy Systems and High Value Manufacturing, to trial new forms of urban development, mobility and shape the future public and sustainable transport network.

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

2.08 Further detail around nature of the region can be found in **Figure 4** overleaf.

The diverity of our region, Clockwise from top corner, Hadrians Wall, Penshaw Monument, Durham City Centre and Souter Lighthouse

Figure 4 North East Region Key Attributes



Polycentric Economy

2.09 The region is dominated by a polycentric economy which provides challenges and opportunities around providing sustainable and public transport options. This includes the employment hubs of our three city centres of Newcastle/ Gateshead, Durham and Sunderland, business parks across the conurbation, and towns. These economic assets are demonstrated on the attached plan in Appendix A.

2.10 Professional services are focused on the urban conurbations with advanced manufacturing located at business parks around the region. In Newcastle, in direct contrast to the rest of the region, economic growth has been rapidly fuelled by a young population and growing knowledge-based services sector.

2.11 Connectivity is of a reasonable quality within the polycentric urban core, mainly thanks to the well-developed Metro and bus system. However, it remains a challenge to more remote rural areas or deprived urban periphery areas. Any strategy needs to address these points.

Challenges and Opportunities

2.12 The challenges and opportunities related to our geography are:

Summary Box: Our Geography

Key Challenges	Opportunities
Polycentric geography means that there are 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 Potential to change travel habits increase trips by sustainable modes

Our Transport Network

In this section we

review the existing public and sustainable transport assets by mode, that exist in the region and importantly how they are used by the travelling public

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

Buses

2.13 Buses are our most used form of public transport, particularly in urban areas, with nearly 156.3 million passenger journeys in 2017/18, usage has however declined by 22% from a peak of 178.5 million journeys in 2006/07 in common with many other areas. Around 650 different registered bus services operate in the region. Of these, around 88% of service mileage is operated on a commercial basis with the remaining 12% subsidised by the county councils or Nexus. The secured bus network comprises 5.3 million bus miles per annum in Tyne and Wear (approximately 10% of overall mileage), 1.3 million bus miles per annum in Northumberland (17% of overall mileage) and 2.1 million bus miles per annum in Durham (15% of overall mileage). Across the North East these services accommodate approximately 11 million passenger journeys, 6.5% of all passenger journeys.

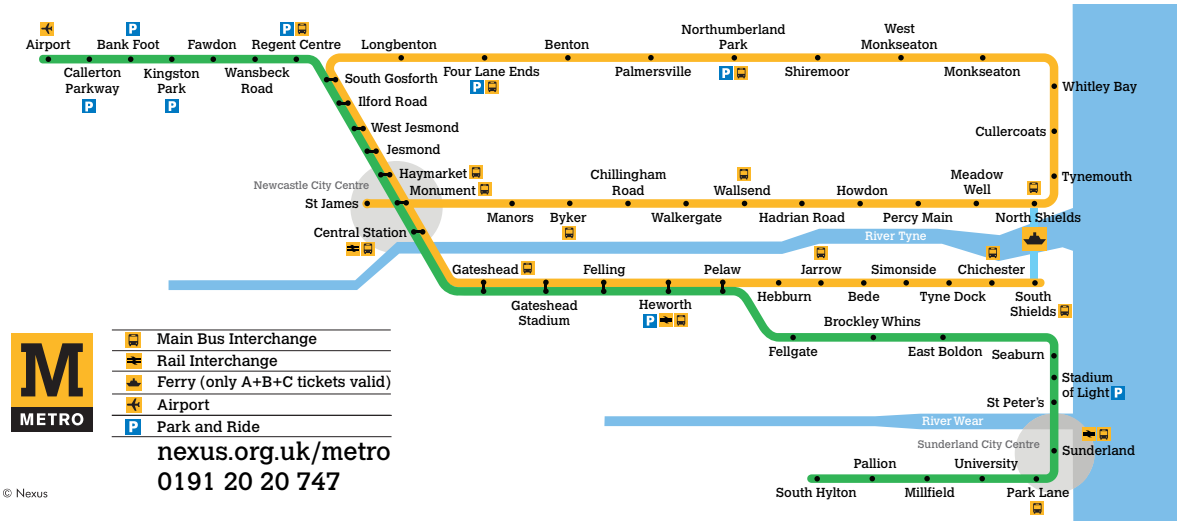
2.14 There is generally a high level of satisfaction with services and most of the fleet continues to be renewed or retrofitted with greater levels of technology both in emission controls, passenger real time information and WIFI / charging sockets.

Metro

2.15 The Tyne and Wear Metro serves 60 stations across Tyne and Wear, including the cities of Newcastle and Sunderland and connecting the coast at North and South Tyneside with Gateshead and the north of Newcastle. The service operates at a daytime frequency of every 12 minutes, increasing to every six minutes through Central Newcastle and Gateshead during the morning and evening peak periods. The system intersects with national and international connectivity hubs at Newcastle and Sunderland stations and Newcastle International Airport.

2.16 In 2017/18 annual Metro usage was 36.4 million passenger journeys, with 53 million trips a year forecast by 2030. Even under a conservative estimate, 45 million journeys are expected in 2030[6]. 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, the new fleet business case exemplifies this. Metro also plays an important role in multi-modal journeys. Bus and taxi interchanges at locations such as Heworth, Sunderland Park Lane, Regent Centre, Gateshead and Four Lane Ends enable integrated journeys to be made, with through-ticketing products available.

The Tyne and Wear Metro Network



Local Rail

2.17 Regarding local rail (Durham Coast, Tyne Valley, Bishop Line and Northumberland services on the East Coast Main Line) usage is increasing, resulting in capacity issues at peak times. Pacer trains are intended for replacement by the end of 2019. Generally local services fall below the minimum standards of the Transport for the North Long Term Rail Strategy (two trains per hour and a minimum speed of 40mph).

Ferry

2.18 The Shields Ferry provides a valuable service linking North and South Shields, with 422,000 trips in 2017/18. This provides connections for pedestrians and cyclists and is important for commuters and leisure passengers alike.

Ticketing and Technology

2.19 Nexus has a smart ticketing platform called POP, which is an ITSO international standard system that already allows for the purchase of tickets and production of a paperless token for travel across all Metro and bus services in the North East. This system is about to be launched on a smartphone so that it can be integrated with a travel app. The Bus Open Data programme will ensure that all bus fares are available online and published through an API feed.

2.20 Nexus has a journey planner, as do individual bus operators. This relies on scheduled timetable information that will be enriched by the DfT's Bus Open Data programme, which will require operators to take a lead in publishing their own timetable data.

2.21 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 project.

2.22 Real-time information is available for all buses across the region, although the functionality of this system requires updating. Real-time information can also be made available for Metro services with some further investment.

Our plan will support national connections with regional and local links

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

2.23 Comprehensive information about the live operation of our local highway networks is available from our state-of-the-art Urban Traffic Management Centre (UTMC). The functionality of this centre will be improved in relation to transport corridors because of investment secured through Tranche 1 of the Transforming Cities Fund.

The region's UTMC allows for the management of the netwok including supporting the reliability of bus services

Walking and Cycling

2.24 The region has a well-established walking and cycling network, which has been subject to investment over recent years through funds such as the Local Growth Fund and its Local Sustainable Transport Fund, 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 as explored below. Just within Newcastle, 31% of the population live within 125m of a signed cycle route yet 7% of the population currently cycle, this reduces to 2% across the wider North East geography.

2.25 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:

- 25 per cent of men and 12 per cent of women cycle once a week (above the UK average of 4 percent);
- 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 very useful to help them cycle more; and
- 74 per cent of resident's support building more protected roadside cycle lanes.

2.26 There is a core of cycle commuting 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 as we demonstrated in the current travel trends a significant opportunity to encourage modal shift.

2.27 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.

Park and Ride

2.28 The Region has an established Park and Ride offer, our current sites offer over 4,300 spaces at:

– 30 Tyne and Wear Metro stations;

– bus-based Park & Ride in Durham City and Newcastle Great Park; and

– a range of National Rail stations across the area.

2.29 Park and Ride plays an important role in improving the efficiency of our transport network in the North East and relieving to urban congestion, helping to improve air quality and enhance our economy. From Nexus' research, 75% of people using Metro Park and Ride are doing so for business and commuting purposes, compared to 42% of all Metro passengers travelling for business and commuting purposes. People were asked why they used Park and Ride, with almost a half saying it was cheaper than driving all the way to their destination. In addition, at the time of the survey, long-standing roadworks were taking place at Heworth and the A19 Silverlink roundabout, which may explain the number of people who said they were using Metro Park and Ride to avoid roadworks.

2.30 Occupancy at Metro Park and Ride sites varies, with some car parks such as at East Boldon regularly over capacity, whilst others are under-used. In addition, there is a variety of approaches to parking and charges at different stations.

2.31 We have bus-based Park and Ride options available in Durham and at Newcastle Great Park. Durham's Park and Ride offers solutions to congestion in the city centre, with sites dotted around the periphery of the city on arterial routes. Demand is high, and the sites benefit from single payment options (free parking and a bus fare) and 10min bus frequencies into the city. Newcastle's Great Park site located just off the A1 is an example of an operator led facility which offers free parking and 15 minute daytime bus service on express routes into Newcastle.

National Connectivity

2.32 Any programme must complement the work being developed by organisations such as Transport for the North and High Speed 2 in improving pan Northern and national connectivity. For example, activity at our station gateway sites in this programme needs to reflect wider interventions being promoted and will support last mile connectivity to these stations and assets. As examples the delivery of High-Speed services at Newcastle Central station is hinged on the development of the station, any works promoted through this fund will complement this future requirement. In addition, local rail enhancements at stations such as Sunderland, also benefit wider national links and future capacity and frequency enhancements on the Durham Coast line.

2.33 This approach applies to roads as well as rail, with a complimentary package of works at a local level that support the investments that are 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.

International Connectivity

2.34 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.

2.35 Linked to the tourism points above, 5.4 millon people used Newcastle International Airport in 2017. The airport serves 80 destinations direct and has just announced new route to Germany. Connecting the airport efficiently to the wider region by sustainable modes is a priority. Durham Tees Valley airport also offers international and national routes.

2.36 Although freight traffic is the primary focus of our five regional ports, the Port of Tyne is also significant for passenger movement, both in terms of ferry services to Amsterdam and calls by cruise liners; in the period 2010 to 2015 passenger numbers averaged 583,000 per annum. The number of cruise ships calling at the Port of Tyne is increasing with over 51 calling in 2018. 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.

2.37 By encouraging an increase in public and sustainable transport trips we can make strides in freeing up more road space for freight and other vehicles that rely on the network to perform their functions for a successful regional economy.

More Sustainable Connectivity

2.38 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.

2.39 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

2.40 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.

2.41 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 that we can provide solutions to through this bid.

Newcastle International Airport

Our People

In this section we

Profile our current population

Introduce changing trends

Consider public attitudes towards public and sustainable transport

Population overview

2.42 The population of the North East LEP area is 1,972,200 with a workday population of 932,000 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 people.

2.43 The age structure of the region is typically in the older age cohorts (25-49, 50-64 and 65+ years) and notably, there is a lower proportion of persons aged 0-15 years, at 17.2% compared to 19.0% nationally. Although currently the overall proportion of persons of working age (16-64 years) is in line with the regional and national averages (63.3%), this is set to decline over coming years given the ageing profile (and population trends examined below in The age structure of the region is typically in the older age cohorts (25-49, 50-64 and 65+ years). The median age across the whole region is 43.5 years. Although currently the overall proportion of persons of working age (16-64 years) is in line with the regional and national averages (63.3%), this is set to decline over coming years given the ageing profile (and population trends examined below in **Table 1**).

Changing Trends

2.44 Over the last 10 years, the population of the North East LEP area 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 North East LEP area's lower population growth reflect both a lower rate of natural change (births minus deaths) and lower rates of migration into the North East LEP area.

2.45 By 2040, our population is projected to have changed significantly, with fewer young people (0-15) and more older people (65 or over). By 2028 there is expected to be a 19.7% increase in those aged over 65. The increase in life expectancy, changes in social attitudes and better health may lead towards an increase in mobility because:

– People will remain in work later in life;

– Future generations of older people will be used to high levels of personal mobility and may well be 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 requires more travelling.

2.46 This is being experienced to date with increases in age profiles across all North East areas except for Newcastle, which is largely skewed by university students. The region is home to the National Innovation Centre for Ageing, co-located with Newcastle University, which has strong connections across the region that is studying and identifying solutions for future demographic changes. The region has engaged with the university in the development of this programme and we note that we need to design schemes that allow us to live better for longer and create age-friendly places.

2.47 32% of the region's workday population have a degree or equivalent qualifications with qualification levels rising although against a backdrop of a post-industrial population and concentrations of worklessness higher than the national average.

Table 1 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%

Public Attitudes

2.48 The recent air quality consultation, undertaken by Newcastle City, Gateshead and North Tyneside councils provides a rich resource of attitudes towards public and sustainable transport. Over 19,000 responses were received, the clear majority from residents and commuters.

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

BREATHE

2.49 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% for cycle and 78% for public transport. This highlights the value of these networks to existing users.

2.50 Turning to potential users there were strong results for those prepared to change habits to address air quality were, 10% walk, 39% cycle and 22% public transport.

2.51 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%
- Investment in intelligence transport: 84%

2.52 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%
- Public Transport is too expensive: 42%

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

2.54 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 – 'frequency', 'safety' and 'getting to where they need to go' were ranked the highest; and

2.55 Barriers to public transport use included the convenience of the car and also speed of journey were the main reasons. Two main objections to public transport were 'reliability' and 'cost'.

2.56 This demonstrates clear awareness of the challenge of air quality and the consideration of the investment in the network to encourage use, but there are clear attitudinal barriers to achieving change which this bid will focus on.

Summary Box: Our People and Public Attitudes

Key Challenges	Opportunities
Our population is growing, which needs to be accommodated on our networks	Through accommodating people in work for longer periods and designing schemes that match future societal needs we can maximise the impact of these schemes to influence long term travel trends
We have an ageing population with specific travel needs	There are some positive attitudes towards our public transport network, which form the basis for encouraging modal shift focused on quality, capacity, choice, speed and affordability
Public attitudes reveal concerns about public and sustainable transport	

Our Economic History

In this section we

Review the structure and size of our economy

Identify areas of current strength and future opportunities

Review drivers for change in the economy

Summarise key challenges and opportunities facing the region

Economic Structure and Size

2.57 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 a number of sectors including automotive and medicines. Additional detail on the economic make-up of the region is available in IPPR North's report supporting this SOBC, which can be found at Appendix B.

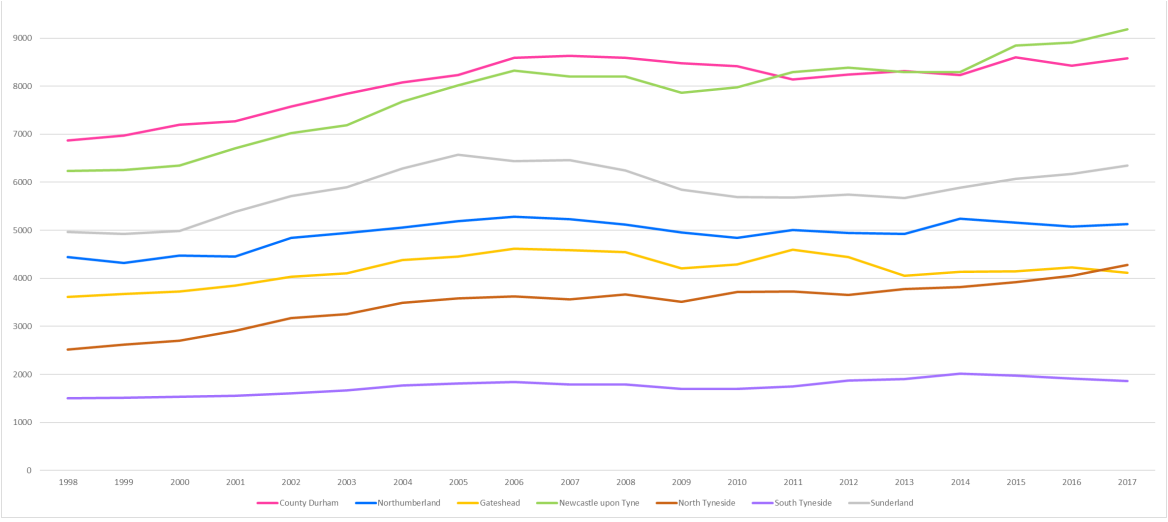
2.58 Jobs and output are underpinned by the public sector (education, health & public administration), retail and manufacturing but we have emerging strengths in nationally growing sectors such as advanced engineering, life sciences, the digital economy and other professional services. These sectors will be critical to harnessing future growth. 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.

2.59 Professional services are focused on the urban conurbations with advanced manufacturing located at business parks around the region. In Newcastle, in direct contrast to the rest of the region, economic growth has been rapidly fuelled by a young population and growing knowledge-based services sector.

2.60 Looking at the economic size, the GVA of the region is £40.1bn (2017) which breaks down to a GVA per capita of £20,338 this is below the national average of £24,181 (2017) which is England excluding London. We have seen improvements in these areas, but performance is stifled, and we explore through this case some of the potential reasons behind this.

2.61 Across the North East, **Figure 5** shows that 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.

Figure 5 Regional Gross Value Added (balanced), North East local authorities: chained volume measures in 2016 pounds, 1998 to 2017. Source: ONS



2.62 The region's Strategic Economic Plan (SEP) has several targets, two of which are:

– Supporting the economy and deliver an extra 100,000 jobs by 2024, an uplift of 11% on 2014; and

– Ensuring 70% of the new jobs delivered are 'better' jobs – offering higher skilled, more productive (i.e. higher GVA per worker) and better-quality opportunities to more people in the area.

2.63 Given the economic challenges of the economy there is also a focus on:

– Increasing the level of private sector employment and thereby reducing public sector dependency by reducing the gap in private sector employment density with the national rate by 50% by 2024;

– Closing the gap in the employment rate for people aged 16-64 by 100% by 2024;

– Reducing the gap in economic activity for people aged 16-64 by 50% by 2024; and

– Reducing the gap in GVA by hour worked by 50% by 2024.

2.64 Businesses cite easy access to markets, customers, clients, and the availability of qualified staff as the factors when deciding where to locate their operations with transport an essential factor.

Opportunity sectors for the Region's economy

Areas of Current Strengths and Future Opportunities

2.65 To achieve these economic targets the LEP, 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 6** overleaf.

2.66 The North East economy has diversified over recent decades and has:

– Key assets in the energy sector, including offshore energy and subsea technologies, regional energy and demonstration and innovation;

– World leading clinical research that supports a growing health and life sciences sector;

– A vibrant digital community with a combination of start-up, high growth and established businesses across a wide range of specialisms;

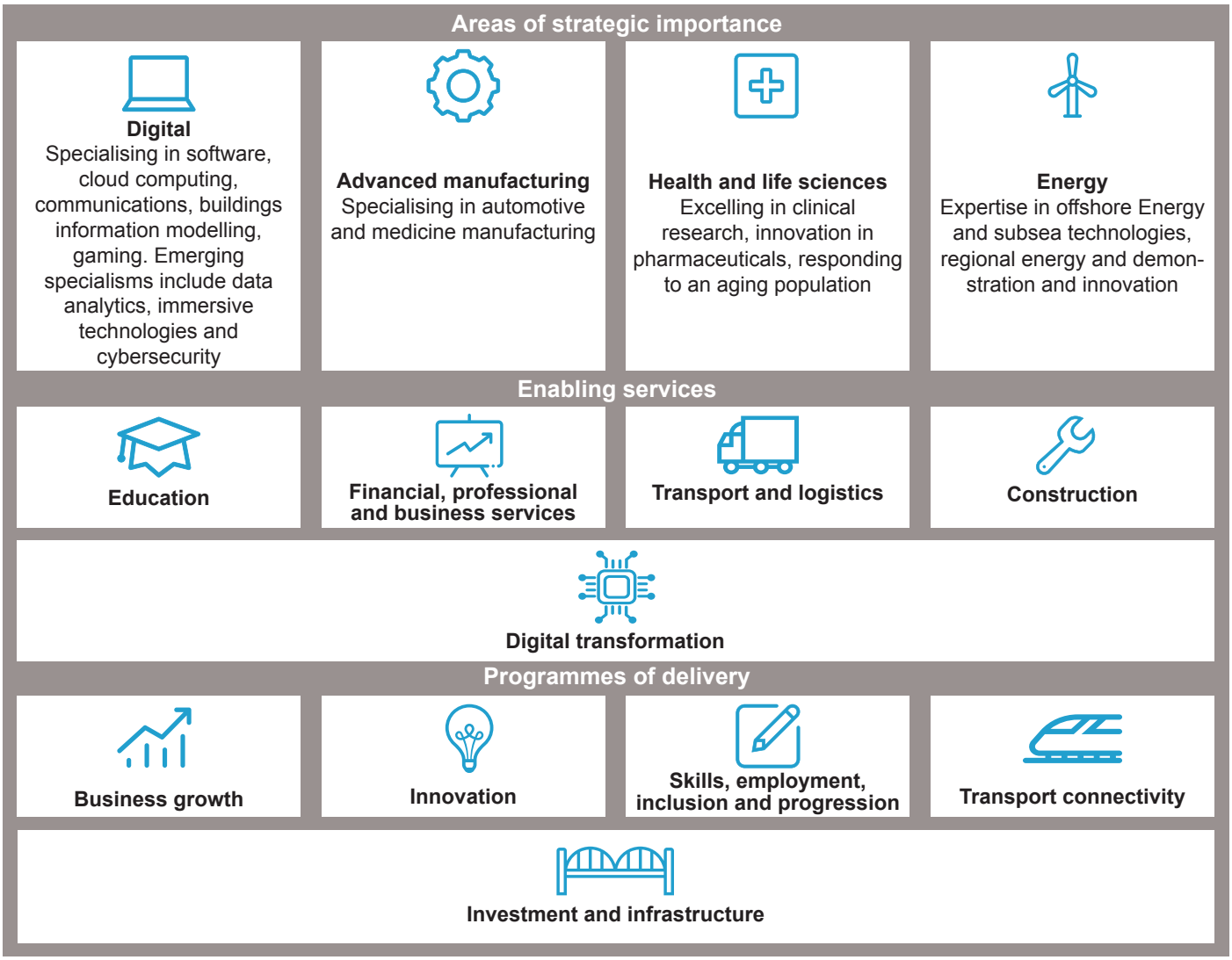
– Capabilities across a range of enabling services including education, financial, professional and business services, transport and logistics, and construction;

– Significant employment in the public sector across both local services and central government back office and shared services; and

– A strong cultural, heritage and sports offer that supports the tourism sector.

2.67 44% of employment in the North East LEP area is in science, research, engineering and technology, professional roles. Whilst this is below the rate in England excluding London (5.4%), the gap has decreased since 2014.

Figure 6 North East SEP, Our Plan



2.68 Regarding performance against our targets:

- The most recent data (to December 2018) showed that that the number of jobs in the North East had increased by 71,600 since 2014 (against a target of 100,00 extra jobs by 2024);
- Of the 71,600 additional jobs since 2014, 70% – or 49,800 – are 'better jobs' (as at December 2018). (against a better jobs target of 70% from 2018);
- Between 2015 and 2017, the gap between the NE and other regions on private sector employment had widened by 5%. This reflects a larger increase in private sector employment per head across England excluding London, than in the North East LEP area. (against a target of reducing the gap in private sector employment density by 50% by 2024);
- Regarding closing the gap in the employment rate, by December 2018, the gap between the North East LEP area and England excluding London had reduced by 34%. (against a target of 100% by 2024);
- By December 2018, the gap between the North East LEP area and England excluding London for reducing the gap in economic activity for people aged 16 – 64 had reduced by 15% (against a target of 50% by 2024); and
- GVA output per hour worked has reduced in the NE LEP area by 29% in 2017 (against a target of 50% by 2024).

2.69 These indicators, suggest the region is on track to achieve our headline targets of more and better jobs but there remain challenges to the size of the private sector, closing economic inactivity rates and increasing GVA output by worker.

Drivers for Change

2.70 The key issues that underpin our lower level of GVA per head compared to England excluding London are:

– A lower proportion of population that are in employment; and

– A lower level of productivity.

2.71 Both levels have seen improvement since 2014 with the gap between the North East LEP area and England excluding London narrowing on both measures. The economy is however being held back given the above performance indicators and is not performing to its full potential. This can be partially attributed to a lack of transport connectivity.

2.72 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."**

2.73 Transport plays an integral role in unlocking our investment sites as well as giving access to employment labour markets and enabling trade. We explore below some of the ways as to how we can deliver fundamental shifts in productivity and economic growth in the region. You will find more narrative around the economy in the IPPR North report available as Appendix B.

2.74 The North East has demonstrated its potential for economic prosperity through embracing change, welcoming new industries and adapting established ones, and learning new skills. 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.

2.75 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.

Schemes will support the aims of the Northern Powerhouse

NORTHERN POWERHOUSE HM Government

2.76 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. The North of England has long underperformed relative to the UK in terms of its productivity performance, with a persistent productivity 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, too many low-skilled workers, lower levels of innovation and enterprise activity, lower investments and sub-optimal transport links.

2.77 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 – it estimated that between 58,000-72,000 private sector jobs were "missing" from the North East LEP economy, many of which ought to be in higher-paid occupations in higher-value sub-sectors. With these jobs, economic output including productivity levels would be stronger.

2.78 This SOBC will consider these challenges in greater detail and look to establish solutions to improved transport connectivity that can deliver profound change to the way in which the economy grows and develops.

Summary Box: Our Economy

Key Challenges	Opportunities
Our Economy, measured by GVA levels, is performing below the national average	Investment can be targeted so it maximises access to labour markets and national / international gateways for trade and investment
The private sector economy is smaller in the region than other areas	We have a strong policy basis and effective implementation plans to support the region's economy
Employment in higher skill sectors is low	

Policy and Strategy Context

In this section we

Set out which local, regional, pan regional and national policies and strategies which are relevant to this SOBC

Explain why these policies and strategies are relevant

Indicate how our programme can seek to respond to the aims, objectives and/or requirements of these policies and strategies in harmony with those set out in the TCF guidance

2.79 The Transforming Cities Fund itself has direct links to the Government's Industrial Strategy yet shares comparable links with many other published strategies and policies, especially around the themes of economic growth and productivity and the clean growth.

Policy and Strategy – National Strategy Links

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

2.80 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.

2.81 TCF is branded as part of the Government's Industrial Strategy and its guidance highlights links including the desire to drive up productivity and improve connectivity between suburbs and urban centres. Thematically, TCF considers improved access to employment sites, supporting established and emerging industries and sets out a desire to reduce carbon emissions linking to the clean growth agenda. The Future of Mobility Grand Challenge links to Transforming Cities Fund with an allocation of £90milion from the National Productivity Investment Fund to create New Mobility Zones to trial new transport modes, services, and digital payments and ticketing.

2.82 Our programme will connect commuters to employment sites by rail, bus, cycle and walking, responding to both the call for improved connectivity between suburbs and employment sites and to the clean growth agenda. Answering the Future of Mobility Grand Challenge, we will use technologies in our Urban Traffic Management Centre to bus reliability and we have responded to the Future Mobility Zone Expression of Interest with proposals around ticketing, travel information, new mobility modes including demand responsive and links into the existing sustainable network.

Future of Mobility: Urban Strategy 2019

2.83 The Future of Mobility Urban Strategy is declared 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:

- New modes of transport and new mobility services must be safe and secure by design;
- The benefits of innovation in mobility must be available to all parts of the UK and all segments of society;
- Walking, cycling and active travel must remain the best options for short urban journeys;
- Mass transit must remain fundamental to an efficient transport system;
- New mobility services must lead the transition to zero emissions;
- Mobility innovation must help to reduce congestion through more efficient use of limited road space, for example through sharing rides, increasing occupancy or consolidating freight;

– The marketplace for mobility must be open to stimulate innovation and give the best deal to consumers;

– New mobility services must be designed to operate as part of an integrated transport system combining public, private and multiple modes for transport users, and

– Data from new mobility services must be shared where appropriate to improve choice and the operation of the transport system.

2.84 This strategy is relevant because TCF is an enabler to an enhanced walking, cycling and rapid transit. TCF spreads benefits across England and across segments of society.

2.85 Our programme offers significant walking and cycling interventions in a polycentric region and increases the capacity, resilience and frequency of mass transit. It touches societal segments including areas of above average multiple deprivation. Integration of our FMZ proposal further synergises this strategy to our programme.

Transport Investment Strategy 2017 (TIS)

2.86 TIS outlines how the Government will invest in transport to achieve the goals of the Industrial Strategy and that through investment, Government can and must 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.

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

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

Clean Air Strategy (2019)

2.89 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 describes that: “immediate air quality challenge is to reduce emissions of nitrogen oxides in the areas where concentrations of these harmful gases currently exceed legal limits.”

2.90 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”.

2.91 Our programme responds with a clear desire to reduce nitrogen oxides through an attractive regional walking, cycling and public transport offer including rail and Metro.

National Planning Policy Framework (2019)

2.92 This Framework has 3 overarching objectives:

– **an economic objective** – to help build a strong, responsive and competitive economy, by ensuring that sufficient land of the right types is available in the right places and at the right time to support growth, innovation and improved productivity; and by identifying and coordinating the provision of infrastructure.

– **a social objective** – to support strong, vibrant and healthy communities, by ensuring that a sufficient number and range of homes can be provided to meet the needs of present and future generations; and by fostering a well-designed and safe built environment, with accessible services and open spaces that reflect current and future needs and support communities’ health, social and cultural well-being.

– **an environmental objective** – to contribute to protecting and enhancing our natural, built and historic environment; including making effective use of land, helping to improve biodiversity, using natural resources prudently, minimising waste and pollution, and mitigating and adapting to climate change, including moving to a low carbon economy.

2.93 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 sustainable transport modes, giving people a real choice about how they travel."

2.94 It also encourages solutions, which support reductions in greenhouse gas emissions and reduce congestion stating that Local Plans should facilitate 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.

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

National Infrastructure Commission (NIC), National Infrastructure Assessment

2.96 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 the National Infrastructure Assessment which sets out the long-term economic infrastructure needs. The assessment encourages Metro Mayors and city leaders 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.

2.97 Relevant to TCF is the work by the NIC through the 'Next Steps for Cities' programme. This work is a programme with cities, as they develop long-term transport strategies that unlock new job opportunities and deliver much-needed new homes. Our region is actively engaged with the NIC.

Policy and Strategy: Pan Regional Links

TfN Strategic Transport Plan (STP) 2019

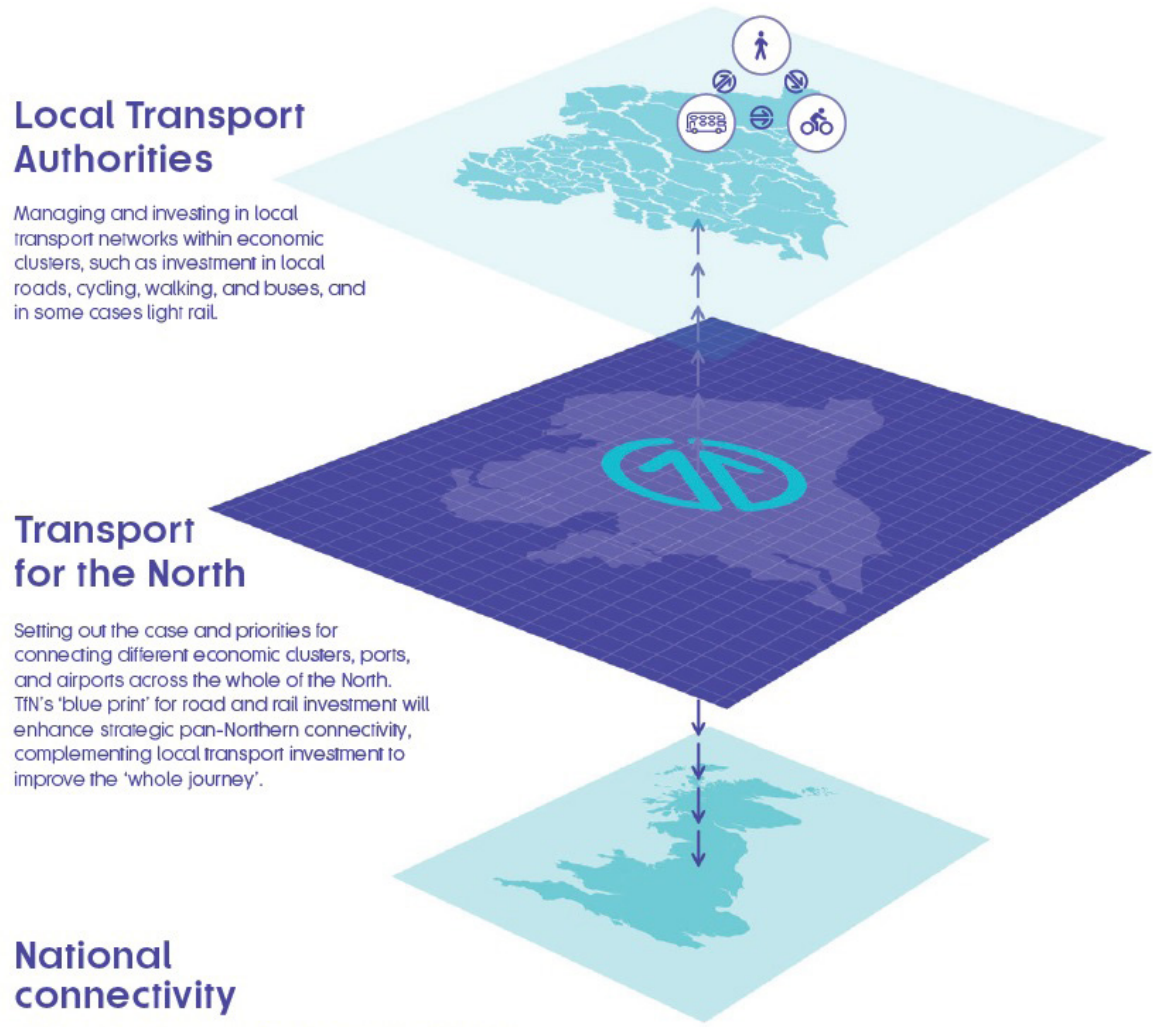
2.98 Transport for the North's Strategic Transport Plan sets out the case for strategic transport infrastructure investment through to 2050 with four pan-Northern objectives:

- 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

2.99 The STP is focused on Northern intercity connectivity and travel within regions to bolster wider economic growth; and is relevant as it identifies the need to continue to invest locally to provide links in and out of the pan northern network.

2.100 Our programme improves regional intracity connectivity, 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 with improved rail gateways and better access to interchange into the wider rail. network. 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.

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



North East Strategic Economic Plan (SEP) Refreshed 2019

2.101 Our SEP 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. 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.

2.102 Our SEP's ambition and targets are aligned neatly to that of TCF through the strategic goal of driving up productivity and through the crosscutting priorities of TCF including improved access to work and the delivery of 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". The geographical alignment of our SEP with the area covered by this SOBC allow us to conclude that the ambition of TCF aligns with our local ambition. The refreshed SEP cites TCF as an opportunity for the region.

2.103 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.

Local Industrial Strategy (LIS)

2.104 The North East (LIS), currently in development, 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.

2.105 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. 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. The proposed transport innovations will link the region's internal assets to the national and international economy, connecting people and places to new opportunities.

2.106 Our LEP has worked to ensure that the LIS 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 SOBC offers a vital opportunity to make the most of these identified opportunities. In addition, the monitoring and evaluation of our TCF interventions post-delivery can contribute to and build upon an excellent baseline of data. Our emerging LIS aligns with TCF under the umbrella of the Industrial Strategy.

2.107 Our programme will update in tandem with development of the LIS.

Local Policy and Strategy

Metro and Local Rail Strategy (MLRS)

2.108 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.

2.109 TCF interacts with MLRS because of shared economic, environmental and societal aspirations. It is also a means to attract capital funding for sustainable schemes.

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

2.110 Each of the three transport authorities in the North East has developed a Local Transport Plan, setting out how their 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 which is currently in development.

2.111 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 broadly correspond with those of the Transforming Cities Fund, and so our programme of interventions will align with and build upon the LTPs at a coordinated regionwide level.

Local Cycling Walking Infrastructure Plans (LCWIPs)

2.112 All our local authorities are developing LCWIPs. All are at varying stages and this SOBC builds on the expected outcomes through detailed engagement with our local authority partners.

NE Regional Transport Policy

2.113 In 2016, prior to the formation of the North of Tyne Combined authority, the seven north east authorities consulted on a Transport Manifesto. Following governance changes the region is developing the transport plan and this SOBC has been developed in synergy with this workstream including draft strategies and will assist in the development of a robust plan, particularly with the analysis, data flows and schemes which emerge from this bid.

Summary Box: Our Economy

Key Challenges	Opportunities
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 resourced to respond 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 focussed strategies
	Our region's policy landscape calls for the delivery of schemes that TCF can enable. Delivery of schemes through TCF is a success criteria in our SEP

Structure and Assumptions

2.114 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 at our challenges and opportunities and looked at the focus for change and growth across the region. 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.

2.115 The Structure is as follows:

– Policy and strategy

– The problem identified

– The case for intervention

– Objectives

– Our options and proposal

– Contribution of schemes to objectives

– Conclusion

2.116 There are several important assumptions that need to be recognised when reading this document.

2.117 Statistics: The general approach is that we incorporate statistics at a Local Enterprise Zone geography unless specified. Data has been sourced from a variety of sources and includes data presented through our North East Data Hub, https://www.northeastdatahub.co.uk/. 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.

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

2.119 Productivity: When referring to productivity, the measure of productivity being 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.

2.120 GVA: There are two noticeable indicators of GVA in the report including GVA per capita and GVA for the LEP area.

2.121 Public and Sustainable Transport: Through this SOBC we differentiate between public and sustainable transport, with public transport inclusive of buses, rail, Metro and park and ride and sustainable defined as walking and cycling modes and intelligent transport systems.

Our Challenges

In this section we

Consider the challenges that we face in delivering the vision of more sustainable connectivity and more mobility towards, 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

2.122 Building on the coverage of the economy earlier in this case, the economic challenges faced by the region can be summarised as follows:

– The economy is growing 12.2% since 2014 but the gap between the region and the rest of England excluding London remains 16% below the national average;

– Productivity levels have increased over time with the gap between the region and the rest of England (excluding London narrowing). Levels are up 8.6% since 2014, but we can go further;

– Employment in the private sector, remains below the national average with the gap widening over recent years. This reflects that the 1.9% increase in private sector employment per head in the North East LEP area was not as large as the 3.3% increase across England excluding London; and

– Economic activity rates have improved, with the gap between the North East LEP area and England excluding London had reduced by 15%.

2.123 Underpinning future economic growth is the need to increase productivity across the region. We explore some of the structural considerations to achieve this uplift through the bid.

Productivity

2.124 The Productivity (labour productivity) challenge has improved with the gap between the region and others narrowing over recent years, but we remain 6% below the average output for England. 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. This SOBC provides the opportunity to look at some of these challenges to provide the right conditions for growth.

2.125 The gap appears to be narrowing with performance in some sectors particularly strong. There are sectors with above-average levels of labour productivity. The region also has several relative sectoral strengths, in which its sectoral productivity is higher than England excluding London. The North East LEP has labour productivity higher than the England excluding London average in seven sectors, and lower relative labour productivity in eight sectors.

2.126 Reasons for challenging productivity levels in the North East are linked back to the five thematic areas include polycentricity (place), long term systemic levels of employment (people), skills levels (people), to some extent the economic makeup of the region (Business Environment) and Infrastructure.

Place - Polycentricity

2.127 The North East is a region like no other. Its geography is highly complex and polycentric (see Appendix A): 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.

2.128 With the distinctive economic geography, which comprises both urban and agglomerated economic centres alongside rural, dispersed settlements, intra-urban connectivity is of a reasonable quality within the polycentric urban core, mainly thanks to the well-developed Metro and bus system. However, connectivity remains a challenge to more remote rural areas or deprived urban periphery areas. Any strategy needs to address these points.

Place – Tourism

2.129 Regional activity is not just focused on action for those who live and work here, it is also for those who visit the region. The region has increased levels of inbound tourism with 0.5 million visits to different parts of the North East in 2017, 0.4% higher than in 2016. This is slightly down in 2018 to 0.42 million. Domestic tourism is strong with rises from 0.9 million to 1.051 million UK visitors to the North East in 2018. The region has plans to develop a tourism strategy with Newcastle International Airport launching a new website as a platform of promoting the region. Our plans and proposals do take account of the interconnectivity with national and international connections and support access to tourism assets by public and sustainable transport.

People - Skills

2.130 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 comparatively low, with 31.6% of the working-age population qualified to NVQ4+, compared to 37.7% nationally. Residents with no or lower-level qualifications are more likely to be workless than those with Level 3 or 4+ qualifications, reinforcing deprivation and inequality.

2.131 Professional, associate professional and skilled trade roles are identified as the occupations with the highest rates of skills shortage vacancies. Firms in the area report significant difficulties in hiring suitable workers at these occupational levels than the national average (16% of North East LEP area employers had at least one vacancy in the last 12 months (compared to 19% across England excluding London). This suggests that the relative deficit of high-skilled workers is a supply side, rather than a demand side issue.

2.132 School attainment at 16 is around the England average in the region, 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 there or study there.

Record numbers of cruise ships are calling at Port of Tyne

2.133 Current 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 services. This is illustrated in **Figure 7** overleaf. Between 2014 and 2018 employment in professional occupations in the North East LEP area has increased by 33,600. This was a 25% increase compared to 11% across England excluding London.

2.134 Regarding job creation in the private sector there are fewer businesses per head than other areas with 318 per 10,000 residents here in the North East in 2018 this is 67% of the rate for the rest of England excluding London.

2.135 In 2018, there were 64,800 people registered as having achieved a trade apprenticeship in the North East (including Tees Valley). The region is host to a high number of apprenticeship providers and training institutions. Our North East LEP undertake 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 apprenticeship opportunities promoted by the North East Growth Hub. This bid recognises the role of the transport network as a direct provider of apprenticeship opportunities and the role in connecting people to these opportunities. There is more detail available in our IPPR North Report, available at Appendix B.

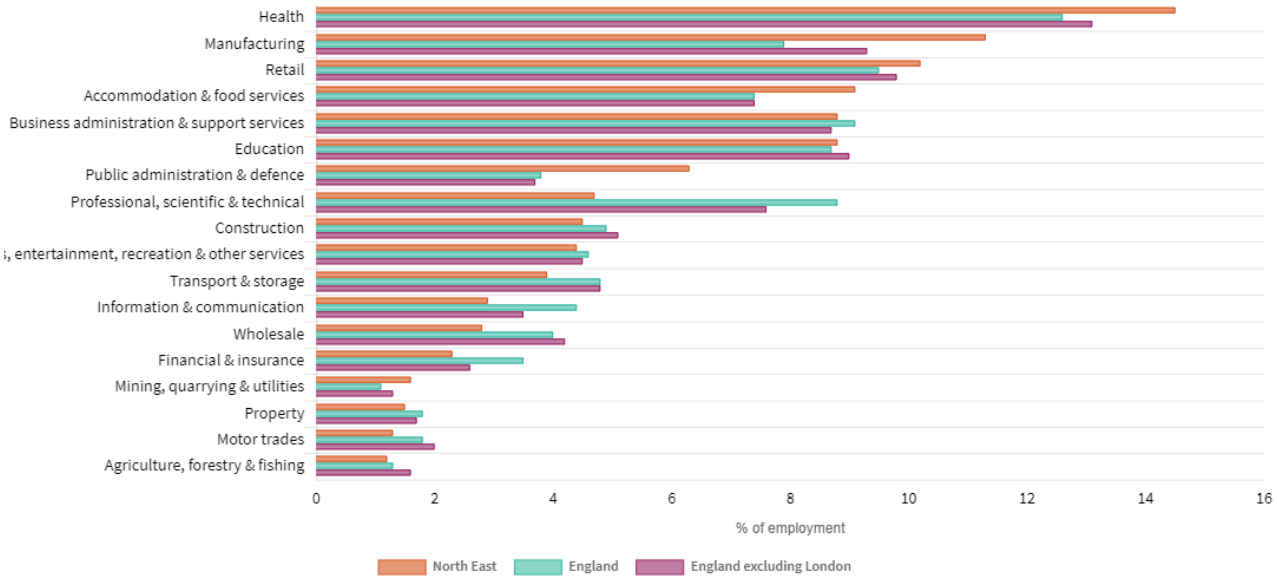
Business Environment

2.136 The North East LEP area economy was traditionally dominated by mining and manufacturing. Whilst manufacturing remains an important part of the regional economy, this is increasingly high value, advanced manufacturing, with clusters in a number of sectors including automotive and medicines.

2.137 Looking in detail at performance the region has seen the value of goods exports per adult rise to be higher than across England excluding London. Whilst the value of service exports per adult is lower in the North East region than across England excluding London, it increased between 2014 and 2016[38] This suggests a rise in the value of businesses supporting the economy, but we can continue to make progress.

2.138 Regarding innovation, 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 London[41]. This could be correlated to relatively low levels of innovation within the region. 42% of North East businesses report they were innovation active between 2014 and 2016 – a lower proportion than for England excluding London[38]. As a result we can continue to increase the levels of innovation in the region.

Figure 7 Workforce by Industry, North East



North East Data Hub

Place – Location of Enterprise

2.139 Many important sites are distributed across the North East's economy, as the map shows in Appendix A. 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 sectors of growth identified in the SEP (digital, advanced manufacturing, health and life sciences, and energy).

2.140 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 (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 must support such an ambition.

2.141 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 better-off communities, and poor connectivity with unreliable or infrequent services can be a barrier to getting or remaining in work. Buses are heavily used by lower-income workers and jobseekers: research 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; that jobseekers are more than twice as likely to use buses as the rest of the population; and a survey found that 58 per cent of unemployed people had relied on the bus when they were last in work.

Infrastructure

2.142 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, this includes systems for the provision of transport, digital, energy, water, waste removal.

2.143 Focusing on transport, as we have established connectivity is a central programme of the SEP. Through this SOBC, we shape how we can 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.

2.144 The North East Local Enterprise Partnership's SEP and emerging LIS are strong reference points for this SOBC as to show how we can achieve a strong regional economy with positive environmental and social outcomes.

Summary Box: Productivity

Key Challenges:	Opportunities
Regional productivity levels remain lower than the national average	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
Connecting our economic assets in a polycentric economy to improve skills levels and develop our business environment	

Our Transport Challenges

In this section we

Review the transport challenges faced by our network

Examine key movement trends and consequences

Summarise the key opportunities for change

Buses

2.145 Buses are our most used form of public transport, usage has however declined by 22% from a peak of 178.5 million journeys in 2006/07 in common with many other areas.

2.146 The bus network experiences congestion at certain sections, including our busy urban areas this is considered part of the reason for declining use. There has been considerable investment in bus priority over the last 30 years, but the pace of investment has slowed due to budget reductions alongside an increase in areas where new priority measures are required due to changing travel patterns and new developments.

2.147 The passenger demands a service which turns up and arrives on time with minimal delay. This bid is the opportunity to look at the reasons for congestion and work with operators to address network performance.

Metro

2.148 The Metro has experienced reliability and resilience problems in recent years due to ageing infrastructure and fleet. 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.

2.149 There are plans to increase the capacity of the Metro through fleet replacement, however its infrastructure limits the ability to increase frequency, owing to pinchpoints on the network. This in addition limits the ability for Metro to add new stations on the network to support housing proposals across the region and makes it difficult to deliver future expansions. Further detail on the challenges are available in the accompanying Outline Business Case for Metro Flow.

Congestion on the Region's highway network, affecting buses

Local Rail

2.150 Regarding local rail (Durham Coast, Tyne Valley, Bishop Line and Northumberland services on the East Coast Mainline) usage is increasing, resulting in capacity issues at peak times.

2.151 Generally local services fall below the minimum standards of the TfN Long Term Rail Strategy[8]. Including slow journey times and geographical constraints in services.

2.152 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 has been 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, for every additional passenger journey Metro and Local Rail contributes £8.50 to the regional economy.

Walking and Cycling

2.153 The region has a well-established walking and cycling network, which has been subject to investment over recent years through funds

2.154 There is a core of cycle commuting 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.

2.155 Cycling is also an important form of transport for people from lower income groups, including students and people in lower supervisory and technical occupations.

2.156 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. This is a challenge that the region is aware of and is seeking to address through agreeing design principles for the 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. An update will be given in November.

Park and Ride

2.157 Park & Ride plays an important 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.

Travel to Work

2.158 In respect of travel to work, the region's economy is relatively self-contained with 95% of people living or working within the 7 authority districts of the area. Due to the polycentricity of the region's economy 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. The travel to work journeys between authorities in the region are set out below (In respect of travel to work, the region's economy is relatively self-contained with 95% of people living or working within the seven authority districts. Due to the polycentricity of the region's economy 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. The travel to work journeys between authorities in the region are set out below (**Table 2**).

Cycle links around rail stations

Table 2 Travel to work journeys between North East Authorities (%) (Source: Census 2011)

	Place of residence						
Place of work	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
NELEP	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

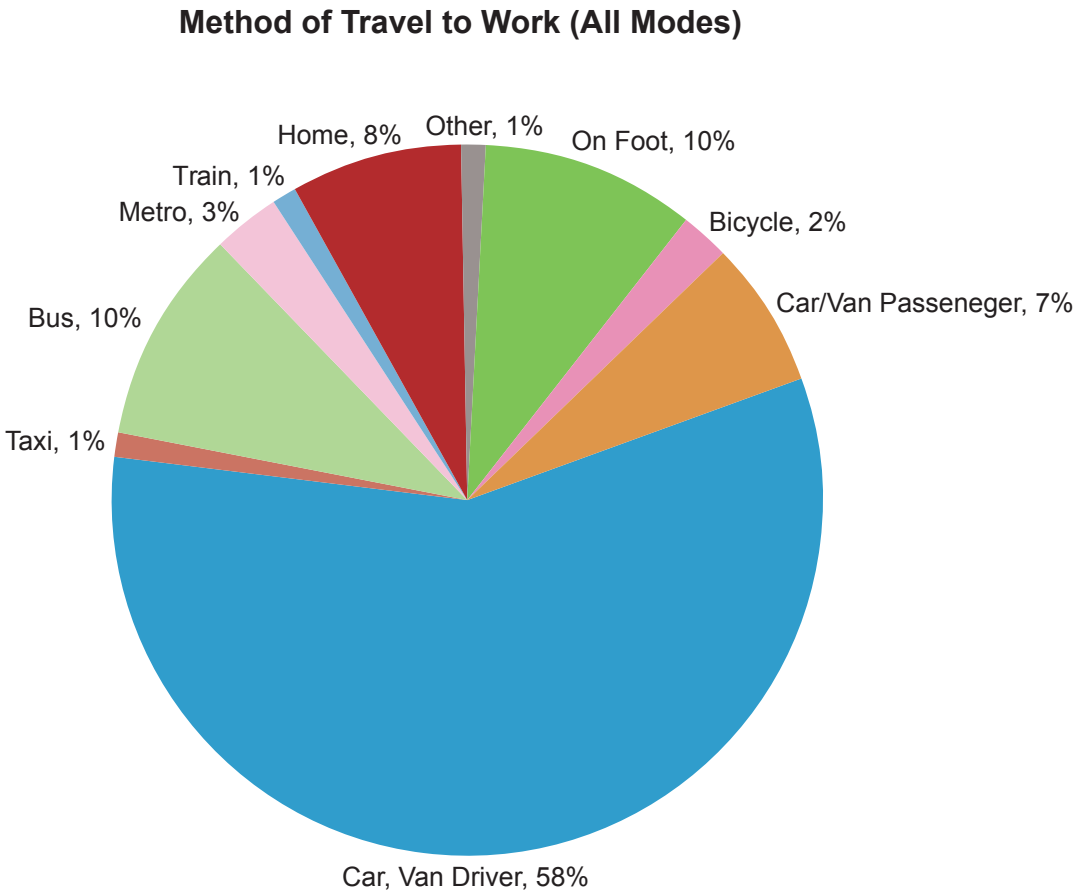
2.159 On average, people are less willing to travel longer distances for work in the North East area than elsewhere. The average distance travelled in the region is 16.7km, reducing substantially in the urban areas. With 56% of trips under 10km and 36% under 5km there is a significant opportunity to encourage modal shift across the region.

2.160 Commuting data indicates that rural residents are, unsurprisingly, more dependent on a car than their urban counterparts (three quarters of commuters from rural areas use cars to get to work compared with 65% in urban areas) and make less use of buses (5.7% of rural residents commute by bus while in urban areas it is 11.4%) largely as a result of service provision and levels of density. Residents in rural areas are twice as likely to work from home as their urban counterparts. With shops and services more dispersed, often the car is seen as the only way to get there.

2.161 In summary, **Figure 8** 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.

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. This is a challenge that the region is aware of and is seeking to address through agreeing design principles for the 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. An update will be given in November.

Figure 8 Method of Travel to work, all modes (Census 2011)



Summary Box: Our Public and Sustainable Transport network and its use

Key Challenges

Metro and Bus patronage has fallen over recent years

Established park and 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

Commutes by vehicle are dominant at 58%

Opportunities

There is significant potential to develop the network, to meet future economic and population demand

Commuting distance are low in this region with potential for switchable trips

There is an opportunity to enhance investment and connectivity to international and national gateways through targeted action

Congestion

2.162 Partially because of the high proportion of car and van use in commutes on road corridors into the centres of Durham, Newcastle, Gateshead and Sunderland are regularly congested, especially at peak times. Data from Tom Tom shows journeys take on average an extra 15min in the peak period. This results in lost time to the economy and has negative road safety and sustainability implications which make active travel options less attractive.

2.163 Congestion is compounded by the nature that Tyneside has few river crossings by road, which constrains movement patterns. There are only six crossings between western Gateshead and the coast – plus a one-way bus-only bridge – of which one is the A19 Tyne Tunnel. With no road bridges 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 perceptually as well as physically 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 SE Northumberland involves significant movement to and from those centres affecting junctions on the strategic road network and major road network.

Congestion in Durham City Centre

Car ownership and use

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

2.165 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 2018, as shown in 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 2018, as shown in **Table 3**. Decreases were greatest in local authorities on either side of the River Tyne. 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. A congestion map for the region is shown in Appendix C.. Decreases were greatest in local authorities on either side of the River Tyne. 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. A congestion map for the region is shown in Appendix C.

Table 3 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

Key Challenges

Congestion has increased in the central area with pronounced levels at some of our river crossings and our city centres. This is largely as a result of high levels of vehicle commuting in the region

Traffic speeds as a result have decreased in Tyne and Wear with slight increases in County Durham and Northumberland

Both have implications for our bus network

Opportunities

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

Air Quality and our Low Carbon Future

In this section we

Review the current air quality challenge facing the region and transport's contribution towards it

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

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

Air Quality

2.166 In the UK, poor air quality is estimated to contribute to almost 29,000 deaths per year. Problems caused by air pollution impose many other costs on society including an added burden on the health service which this has been estimated by Defra at an annual cost of £15bn. 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 alone.

2.167 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.

2.168 The four North East Air Quality Management Areas (AQMAs) relating to Nitrogen Dioxide (NO2) levels and associated Local Air Quality Action Plans (AQAP's) are summarised in **Table 4**.

Table 4 AQMA locations

Authority	Location(s)
Durham	1 Durham City
	2 Chester Le Street
Gateshead	1 Town Centre
Newcastle City Council	1 City Centre
	2 Gosforth
South Tyneside Council	1 Boldon Lane/Stanhope Road
	2 Leam Lane/Lindisfarne Roundabout

2.169 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;

– Encouraging cycling and walking;

2.170 The measure of success of an AQMA would be for air quality within it to improve enough to meet the national objective levels for a continued period. If this could be achieved, then the AQMA in question could be revoked – in other words abolished on the grounds that air quality has improved sufficiently that it is no longer a concern.

2.171 Councils in Newcastle, Gateshead and North Tyneside have been working together to develop proposals for improving air quality. This is because of that the councils have been given a legal order by the government to identify measures for improving air quality in the shortest possible time.

2.172 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. High traffic volumes are compounded by the polycentric geography of the economy and resultant travel to work patterns. During early-2019, a public consultation took place to seek feedback on two options; a charging clean air zone, and a low-emission zone with tolls. The introduction of non-charging options alongside charging options, such as bans on HGVs and LGVs at peak.

2.173 A consultation has recently closed on the proposals that have been developed by the three local authorities. In considering different measures they have 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.

2.174 There are several potential options that are being tested and that were subject to the recent consultation including charging clean air zones and low emission zones. The full results of the consultation and associated next steps are expected later in 2019, we have identified some of the early results in relation to perceptions of publicpublic attitudes section above.

2.175 As we explore later in this strategic case, 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.

2.176 The air quality exceedance areas can be found in Appendix D.

Our Low Carbon Future

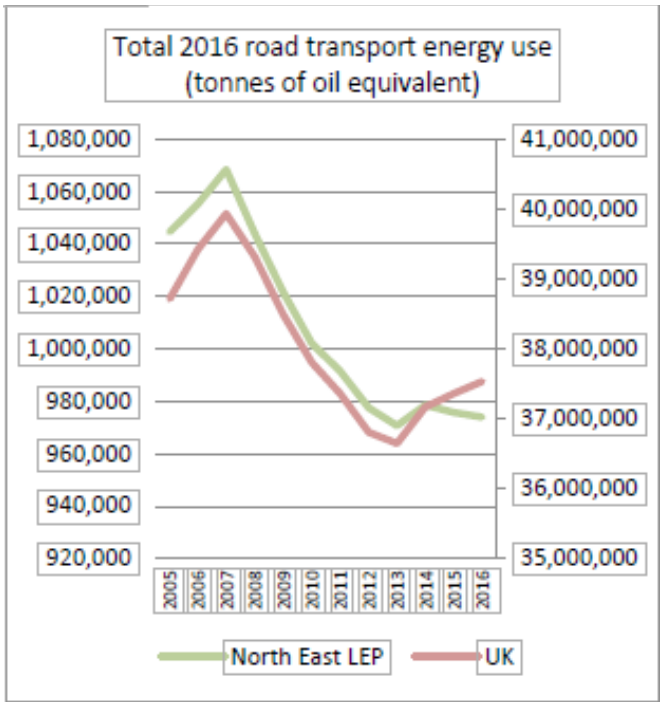
2.177 With successes in offshore wind technologies and electric vehicles, the North East has been at the forefront of the move towards low carbon economic growth. It is critical that this bid supports the efforts to grow the low carbon sectors through in opportunities for modal shift, supporting the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

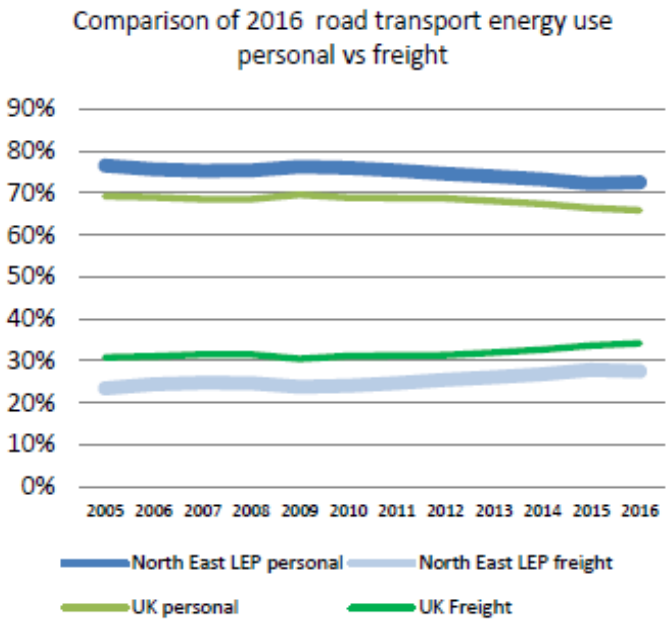
2.178 This is compounded by the nature of road transport contributing the most out of any sector to carbon emissions (37% across the NE area). The figure for transport is in this region lower than the national average reflecting lower car ownership, mileage and a relatively strong public transport infrastructure. In addition, this appears partly to be due to the UK's increasing freight energy consumption from 2013. The North East's freight consumption decreased between 2014 and 2016, against a national trend of increases. The region has had a consistently lower percentage of freight road transport energy use than the UK overall.

2.179 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 strategy. It is also acknowledged that other technologies will be important to provide a range of solutions which meet different needs. The North East has had a very successful 'Go Ultra Low programme', which has made progress in delivering a high-quality electric vehicle charging network for the region. 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. There are circa 2,536 (June 2018) Plug in Vehicles in the region. In all authority areas the level of uptake of plugged in vehicles is increasing.

2.180 The North East is home to wider low emission transport expertise and is engaged in this agenda nationally. The internationally significant automotive cluster, the NEAA, brings together regional organisations on workstreams including advanced propulsion. The Gateshead College subsidiary consultancy Zero Carbon Futures has also developed an international reputation for development of low carbon vehicle strategies. The region has examples work which is 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

Figure 9 Total Road Transport Energy use and a comparison of freight and personal transport.





2.181 As a result, the North East 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.

2.182 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 bid therefore must recognise 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 Economy

Key Challenges	Opportunities
The region experiences air quality hotspots in our town and city centres	The region has strong plans in place to address air quality and carbon emissions
Transport contributes a significant proportion of 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

Public Transport, Housing and Employment Growth

Through this section we

Identify housing and economic targets and look to the challenge of delivering sustainable connectivity to target areas; and

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

Housing and Economic Targets

2.183 We have already established that some of our significant employment sites including out of town business parks are successful but have limited public transport connectivity and to support their onward vitality and growth there is an opportunity to address the connectivity that is available and the quality of those connections.

2.184 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 or are planned around the existing public transport network, linked to excellent and, 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.

2.185 An analysis of Local Plans and their constituent targets shows high levels of growth in homes and jobs that is planned across the region. As shown in **Table 5.**

Integrated Infrastructure Planning

2.186 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 corral datasets explore the inherent link between the location of these growth sites, the existing transport network and opportunities for enhancements to sustainable and public transport infrastructure to encourage a more sustainable pattern of development and movement.

Table 5 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%	8,406	12,338	2011-2031
County Durham*	21.4%	31,400	11,640	2016-2033
Northumberland*	12.9%	17,700	16,500	2016-2036
Gateshead	12.1%	11,000	8,000	2010-2030
Total	**100.0%**	**117,509**	**82,408**	

Summary Box, Housing and Employment Growth

Key Challenges

The transport network may not be capable of accommodating significant local plan targets for the delivery of 117,509 homes up to 2036 in the region with land and capacity for 82,000 new jobs

Opportunities

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

Inequalities

Through this section we review

Public health challenges and transport's contribution,

Deprivation levels around the region;

Consequential challenges around social mobility;

Opportunities to deliver enhanced mobility across the region.

Public Health Challenges

2.187 Typically, levels of inactivity, obesity and the health problems they cause are higher in our area than elsewhere in the UK..

2.188 The North East has experienced the fastest increase in life expectancy of any region of the UK. But the health and wellbeing gap with the rest of the UK and health inequalities within the region remain stubbornly high, with behavioural factors and deprivation levels impacting on health and wellbeing.

2.189 Poor population health leads to overuse of intensive health services and pressures on primary and social care, resulting in a system over-focussed 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.

2.190 Currently in several trusts across the region, there is a consideration of relocating healthcare services, this impacts on the connectivity that is required to access those services. The region is acutely aware of this pressure and this bid seeks to improve infrastructure in these areas to allow better connectivity through sustainable means to these services.

2.191 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 lower. There are also very significant differences between parts of the North East.

2.192 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.

2.193 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" (13%, England: 10%). Relative to the UK, a high percentage of economically inactive people in the region are long-term sick (28.5%, UK: 22.1%) and a high percentage of 16-64-year olds are Equality Act Core or Work-limiting Disabled (23.3%, UK: 19.5%); the absolute figures are 87,000 and 288,000 respectively.

2.194 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. Therefore, we will focus our efforts to increase active travel and reduce inactivity on the most vulnerable people and areas within our region, where we are likely to make the biggest impact.

2.195 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 users.

2.196 The physical activity associated with regular cycle commuting 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%. 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 investment in large-scale cycling networks both encourages the use of bikes as a form of transport *and* improves population health as a result, due to increased physical activity levels. The proposed programme will help the North East to share in these benefits.

2.197 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. 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 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 2035, rising to £18.57bn if the costs for diseases for which there is less robust evidence.

2.198 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 Sustainable transport and 'walkable' environments help to reduce social isolation and build social cohesion and capital, because of the social interactions that they facilitate. 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. and as well as mental health gains, sustainable transport use social and creative benefits as well as economic ones because of human contact, through improved connectivity across places and connections between people.

Deprivation Levels

2.199 Spatially, deprivation is concentrated in the urban areas. This highlight 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.

2.200 The 2015 Index of Multiple Deprivation (IMD) 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, including, income, employment, health deprivation, education, barriers, crime and the living environment.

Table 6 Indices of Multiple Deprivation rank in the North East

Local Authority	Indices of Multiple Deprivation rank of average score(out of 326 local authorities)
South Tyneside	32
Sunderland	37
Gateshead	73
County Durham	75
Newcastle upon Tyne	53
North Tyneside	130
Northumberland	136

2.201 The LEP area ranks 10th out of 39 areas with challenges around employment levels and skills.

2.202 In relation to Northumberland and County Durham the data demonstrates that South East Northumberland and East Durham perform poorly against some of these social indicators, particularly when comparing these to the national figures. This is exemplified on the attached map in Appendix E which shows the concentrations of deprivation around the North East.

2.203 Accessible public transport which allows people to reach opportunities outside of their immediate area can help to reduce these disparities.

Social Mobility

2.204 Transport can help to reduce inequalities by enabling people to access a multitude of services quickly and easily. Sustainable transport, including walking and cycling, can play a significant role in improving health and increasing activity levels.

2.205 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.

2.206 As the Social Mobility Commission's report in 2017 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 performance for the region, doing well for children but the worst performer on youth isolation and working lives. This surrounds educational attainment at and beyond GCSE and indicators around pay and employment levels.

2.207 Transport and the lack of affordable access is cited as one of the main reasons for poor levels of performance in social mobility. 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. As we have established we also have an ageing society and we need to effectively address their needs through sustainable transport services which connect to the services they need, reducing isolation.

2.208 The UK 2070 Commission has 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. The commission has recommended several actions to address these challenges including effective devolution, harnessing new and local economies, aligning our ambitions and establishing a UK renewal fund.

2.209 Whilst not a capital ask affordable transport is a tenant of delivering change in use as transport affordability, particularly as in relation to public transport it is often cited as a reason for it not providing an effective option. This is particularly the case for those on limited incomes, as well as those who may not travel daily so are thus unable to take advantage of season tickets. 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 Buses are heavily used by lower-income workers and jobseekers: research 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; that jobseekers are more than twice as likely to use buses as the rest of the population; and a survey found that 58 per cent of unemployed people had relied on the bus when they were last in work.

2.210 To address this, the region already offers products in which a traveller is not penalised if they do not travel every day. Councils within the region offer enhancements to the statutory concessionary bus pass scheme for older and disabled people.

2.211 Other initiatives that operate, or have been trialled, in parts of the area 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.

2.212 Furthermore, we have a strong offer for children and students to help with the costs of travel. This bid has been developed in coordination with the existing ticketing arrangements. Nevertheless, we do know that there are perceptions of poor value for money which influences the way people choose to travel.

Summary Box – Inequalities

Key Challenges	Opportunities
Health and income-based inequalities are prevalent around the region	Deliver increased availability and choice to access new opportunities, increasing the labour market and the skills base
Lower levels of life expectancy	Improve levels of physical activity during travel
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	

Summary of our Challenges

In this section we

Summarise our key challenges; and

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

2.213 In summary, our businesses and communities rely on a well-functioning transport network to thrive. As a region we face several challenges, but we have plans in place to deliver efficiency in movement. Our existing network contributes a significant amount to the region's economy and ease of connectivity, as examples for every new journey on the Metro and Local Rail network there is a £8.50 direct benefit to the economy, we have one of the densest bus networks in the country and have strong international connectivity. Our economy is growing, with 14.2% growth in the number of businesses in 2018, outstripping what was happening nationally, and we have seen a growth in productivity since 2014.

2.214 We can however continue to make improvements, and we have a strong base on which to develop and support the true ambition of the region as established by the North East in our Strategic Economic Plan and emerging Local Industrial Strategy.

2.215 The region has a significantly large population of 1.9m people with a growing economy but a challenge of low levels of productivity and health and social mobility inequalities. The polycentricity of the region is both a challenge and an opportunity, resulting in high levels of car use for commuting, despite low levels of car ownership when compared with the national average, but with the potential for modal shift.

2.216 The region has pockets of poor air quality and is bringing measures in to address these issues. The public transport network is well established, particularly in the urban areas with strong ticketing packages. The network however doesn't reach everywhere and can suffer from resilience including by matters beyond their control such as congestion.

2.217 This is a significant opportunity to influence how people access public and sustainable transport across the region with better quality links to support economic growth.

2.218 A summary of the challenges and opportunities we face in the region is provided below:

Challenges	Opportunities
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.
GVA output rising but challenged by external pressures	Need to target transport investment so it maximises access to labour markets and national and international gateways for trade and investment
Public transport use is falling, single occupant 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	This bid 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
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.
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.

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.

2.219 The current trends around how people currently travel, and recent trends including the externalities are summarised in **Table 7**.

2.220 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

2.221 **Table 7** shows that the population of the region has increased 2%, and the long terms trends are for this to continue, the 2016 sub national population projections shows an increase of 3% to 2036 (based on the wider North East geography). Applying this to the NELEP 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%).

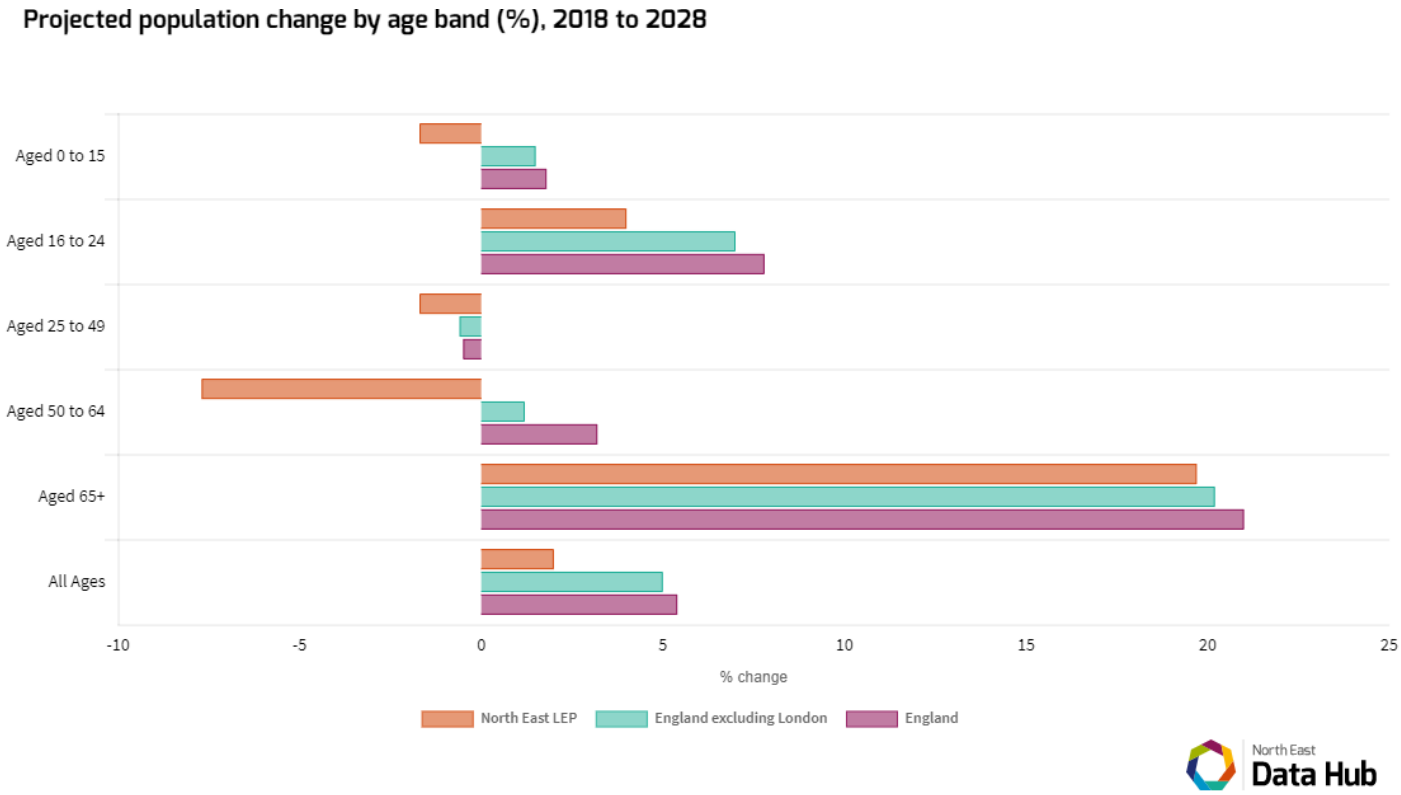
2.222 The population is projected to decline in the 0 to 15, 25 to 49 and 50 to 64 population age groups in the North East LEP area, as shown at **Figure 10**. In total, it is projected that there will be 32,000 fewer individuals of working age (16 to 64) in the North East LEP area in 2028 than in 2018. 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.

Table 7 Indicators

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	80
'13	1,944,900	73.5%	£35.2bn	35,703,164	5,948,000	168.6m	26332	
'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	

**No data was available for Durham in this year*

Figure 10 Population Change



2.223 Employment levels are circa 75% which have slightly increased on 2009 levels but fluctuate quite considerably. 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 LEP area has been increasing. However, crucially, the North East LEP'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 which places different pressures on the network with implications not only for the economy but also for social mobility and public health.

2.224 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.

Challenges	Opportunities
Working age population is expected to decline, increasing the need to attract and retain workers	GVA of the North East LEP has been growing and there is capacity to increase the rate of this growth
Populating is ageing with implications for the economy, health and people's transport needs	Investment in our transport network will help us to adapt to our changing economy and society

Our sustainable and public transport network will underperform

2.225 Looking at Table 7 on how people travel, two indicators around Metro and bus passenger numbers have fallen over the period studied, this is common with many urban areas and can be attributed to several factors including macro-economics, a change in how people are currently working and for buses congestion. 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 which are daily flows are combined with road lengths to calculate the number of vehicle miles travelled each year show a small increase in journey kilometres travelled.

2.226 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 2016/17. In essence, people are owning vehicles and travelling more using them and travelling less by traditional modes of public transport except for local rail.

Metro waiting at a red signal at Pelaw North junction

2.227 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 track layout constrains timetables and does not allow for trains to recover easily from delays. 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 status quo. There has so far been 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, 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 alone 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. The full potential of existing investment can only be unlocked through significant modal shift onto Metro, taking vehicles off the roads.

2.228 Not investing in the rail network has the potential to stifle demand. Across the region it is likely that 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 TfN Long Term Rail Strategy minimum expectations. In addition, the geography of the rail network in the region is limiting growth. The catchment area of the Northumberland line as an example 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.

2.229 In the same way, investment is essential to ensure the success of future mobility innovations as set out in our Future Mobility Zone expression of interest in line with the Future Mobility Strategy. This includes but is not limited to new ways in planning, accessing and paying for public transport, new forms of public transport in demand responsive transport, micro-mobility modes and future mobility gateways. These new forms of mobility and a general encouragement to switch to public transport will be successful only if the region has a network of sufficient quality and capacity to encourage a switch to alternative modes, and without intervention it is considered that there can only be limited success.

Challenges	Opportunities
Passenger numbers on all modes of public transport except local rail are in decline	Latent demand could be unlocked by improving the speed, frequency and quality of the local rail network
Car/van ownership and usage in the region is increasing	Future mobility innovations could encourage modal shift if building on a strong public and sustainable transport base
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	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

2.230 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. 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.

2.231 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 can be found in Appendix C. 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.

2.232 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. 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.

2.233 Park and Ride is an established part of the region's transport network, however it does not currently work to its full potential, and going forward 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. It is essential, therefore, that our park and 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.

Challenges	Opportunities
Congestion in our urban centres is likely to increase which would particularly affect employment sites currently not well served by sustainable transport	Reducing congestion will enable the bus network to operate to its full potential
Existing sustainable transport options are unlikely to cope with increased demand without investment to increase capacity and attractiveness	Enhancements to sustainable transport, particularly park and ride, could take pressure off our busiest routes
	A reduction in congestion would have related benefits to air quality and public health

We will fail to improve air quality in reasonable time

2.234 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 across the North East, 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.

2.235 Cycling and walking levels across the region have increased from the 2001 to 2011 census, however this still represents a small proportion of commutes. 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.

2.236 There are several interdependencies which affect this base case, including the current air quality consultation which may seek to switch trips to public transport. 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 to avoid any financial penalties. Significant improvement to our sustainable transport network is essential to make low carbon travel a more attractive option to rival the private vehicle.

2.237 Despite our current Go Ultra Low North East project making significant progress in the delivery of a high-quality 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.

Challenges	Opportunities
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 levels for commuting and leisure purposes are increasing and there is capacity to extend this to cycling to work
Cycling and walking still make up a small proportion of commutes	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
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	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

2.238 There is a pressing need to encourage more mobility within isolated communities, to improve wellbeing and reduce health inequalities; 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 people will not have the ability to access the economic and educational opportunities that exist within our city centres and centres of employment. Transforming Cities is a platform from which to demonstrate the link between housing, employment, education and social opportunities and the transport network that binds them together.

2.239 There is a call 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. These provide a start point for the North East LEP, Combined Authorities, Joint Transport Committee and Local Authorities to work to build integrated strategies which at the heart of them show how people can move around the region in a sustainable way to access jobs, services, recreational activities and education opportunities.

2.240 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.

Challenges	Opportunities
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	Transforming Cities could encourage the North East LEP, Combined Authorities, Joint Transport Committee and local authorities to continue to work towards building more integrated strategies

Impact of doing nothing – challenges summarised

2.242 In light of the above analysis, we should conclude that without adequate investment in our sustainable transport network we can be fearful that the full ambitions of the SEP will not be realised, housing and employment sites may not be delivered and the success of our future of mobility zone will be limited. 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.

2.243 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 progresbeing made towards addresskey regional challenges.

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

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

2.244 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.

2.245 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."**

2.246 Our objectives explore the principles of this vision and align closely with thes set out in DfT 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.

2.247 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 Guidance.
- Secondly, we have mapped the regional challenges identified in this Strategic Case to each of those TCF objectives; and
- Thirdly, we have developed regional objectives that draw together the spirit of the TCF objectives and the regional challenges faced.

2.248 The resulting Programme Objectives are shown in **Figure 11** overleaf.

Figure 11 North East TCF Tranche 2 Bid: Programme Objectives

DfT Objectives	Regional Challeneges	Programme Objectives
Drive up productivity through improved connections between urban centres and suburbs	Polycentric geography; falling bus and Metro patronage; P&R not achieving potential; low levels of cycling; low levels of walking to commute; GVA levels below national average; low levels of high skill and private sector employment; growing congestion in city centres and river crossings; growing congestion affecting bus network	1. Improving capacity on sustainable transport modes to facilitate commuting trips and improving access to employment centres, enterprise zones and development sites to support economic growth. 2. Improving reliability and resilience of Metro services. 3. Improving bus punctuality and reliability. 4. Improving passenger rail services in corridors with unmet rail demand.
Improve access to work and deliver growth	Low levels of cycling; growing population; ageing population; negative attitudes to public transport; low levels of high skill and private sector employment; growing congestion affecting bus network; meed sustainable transport choices for 82,000 new jobs; pockets of deprivation with income and health inequalities affecting life expectancy; need more integration of land use and transport strategies	5. Expand our sustainable transport network into deprived areas of the region (based on IMD 2015 classification). 6. Improve the resilience of the Metro network serving deprived areas of the region. 7. Deliver affordable sustainable transport options (walking and cycling) within deprived areas of the region. 8. Increase % of adults walking and cycling at least three times a week.
Encourage use of Future Mobility Services	Falling bus and Metro patronage; ageing population; negative attitudes to public transport;	9. Ensure that capital investment delivered by this programme makes passive provision for the introduction of Future Mobility Services. 10. Deliver EV charging points in schemes within the programme that include car parking investment.
Tackle air pollution and reduce carbon emissions	Falling bus and Metro patronage; increasing car ownership; low levels of cycling; high proportion of commuting trips by private vehicle; growing congestion in city centres and the river crossings; growing congestion affecting bus network; traffic pollution hotspots in city/town centres; traffic contributes considerably to carbon emissions; need more integration of land use and transport strategies	11. Reduce carbon emissions from local transport by increasing the volume and proportion of journeys made by low carbon, sustainable modes. 12. Contribute to achieving EU target concentration of 40µg/m^3 across NO2 exceedance areas by 2023. 13. Work with bus operators to increase the number of buses that offer Euro 6 emissions standards or better (including introducing more zero emissions buses). 14. Reduce reliance on the private car for commuter journeys. 15. Improve levels of satisfaction with Metro services. 16. Improve levels of satisfaction with local bus services.
Deliver more homes	Growing population; ageing population; need sustainable transport choices for 117,000 new homes; need more integration of land use and transport strategies	17. Extend the reach of our public and sustainable transport network to support housing delivery, by providing major housing development sites in urban areas with a sustainable transport option to a local centre and a regional centre (a regular bus service, a rail/Metro service or a segregated walking/ cycling link).
Deliver apprenticeships and improve skills	Low levels of high skill and private sector employment; projected decline in working age population	18. Reduce jounrney times to at least one college or university to/from deprived areas of the region (based on IMD 2015 classification)

Our Measurement of Success and What Constitutes Successful Delivery

2.249 Building on the programme objectives set out in **Figure 11**, we have begun the process of developing SMART measures of success. These measures of success relate to wider regional targets where available, including the Metro and Local Rail Strategy, Nexus' targets for accessibility to key destinations (which only apply to Tyne and Wear) and Nexus' policy for developers providing publicservices to majors (which also only apply to Tyne and Wear).

2.250 The resulting draft measures of success are set out in **Table 8** below. Please note that these measures of success are in early draft form at this stage and will be developed considerably between now and November 2019, working with key stakeholders in the region. 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.

Table 8 North East TCF Tranche 2 Bid: Measures of Success *(some measures are work in progress, highlighted yellow)*

Programme Objectives	Measures of Success
Improving capacity on sustainable transport modes to facilitate commuting trips and improving access to employment centres, enterprise zones and development sites to support economic growth Improving reliability and resilience of Metro service Improving bus punctuality and reliability Improving passenger rail services in corridors with unmet rail demand	Increase Metro patronage by 3.5% by 2023 Improve bus punctuality to 95% for services in the bus corridors where investment is focused Increase local rail patronage by 5% by 2023 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. Increase bus punctuality to the target of 95% by 2025 on the corridors included in our bus interventions package Increase local rail patronage by at least 5% ('do nothing' uplift not accounted for)
Expand our sustainable transport network into deprived areas of the region (based on IMD 2015 classification) Improve the resilience of the Metro network serving deprived areas of the region (based on IMD 2015 classification) Deliver affordable sustainable transport options (walking and cycling) within deprived areas of the region (based on IMD 2015 classification) Increase % of adults walking and cycling at least three times a week.	Areas in the region within the top 10% of England's most deprived areas can access at least one major employment site within 30mins travel time
Ensure that capital investment delivered by this programme makes passive provision for the introduction of Future Mobility Services Deliver EV charging points in schemes within the programme that include car parking investment	(to be reviewed following award of Future Mobility Zone status in the North East)

Programme Objectives	Measures of Success
Reducing carbon emissions from local transport by increasing the volume and proportion of journeys made by low carbon, sustainable modes Contribute to achieving EU target concentration of 40µg/m³ across NO2 exceedance areas by 2023 Work with bus operators to increase the number of buses that offer Euro 6 emissions standards or better (including introducing more zero emissions buses) Reduce reliance on the private car for commuter journeys Improve levels of satisfaction with Metro services Improve levels of satisfaction with local bus services	Contribute to a 1.5% increase in the modal share of walking across the city region by 2031 (progress monitored in 2021) Contribute to a 5% increase in the modal share of cycling across the city region by 2031 (progress monitored in 2021) Reduce main mode commuter car trips in NO2 exceedance areas by XX% Increase the proportion of Euro 6 buses or better to XX% by 2023 Deliver a Metro public satisfaction levels of 7.8 by 2024, as measured by Nexus' annual satisfaction survey Deliver a bus satisfaction levels of XX% by 2023, as measured in the annual Transport Focus survey.
Extend the reach of our public and sustainable transport network to support housing delivery by providing major housing development sites in urban areas with a sustainable transport option to a local centre and a regional centre (a regular bus service, a rail/Metro service or a segregated walking/cycling link)	Deliver improved strategic sustainable transport links to at least XXX major housing developments in the region
Reduce journey times to at least one college or university from parts of the region (based on IMD 2015 classification)	Areas in the region within the top 10% of England's most deprived areas can access Further and Higher Education facilities within 20mins travel time

Our Scope

In this section we

Set out the geographical scope, corridors for investment and thematic scope for the Transforming Cities Fund programme

Geographical Scope

2.251 Geographically the scope of the bid corresponds with the North East city region. The bid must be focused on sustainable and 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 are out of scope. Schemes that are not deliverable within the TCF timescales or that require revenue funding from the bid are out of scope.

Corridors for Investment

2.252 Based on how people travel and the geography of our region, in our original expression of interest, we selected four priority corridors for investment, shown in Appendix F in spatial form, and Appendix G in schematic form.

2.253 Together these corridors support the areas of greatest opportunity in the city region. Appendix H shows their economic growth potential identified in the North East SEP (this appendix is to follow). The corridors are:

North and South

Connectivity: Connecting areas of higher deprivation to city economies, this corridor links residential sites throughout SE Northumberland, Newcastle, Gateshead and Durham, to employment opportunities including Kingston Park, Metro Centre, Team Valley and Washington. It also links to 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.

Benefits: Improvements will connect more residents with jobs and training opportunities; expand the labour pool for employers; speed up freight and long-distance road traffic using the national road and rail networks; and increase the viability of sites for new businesses.

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. Over-crowding on Metro and reliability of the existing fleet are growing issues, as is station quality.

Benefits: Improvements will connect more residents with jobs and training opportunities; expand the labour pool for employers; improve air quality and unlock housing growth sites.

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.

Benefits: Improvements will connect more residents with jobs and training opportunities; expand the labour pool for employers; improve air quality; and unlock housing growth sites.

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

Thematic Scope

2.254 The programme is solely focused on public and sustainable transport improvements, 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.

Constraints and Interdependencies

In this section we

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

Constraints

2.255 The following table sets out the identified constraints to our TCF bid at a programme level:

TCF timescales	The short timescales of the bid mean there is limited scope for delay
Land ownership / legal processes	Some works would involve the purchase of land or other long legal processes which has an impact on their deliverability within the timescales of the fund
Nature of funding	As specified in the TCF guidance only capital funding is eligible
Existing transport network	The TCF programme must make sense in the context of the existing transport network, operations and infrastructure
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

Interdependencies

2.256 The development and delivery of the TCF programme will need to take account of other projects being delivered by stakeholders. The risk register which is located in the Management Case provides a more detailed analysis of interdependencies. High level interdependencies are outlined below:

Transforming Newcastle City Centre builds on the Tranche 1 funded work for City Centre North

TCF Tranche 1 schemesw	Tranche 2 programme needs to align with and ideally build upon the schemes that were successfully funded through Tranche 1 of the fund
Future Mobility Zones Fund	The programme should complement the proposals set out in the application for FMZ funding, so that the proposed FMZ interventions will be fully integrated with other public transport and sustainable transport networks
Air quality public consultation 2019	Newcastle, Gateshead and North Tyneside councils have collaborated to develop proposals to improve air quality. Consultation closed in May 2019 and analysis is expected to be completed by late July 2019. Both of the two options consulted on (CAZ or Tyne bridges tolls) can be expected to have a major 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
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 that have been shortlisted by TfN and we will need to react to. Our management case sets out how we will achieve this

Summary

We consider programme interdependencies by introducing solutions through our Management Case on the effective delivery of projects. In addition, we carry out sensitivity tests in the Economic Case regarding our air quality interventions proposed by the three councils identified in the above.

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

2.257 The TCF team has worked closely with scheme promoters (7 local authorities, Nexus, and Intu) throughout the process, guiding the generation of schemes for the long list and collaboratively developing them to the level of detail required for appraisal. Feedback from political stakeholders (members of the Joint Transport Committee) and Chief Executives 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.

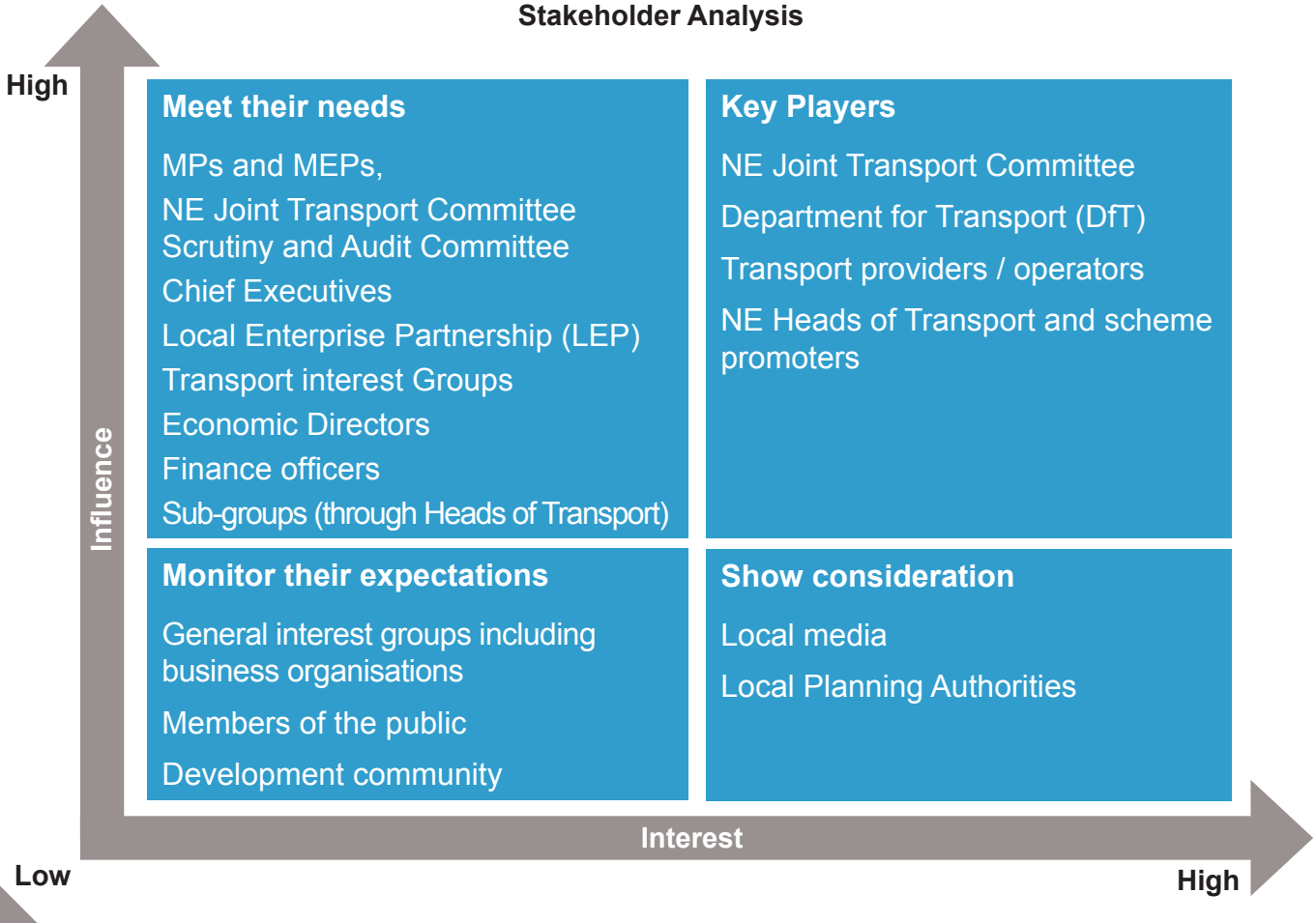
How Our Stakeholders Contribute

2.258 Bus schemes have been subject to regular discussion at workshops with the three main bus operators in the region, Arriva, Go North East and Stagecoach. This has resulted in the identification of congestion hotspots on the network and results in focus areas for the bid. Engagement has also taken place with Sustrans and Living Streets to gain support for the walking and cycling interventions proposed in the bid.

2.259 To ensure the bid is fully aligned with the North East's Strategic Economic Plan and the upcoming Local Industrial Strategy, the team has engaged with NELEP throughout development of the bid.

2.260 To date, letters of support have been obtained from the aforementioned stakeholders (Appendix I) and support for the project will be developed for final submission. We have identified key stakeholders and the mechanisms in which to engage with them in **Figure 12** below that maps out stakeholders and classified according to interest in this work.

Figure 12 Influence / Interest Grid for Stakeholder Prioritisation



2.261 Key Players: these are the people we will fully engage with and levels of engagement:

– **Heads of Transport, Joint Transport Committee** and **scheme promoters** on the grounds that they are all closely involved often on a day-to-day basis with all aspects of the bid and are required to endorse messages.

– The **DfT** as the co-development body of this bid and the agency we need to satisfy through its development and meet the objectives for a robust bid.

– The **Transport Industry** as this bid is hinged on delivery of these schemes and onward successive operation to maximise the benefits. Through this bid, we have implemented regular dialogue with all these groups; weekly HOTG conference calls, regular DfT co-development calls, engagement sessions with our transport industry and regular Joint Transport Committee leading to the formal decision to submit the Draft SOBC.

2.262 Meet their needs: these are groups that have high influence but are not involved on a day to day basis:

– **MPs** and **MEPs** can support the success of this bid through engagement and can enthuse their constituents on the positive investments that are being made. We have a communications plan which establishes our methodology, please see our management case.

– **NE JTC Scrutiny and Audit committee** may be interested to scrutinise the bid and we will be ready to answer any queries they have.

– **Chief Executives** and **Economic Directors** have provided a supportive steer on the bid and its inclusion. Regular liaison sessions have taken place with these groups and will continue.

– The **North East LEP** is an important stakeholder because the bid aligns with the SEP and the emerging Local Industrial Strategy. A detailed review of the case has been undertaken by our LEP.

– **Transport Interest Groups** are often important to the success of the bid given their remit in supporting sustainable and public transport, we have engaged with a number of these groups as detailed in the text above and will continue to do so.

– **Economic Directors** have provided a supportive steer on the bid through regular liaison sessions to ensure its coordination with the wider economic backdrop.

– **Finance officers**, this bid has involved detailed financial review to ensure it is affordable and presents detailed value for money, please refer to our financial case, we have ensured finance officers have been involved throughout and

– **NE officer Sub-groups** are high influence because they are critical to delivery of the programme and the successful monitoring and evaluation. We have engaged with relevant groups and are currently focused on effective monitoring and evaluation with our data group.

2.263 Show consideration: We will keep these people abreast of the project as they are helpful with the detail of the bid and its onward success:

– **Local Planning Authorities** particularly policy teams will be interested in the detail of our analysis of the link between housing delivery and the bid interventions, we will expand our engagement with this group as we approach November,

– **Local Media**, this group may be interested in our bid to develop infrastructure linked to wider campaigns, we have a communications plan which establishes how we are engaging with these groups, please see our management case.

2.264 Monitor their expectations: We will 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) on the grounds that they will want to comment.

– **Members of the public** – some of whom will have very strong views, we will engage through the media on the plans and have included mechanisms for responses in our communications plan.

– **Development community**, we will engage where applicable on the impact of the bid in unlocking housing growth.

Stakeholder conflicting needs

2.265 Where there have been potential conflicts in expectations between the schemes, we have sought to address this through detailed briefings to deliver consensus and achieve endorsement at a political level. In addition, we have ensured that there is minimal overlap between schemes and have recognised interdependencies for example through delivery profiles to ensure the scheme can meet its objectives.

Challenges and opportunities summarised

2.266 The key challenges thus far have been in developing a programme that has regional impact and meets local priorities as well as delivering in accordance with DfT guidance. Communication between the key stakeholders and overarching briefing and reporting mechanisms have been effective in terms of collaborating and presenting a bid that is transformational across the region.

2.267 Further detail in our approach to stakeholder engagement is laid out in our outline communications strategy within the management case.

Challenges and opportunities summarised

2.268 The key challenges thus far have been in developing a programme that has regional impact and meets local priorities as well as delivering in accordance with DfT guidance. Communication between the key stakeholders and overarching briefing and reporting mechanisms have been effective in terms of collaborating and presenting a bid that is transformational across the region.

2.269 Further detail in our approach to stakeholder engagement is laid out in our outline communications strategy within the management case.

Our Options and Proposal

In this section we

Explain our methodology for shortlisting schemes and developing our 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

Case for Intervention

2.270 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 business case. The region should build on our success of a well-established public and sustainable transport offer and look to make targeted improvements to quality, capacity and choice, connecting people to opportunities.

2.271 Focusing on the geographical nature of the region, our polycentricity lends itself to a challenging mix of modes to access opportunities. Often with opportunities on the edge of urban areas there are limited public transport connections available. This bid has presented an opportunity to reflect on the connectivity challenges identified by our local authorities and promoters across the region and to look to address these challenges through targeted action.

2.272 Our proposed interventions, detailed in the next section, will have a role in supporting economic and housing growth in a sustainable way, reducing transport's impact on the air quality, addressing congestion for public transport, connecting communities to opportunities, future proofing the network and increasing the attractiveness of and satisfaction with the network.

How we have identified options which respond to the guidance

Methodology

2.273 Following our successful EOI, local authorities and Nexus began developing and submitting suitable schemes to the TCF team 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 overprogrammed. 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 BCR. A sift was conducted based on the information provided by promoters in the format of a standard pro forma template. Schemes were tested against the core requirements of TCF set out in The long list subsequently required further sifting and prioritisation due to the number of schemes causing the bid to be overprogrammed. 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 BCR. A sift was conducted based on the information provided by promoters in the format of a standard pro forma template. Schemes were tested against the core requirements of TCF set out in **Figure 13**.

Figure 13 Key attributes guiding scheme sifting for Transforming Cities Fund Tranche 2

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

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:

– High Cost: Do maximum

– Medium Cost: Do something

– Low Cost: Do minimum.

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

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 bid; due to the quality of the submitted schemes, this was set high at a score of 8 and above to avoid the bid being overprogrammed. A threshold was also set to determine which schemes would comprise the low-cost bid; this was set at a score of 9 and above.

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 Appendix J. The thematic packages and corridors are illustrated in the maps included as Appendix K.

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

Regional pipeline

2.284 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.

Challenges	Opportunities
Ensure schemes are deliverable and perform highly against TCF objectives Ensure schemes come together as packages and as a whole programme to form a coherent network of interventions across our region	Transform our regional transport network across all major modes to address our key challenges around the economy, environment and wider society Work up our regional pipeline projects to ensure progress of TCF can be built upon going forward when other funding streams become available

Contribution of Schemes to Objectives

Programme level

2.285 Throughout the sifting process detailed above, schemes have been developed and refined with the TCF bid objectives in mind. At a programme level, our TCF bid is demonstrably aligned to the two overarching objectives that have been drawn down from the TCF guidance.

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

2.286 The programme forms a coherent network of links between residential areas and centres of employment, particularly our three city centres. In many cases the schemes enhance the current network by filling in gaps and extending existing interventions. As demonstrated by the maps in Appendix K, 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, through modal shift and reduced journey times, the programme will improve connectivity, thereby increasing productivity and working towards reducing the productivity gap between the North East and the rest of the UK.

2.287 Passenger experience has been at the forefront of scheme development and refinement. Our proposed schemes will reduce journey times through priority measures for public transport, reducing the potential for buses to be delayed 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

2.288 The focus on modal shift to these sustainable modes also aligns with the government order to three of the North East's councils (Gateshead, Newcastle and North Tyneside) to combat air pollution along several commuter corridors. 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 above maps 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.

Package level

2.289 Each individual scheme has been scored against the TCF objectives and the full results and scores can be found in Appendix J. Maps to illustrate each thematic package in the context of the existing transport network are included as Appendix K. The ways in which each thematic package of schemes addresses the two compulsory TCF bid objectives is summarised in the tables below. Please note the schemes listed below are based on the medium cost scenario.

Improving capacity on commuting trips, access to employment centres and development sites to support economic growth	Bus journey times will be reduced on selected commuter routes into employment opportunities (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 in particular, 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
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	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

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 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/Tileshed 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

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. 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

Case study: Metro Green Sustainable Access

MetroGreen 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 aspirations of a new pedestrian/cycle bridge link to the west bank of the River Derwent, improving the substandard pedestrian access beneath the bridge on Wellington Street, and new and extended bus routes into the development.

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

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 access improvements to the Eastern Concourse, Western Dock and Westmorland Road.

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 in close proximity to the station

– Improving access to work and delivering growth –ensuring that travellers to and from the station 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 realm

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 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

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, with the potential of increasing congestion on corridors such as 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, particularly in combination with the large proportion of strategic 'through traffic' on these routes. 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

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 – 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 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 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

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

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 – for example the Northumberland Line proposal, 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.

Rebalancing growth

2.290 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.

Step 1: Considering the balance of spending	Using 'improved productivity' as a priority objective throughout the sifting process meant that this economic rebalancing was a core part of the programme design and development, with schemes concentrating on areas where better access to employment will create local and regional growth. The benefits of the programme are therefore focused on commuter corridors, between residential areas (both existing and planned) and centres of employment.
Step 2: Exploring options and strategic alternatives	The programme has been assessed against a 'do nothing' scenario, in which the TCF objectives and wider policy aims as set out in the Industrial Strategy for example would not be met. Without the programme, the productivity gap between the North East and the rest of the UK would be perpetuated.
Step 3: Describing impacts of interventions	The focus of the bid on intracity connectivity has resulted in the expected benefits of the programme being concentrated in North East city region, helping to bridge the productivity gap between the North East and the national average. The transformational aspect of the bid will ensure that change is widespread and long term.
Step 4: Considering stakeholder views	As set out previously, regional stakeholders have been involved in the process of scheme and programme development. The Policy and Strategy section also demonstrates that the programme has a good policy fit in terms of the regional priorities set out in the TfN Strategic Transport Plan, NELEP Strategic Economic Plan and the upcoming Local Industrial Strategy. Letters of support from identified stakeholders can be found in Appendix I.

Risks to Delivery Associated With Our Options

Identified Risks

2.291 The risks associated with our TCF programme are wide-ranging due to the variety of schemes it contains, which are at different levels of development. Individual schemes that are high value and developed to a more detailed standard address individual risks within their respective business cases. During the co-development period between June and November, the risks associated with the delivery of individual schemes will be revisited and re-examined with scheme promoters. At a programme level, delivery risks largely remain consistent between the high, medium and low cost scenarios.

2.292 Our risk management strategy is set out in more detail in the management case.

Challenges	Opportunities
Address the TCF objectives and regional challenges set out in previous sections through the delivery of the above corridors and packages of transport interventions	Deliver multimodal programme of schemes which addresses the TCF objectives and our regional challenges
Deliver the programme on time and within budget, introducing minimal risk and mitigating this risk as far as possible	Contribute to the economic rebalancing of the North East with the rest of the UK by supporting growth through transport investment

Conclusion

2.293 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 travel to work patterns are complex, however 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 through transforming our sustainable transport network, giving people easier, low carbon access to jobs.

2.294 Our Tranche 2 programme will have a transformational impact on the economy and the 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 two higher value schemes 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 and walking, and park and ride in our key commuter corridors and city centres will build upon past infrastructure investment to provide coherent improvements to connectivity.

2.295 Linking back to our vision which 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.” Our schemes seek 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 important 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.

2.296 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.

3 Economic Case

Introduction

3.01 This economic case assesses individual schemes and combined programme options in order to identify their impacts, benefits and value for money. This draft submission follows Treasury guidelines for developing Strategic Outline Business Cases, a more robust and detailed economic case will progress through to full submission in November 2019, when all the scheme and combined programme appraisal is complete, and more robust sensitivity tests are undertaken.

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 information. 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 scheme and programme level.

– **Summary of results** – discussion of results at scheme and 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 scheme.

Scheme Details and Appraised Options

3.04 The Strategic Case details the compelling case for intervention and the proposed schemes to deliver against a clearly defined set of objectives. It also set the scene for how a 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.

3.05 Three combined programmes were developed from the individual schemes a low, medium and high cost option. All seek to transform transport provision in the North East LEP 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. They will support the delivery of the Strategic Economic Plan and the newly emerging Local Industrial Strategy.

3.06 The following sections outline the appraisal approach undertaken.

Appraisal Approach and Assumptions

Appraisal Approach

3.07 The appraisal approach has been outlined in the Appraisal Specification Report or ASR (see Appendix L). The appraisal follows several approaches, depending on whether existing appraisal is already available or is expected to be provided by individual scheme promoters as the programme level appraisal develops.

3.08 A summary methodology for each scheme is included in Appendix M (which also includes individual scheme appraisal results), covering justification, evidence and assumptions. Each scheme has been appraised independently in the first instance, on its own merits. For full SOBC submission, each of the three cost programmes will be reviewed with regards to interdependencies and an adjustment made to the present value of benefits (PVB) at the programme level. Adjustments for interdependencies has not been carried out in this draft submission.

Existing Appraisal

3.09 Several individual schemes are well developed, and many have had detailed appraisal undertaken. For these schemes, we have reviewed the appraisal, made adjustments where necessary and included the results within this appraisal.

Active Modes – Walking and Cycling

3.10 All three cost programmes include walking and cycling improvements. The Department for Transport's Active Mode Appraisal Toolkit (AMAT) has been used to appraise these schemes.

Bus Priority Measures

3.11 Automatic vehicle location (AVL) data from buses has been used to identify average journey times during period(s) of congestion (e.g. peak periods) and when traffic is flowing freely (e.g. interpeak). These time periods have been identified in partnership with bus operators and local authorities.

Assumptions

3.12 Certain assumptions were needed to enable the appraisal of schemes, on receipt of information. These include the number of users and growth in users following opening of the intervention.

Number of Users

3.13 Current users have been obtained through local counts, where available.

Cyclists

3.14 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.

3.15 For opening years, a variety of figures have been applied to the base year:

– Local experience, for example from Cycle City Ambition Grant Schemes (increase of 57%).

– PCT growth (Go Dutch or Government Target scenarios).

Pedestrians

3.16 Where an active mode intervention will enhance the pedestrian experience, and there is no local data available, user numbers have been estimated; using the same approach as used in Tranche One of Transforming Cities Fund. 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. For schemes where it is more relevant, patronage figures have been used.

Bus Users

3.17 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.

Sensitivity Testing

3.18 Proposed sensitivity testing of the economic performance of the programme is set out in the ASR. These will be carried out for the final submission and are anticipated to include the following:

– Appraising the impact of the region's Clean Air Zone proposals - the proposals have been consulted on, but a preferred solution is yet to be determined. For this appraisal, it is expected that a factor will be applied to non-car users to reflect the impact of some form of charge on car users.

– Appraising the impact of the programme on wider mode-choice across the region - 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.

– Appraising the impact of different assumptions with regard to cost, programme and delivery.

3.19 In all cases, we propose to work the DfT as part of their co-development process to define appropriate sensitivity tests and the way in which these should be undertaken.

Interdependencies

3.20 It is required to understand interdependencies between schemes. There are two broad types of interdependencies that could be considered.

– Cost changes on one mode leading to mode shift e.g. improved Metro journey times arising from the Metro Flow scheme, or introduction of a new service, may lead to mode shift from highway and bus; and

– General costs 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.

– Wider policy changes e.g. Clean Air Zone, parking policy etc.

3.21 No suitable detailed transport model of the area 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.

3.22 At this stage, the potential interdependencies between different schemes have been assessed qualitatively in order to provide an initial assessment of the likely impact on the programme level BCRs. This will be addressed quantitatively in the final submission.

3.23 The appended ASR provides details of the general approach to assessing these, considering potential interdependencies between different types of scheme. The following section applies this approach to the various elements of the proposed programme. References numbers refer to individual schemes, these are illustrated in the appendices.

DU01, DU02 and DU03

3.24 Part of DU01, an active mode scheme, is located near to park and ride routes that tie into DU02 and DU03. Assessment will be made on the extent to which improving the park and ride facilities and bus priority measures

will affect the estimated cycling growth figures and therefore affecting claimed social and environmental benefits. Potential impact on benefits – competing schemes expected to compete for demand, overall impact uncertain at this stage.

GA01, GA05 and GA09

3.25 Schemes GA01 and GA09 tie into each other. However, they are both active mode schemes so should effectively complement each other. Analysis will be undertaken to ensure user benefits are not double counted over the route across the schemes. Potential impact on benefits – positive. There is potential for additional sustainable use as a consequence of increased investment in the area.

3.26 Schemes GA01 and GA05 have overlapping scheme areas but can be expected to serve different routes/journeys and both are active mode schemes. Analysis should be undertaken to ensure user benefits are not double counted across the schemes. Potential impact on benefits – slight negative as schemes may compete for users in some cases.

NE01

3.27 The closure of Blackett Street in Newcastle as part of this scheme may impact on public transport usage. This is understood to have been addressed as part of the promoter's appraisal of the scheme. Potential impact on benefits – neutral as taken into account in provided appraisal figure.

NO01

3.28 This service will potentially reduce demand on competing bus services and highway alternatives. However, the reduction in journey times from a modal shift to rail will provide a benefit to all users. It is understood that competition with bus services is considered in the appraisal for this scheme alongside potential reduced external costs of highway trips. Potential impact on benefits – neutral as taken into account in provided appraisal figure.

NT08 and NT10

3.29 The bus priority measures of NT08 may compete with active measures into Metro stations that NT10 provides. Potential impact on benefits – slight negative.

NX03

3.30 The Metro system competes with several bus services across the network It is understood that this impact is to be assessed in advance of the final submission Potential impact on benefits – slight negative.

ST04 and ST08

3.31 Some of the active mode proposals of ST04 are in the same area as the bus corridor improvements of ST08a and ST08b. Potential impact on benefits – slight negative as schemes may compete for users in some cases.

SU03 and SU07

3.32 The Sunderland Station Redevelopment and the car park proposals may complement each other and therefore, the benefits claimed for each scheme should be assessed for interdependencies. Potential impact on benefits - slight positive as schemes complement each other.

Appraisal Results

3.33 Appraisal results are summarised in **Table 9** Detailed results for each of the three proposed programmes are shown in **Table 10**, **Table 11** and **Table 12**

3.34 It should be noted that these results may potentially change through to full submission, as the precise programme details, costs, benefits and appraisal methodologies are refined as part of the ongoing DfT co-development process.

3.35 It should be noted that the appraisal for some schemes is ongoing and not presented at this point. These schemes are marked "appraisal ongoing" in the tables below.

Table 9 Summary programme level results (accounting for interdependencies)

Programme	PVB	PVC	NPV	BCR
High Cost	£550,722,527	£226,146,540	£324,575,987	2.44
Medium Cost	£539,380,898	£219,125,806	£320,255,091	2.46
Low Cost	£533,638,473	£217,494,051	£316,144,421	2.45

Table 10 High Cost Programme Appraisal Results

Scheme	PVB	PVC	NPV	BCR
DU01 Durham Walking & Cycling Improvements	Appraisal ongoing			
DU02 Durham P&R Expansion	£8,425,482	£3,206,966	£5,218,516	2.63
DU03 Durham Bus Priority	£1,231,107	£238,584	£992,523	5.16
DU04 Durham Rail Station Access	£805,294	£100,712	£704,582	8.00
DU07 Durham Bus Station	£18,850,221	£5,974,918	£12,875,304	3.15
GA01 West Tyneside Cycle Routes (upgrades)	£3,463,635	£1,297,705	£2,165,930	2.67
GA05 Metro Green Sustainable Access	Appraisal ongoing			
GA07 Askew Road Pedestrian & Cycle Improvements	Appraisal ongoing			
GA08 Hills Street & Gateshead Quays Sustainable Access	£2,821,669	£907,945	£1,913,724	3.11
GA09 A167 Birtley to Eighton Lodge Cycle Link	£3,279,136	£3,130,379	£148,757	1.05
GA10 A184 Cycle Route	Appraisal ongoing			
GA11 A195 Bus Lane	Appraisal ongoing			
GA13 Keelmans Way Cycling Improvements	Appraisal ongoing			
GA16 Gateshead Interchange Bus Lane	£3,102,977	£356,392	£2,746,586	8.71
IN01 Intu Cycle Storage	£986,673	£8,646	£978,026	114.12
NE01 Transforming Newcastle City Centre	£24,606,704	£6,875,329	£17,731,375	3.58
NE02 Newcastle Central Station Gateway	Appraisal ongoing			

Scheme	PVB	PVC	NPV	BCR
NE03 Newcastle - North Tyneside Strategic Cycling Infrastructure	£8,062,494	£3,890,355	£4,172,139	2.07
NE04 Newcastle Outer West	£48,420,958	£6,428,018	£41,992,940	7.53
NE07 Airport - Ponteland Cycle Route (including NO02)	£2,264,094	£581,261	£1,682,833	3.90
NE08 Newcastle Streets for People	£3,723,276	£1,861,638	£1,861,638	2.00
NO01 Northumberland Line	£185,400,000	£78,149,300	£107,250,700	2.37
NT02 North Shields Transport Hub	Appraisal ongoing			
NT08 A188/A189 Bus Priority	£9,643,380	£4,339,755	£5,303,625	2.22
NT10 Metro Cycling & Walking Links	£6,724,637	£3,362,318	£3,362,318	2.00
NX02 Metro P&R Enhancements	£1,441,930	£711,198	£730,732	2.03
NX03 Metro Flow	£185,680,000	£91,709,000	£93,971,000	2.02
NX04 Follingsby & Callerton P&R Sites	Appraisal ongoing			
ST04 Smart / Healthier Metro Stations	£5,708,256	£2,353,237	£3,355,019	2.43
ST08a South Shields - Newcastle Bus Improvements	Appraisal ongoing			
ST08b South Shields - Sunderland Bus Improvements	Appraisal ongoing			
SU03 Sunderland Central Station	£26,080,605	£9,978,963	£16,101,642	2.61
SU04 Holmeside Bus Rationalisation	Appraisal ongoing			
SU05 Sunderland Inner Ring Road Bus Priority	Appraisal ongoing			
SU07 Sunderland Station Car Park	Appraisal ongoing			
SU09 Chester Road Bus Corridor	Appraisal ongoing			
SU10 A690 Bus Route Action Plan	Appraisal ongoing			
SU15 A690 Strategic Cycling Corridor	Appraisal ongoing			
Additional Costs	n/a	£683,921	n/a	n/a
Unadjusted High Cost Programme Totals	£550,722,527	£226,146,540	£324,575,987	2.44

Table 11 Medium Cost Programme Appraisal Results

Scheme	PVB	PVC	NPV	BCR
DU01 Durham Walking & Cycling Improvements		Appraisal ongoing		
DU02 Durham P&R Expansion	£8,425,482	£3,206,966	£5,218,516	2.63
DU03 Durham Bus Priority	£1,231,107	£238,584	£992,523	5.16
DU04 Durham Rail Station Access	£805,294	£100,712	£704,582	8.00
DU07 Durham Bus Station	£18,850,221	£5,974,918	£12,875,304	3.15
GA01 West Tyneside Cycle Routes (upgrades)	£3,463,635	£1,297,705	£2,165,930	2.67
GA05 Metro Green Sustainable Access		Appraisal ongoing		
GA07 Askew Road Pedestrian & Cycle Improvements		Appraisal ongoing		
GA08 Hills Street & Gateshead Quays Sustainable Access	£2,821,669	£907,945	£1,913,724	3.11
GA11 A195 Bus Lane		Appraisal ongoing		
GA16 Gateshead Interchange Bus Lane	£3,102,977	£356,392	£2,746,586	8.71
IN01 Intu Cycle Storage	£986,673	£8,646	£978,026	114.12
NE01 Transforming Newcastle City Centre	£24,606,704	£6,875,329	£17,731,375	3.58
NE02 Newcastle Central Station Gateway		Appraisal ongoing		
NE04 Newcastle Outer West	£48,420,958	£6,428,018	£41,992,940	7.53
NE07 Airport - Ponteland Cycle Route (including NO02)	£2,264,094	£581,261	£1,682,833	3.90
NE08 Newcastle Streets for People	£3,723,276	£1,861,638	£1,861,638	2.00
NO01 Northumberland Line	£185,400,000	£78,149,300	£107,250,700	2.37
NT02 North Shields Transport Hub		Appraisal ongoing		
NT08 A188/A189 Bus Priority	£9,643,380	£4,339,755	£5,303,625	2.22
NT10 Metro Cycling & Walking Links	£6,724,637	£3,362,318	£3,362,318	2.00
NX02 Metro P&R Enhancements	£1,441,930	£711,198	£730,732	2.03
NX03 Metro Flow	£185,680,000	£91,709,000	£93,971,000	2.02
NX04 Follingsby & Callerton P&R Sites		Appraisal ongoing		

Scheme	PVB	PVC	NPV	BCR
ST04 Smart / Healthier Metro Stations	£5,708,256	£2,353,237	£3,355,019	2.43
ST08a South Shields - Newcastle Bus Improvements		Appraisal ongoing		
ST08b South Shields - Sunderland Bus Improvements		Appraisal ongoing		
SU03 Sunderland Central Station	£26,080,605	£9,978,963	£16,101,642	2.61
SU04 Holmeside Bus Rationalisation		Appraisal ongoing		
SU05 Sunderland Inner Ring Road Bus Priority		Appraisal ongoing		
SU07 Sunderland Station Car Park		Appraisal ongoing		
SU09 Chester Road Bus Corridor		Appraisal ongoing		
SU10 A690 Bus Route Action Plan		Appraisal ongoing		
Additional Costs	n/a	£683,921	n/a	n/a
Unadjusted Medium Cost Programme Totals	£539,380,898	£219,125,806	£320,255,091	2.46

Table 12 Low Cost Programme Appraisal Results

Scheme	PVB	PVC	NPV	BCR
DU01 Durham Walking & Cycling Improvements		Appraisal ongoing		
DU02 Durham P&R Expansion	£8,425,482	£3,206,966	£5,218,516	2.63
DU07 Durham Bus Station	£18,850,221	£5,974,918	£12,875,304	3.15
GA01 West Tyneside Cycle Routes (upgrades)	£3,463,635	£1,297,705	£2,165,930	2.67
GA05 Metro Green Sustainable Access		Appraisal ongoing		
GA07 Askew Road Pedestrian & Cycle Improvements		Appraisal ongoing		
GA08 Hills Street & Gateshead Quays Sustainable Access	£2,821,669	£907,945	£1,913,724	3.11
GA11 A195 Bus Lane		Appraisal ongoing		
GA16 Gateshead Interchange Bus Lane	£3,102,977	£356,392	£2,746,586	8.71
IN01 Intu Cycle Storage	£986,673	£8,646	£978,026	114.12
NE01 Transforming Newcastle City Centre	£24,606,704	£6,875,329	£17,731,375	3.58

Scheme	PVB	PVC	NPV	BCR
NE02 Newcastle Central Station Gateway		Appraisal ongoing		
NE04 Newcastle Outer West	£48,420,958	£6,428,018	£41,992,940	7.53
NE08 Newcastle Streets for People	£3,723,276	£1,861,638	£1,861,638	2.00
NO01 Northumberland Line	£185,400,000	£78,149,300	£107,250,700	2.37
NT08 A188/A189 Bus Priority	£9,643,380	£4,339,755	£5,303,625	2.22
NT10 Metro Cycling & Walking Links	£6,724,637	£3,362,318	£3,362,318	2.00
NX03 Metro Flow	£185,680,000	£91,709,000	£93,971,000	2.02
NX04 Follingsby & Callerton P&R Sites		Appraisal ongoing		
ST04 Smart / Healthier Metro Stations	£5,708,256	£2,353,237	£3,355,019	2.43
ST08a South Shields - Newcastle Bus Improvements		Appraisal ongoing		
ST08b South Shields - Sunderland Bus Improvements		Appraisal ongoing		
SU03 Sunderland Central Station	£26,080,605	£9,978,963	£16,101,642	2.61
SU04 Holmeside Bus Rationalisation		Appraisal ongoing		
SU05 Sunderland Inner Ring Road Bus Priority		Appraisal ongoing		
SU07 Sunderland Station Car Park		Appraisal ongoing		
SU09 Chester Road Bus Corridor		Appraisal ongoing		
SU10 A690 Bus Route Action Plan		Appraisal ongoing		
Additional Costs	n/a	£683,921	n/a	n/a
Unadjusted Low-Cost Programme Totals	£533,638,473	£217,494,051	£316,144,421	2.45

3.36 At present, AMCB Tables have been completed for the three programme levels in **Table 13 Table 14** and **Table 15** below. A full set of tables for each of the programmes will be provided in the full submission, once appraisal of all programme elements is completed.

3.37 An Appraisal Summary Table, summarising the programme impacts in qualitative terms is included in Appendix N.

Table 13 High Cost Programme AMCB Table

Analysis of Monetised Costs and Benefits: High Programme

Noise	705	*(12)*
Local Air Quality	38	*(13)*
Greenhouse Gases	2,669	*(14)*
Journey Quality	49,255	*(15)*
Physical Activity	32,178	*(16)*
Accidents	14,161	*(17)*
Economic Efficiency: Consumer Users (Commuting)		*(1a)*
Economic Efficiency: Consumer Users (Other)	483,485	*(1b)*
Economic Efficiency: Business Users and Providers		*(5)*
Wider Public Finances (Indirect Taxation Revenues)	32,437	*- (11) - sign changed from PA table, as PA table represents costs, not benefits*
Present Value of Benefits (see notes) (PVB)	550,723	*(PVB) = (12) + (13) + (14) + (15) + (16) + (17) + (1a) + (1b) + (5) - (11)*
Broad Transport Budget	226,147	*(10)*
Present Value of Costs (see notes) (PVC)	226,147	*(PVC) = (10)*
OVERALL IMPACTS		
Net Present Value (NPV)	324,576	NPV=PVB-PVC
Benefit to Cost Ratio (BCR)	2.44	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 14 Medium Cost Programme AMCB Table

Analysis of Monetised Costs and Benefits: Medium Programme

Noise	700	*(12)*
Local Air Quality	37	*(13)*
Greenhouse Gases	2,655	*(14)*
Journey Quality	48,459	*(15)*
Physical Activity	22,145	*(16)*
Accidents	14,081	*(17)*
Economic Efficiency: Consumer Users (Commuting)	482,880	*(1a)*
Economic Efficiency: Consumer Users (Other)		*(1b)*
Economic Efficiency: Business Users and Providers		*(5)*
Wider Public Finances (Indirect Taxation Revenues)	32,382	*- (11) - sign changed from PA table, as PA table represents costs, not benefits*
Present Value of Benefits (see notes) (PVB)	539,381	*(PVB) = (12) + (13) + (14) + (15) + (16) + (17) + (1a) + (1b) + (5) - (11)*
Broad Transport Budget	219,126	*(10)*
Present Value of Costs (see notes) (PVC)	219,126	*(PVC) = (10)*
OVERALL IMPACTS		
Net Present Value (NPV)	320,255	NPV=PVB-PVC
Benefit to Cost Ratio (BCR)	2.46	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 15 Low Cost Programme AMCB Table

Analysis of Monetised Costs and Benefits: Low Programme

Noise	697	*(12)*
Local Air Quality	37	*(13)*
Greenhouse Gases	2,647	*(14)*
Journey Quality	47,740	*(15)*
Physical Activity	20,377	*(16)*
Accidents	14,041	*(17)*
Economic Efficiency: Consumer Users (Commuting)		*(1a)*
Economic Efficiency: Consumer Users (Other)	480,238	*(1b)*
Economic Efficiency: Business Users and Providers		*(5)*
Wider Public Finances (Indirect Taxation Revenues)	32,374	*- (11) - sign changed from PA table, as PA table represents costs, not benefits*
Present Value of Benefits (see notes) (PVB)	533,638	*(PVB) = (12) + (13) + (14) + (15) + (16) + (17) + (1a) + (1b) + (5) - (11)*
Broad Transport Budget	217,494	*(10)*
Present Value of Costs (see notes) (PVC)	217,494	*(PVC) = (10)*
OVERALL IMPACTS		
Net Present Value (NPV)	316,144	NPV=PVB-PVC
Benefit to Cost Ratio (BCR)	2.45	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.

Sensitivity tests and Interdependencies

3.38 A discussion of the results of the sensitivity tests and analysis of interdependencies results will be included in this section in the full submission, this work is on-going and incomplete for this draft submission.

Regeneration and Wider Economic Impacts

3.39 Quantification of potential regeneration and wider economic impacts will be undertaken as the work progresses and will be included in this section. On some schemes, this work will be undertaken by scheme promoters; this is the case for the Northumberland Rail and Metro Flow schemes where work has already commenced.

Environmental Impact

3.40 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, summarised in **Table 16** below.

Table 16 Environmental Impacts

Impacts	Comment	Assessment
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
Air Quality	The programmes will see a shift to more sustainable modes of transport and therefore improved air quality as a result of this.	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.	Beneficial
Landscape	The programmes will have a neutral impact on landscape.	Neutral
Townscape	The programmes will have a neutral impact on the townscape.	Neutral
Historic Environment	The programmes will have a neutral impact on the historic environment.	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, GA13 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

Social Impacts

3.41 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 17 Social Impacts

Impacts	Comment	Assessment
Commuting and other users	Bus journey times will be reduced on the key commuter routes into employment and Ccommercial 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 and ride scheme 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	All three cost Pprogrammes will include Intelligent Transport Systems (ITS) elements, the proposals are still under development.	Not yet assessed.
Physical activity	The programmes contain a large proportion of active mode schemes with 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 cyclists' facilities improving cyclist safety.	Monetised in AMCB
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 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

Summary of Results

3.42 The Strategic Case established the compelling argument for the delivery of the identified interventions across the North East LEP region. This section outlines the benefits of the programmes.

3.43 All schemes have 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 to improving skills and apprenticeships to further increase economic benefits. The ITS schemes to be included in the programmes will future-proof results and objectives, 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

3.44 The schemes seek to reduce journey times and improve reliability for both passengers and operators, and provide better accessibility to employment, education, training and leisure locations.

3.45 Appraisal of the bus schemes is on-going, but initial results show that significant journey time improvements can be achieved in many cases, which will make journeys more reliable and attractive to users. This can be expected to encourage modal shift with a range on knock-on benefits associated with reduced car and highway usage.

3.46 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 considers the localised patterns of congestion, with the biggest journey time savings not always occurring during the traditional peak hours.

3.47 An example of a scheme that complements the TCF's objectives is the Durham Bus Station Redevelopment. It has been designed with air quality improvements in mind, through the proposal of living walls, a green roof and sustainable materials, demonstrating key commitment to incorporating sustainable connectivity in a unique way. It also provides social benefits through its plans to reduce/eradicate anti-social behaviour, in turn, making public transport a more attractive and safe option.

Transforming Walking and Cycling Corridors

3.48 The schemes will encourage active travel for many shorter distance journeys, with some schemes delivering onward connectivity opportunities in some cases, for example the Airport-Ponteland link. Some deliver cycle parking facilities (such as the Intu Cycle Storage), providing further quality cycle infrastructure across the region, building on improvements made through Cycle City Ambition grants.

3.49 Many of the schemes in Gateshead have been designed with the aim to reduce NO_2 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, we will create a healthier and therefore more productive workforce, helping the North East catch-up to other areas.

3.50 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 complements addresses the Transforming Cities Fund aims and should provide wider positive economic and social impacts of encouraging sustainable living.

3.51 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 has the opportunity to be further increased in size.

Transforming City Centre Gateways

3.52 '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 to people. In economic terms, the scheme in isolation provides high value for money. City Centre Gateways also includes bus and rail stations, with both Durham Bus Station and Sunderland Railway Station (Southern entrance), which form gateways into these cities for people arriving on bus or rail. Both these schemes bring benefits, mainly through the updating of dated facilities and providing modern amenities that are expected from today's travellers.

3.53 Many schemes have been designed to provide innovative and modern solutions to the city 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. It also will use the Future Cities Catapult Data Fellow to understand the impact of traffic closures and inform future scheme and policy direction.

Transforming Park & Ride

3.54 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. Therefore, the P&R schemes deliver value for money, in that they achieve aims of reducing congestion, contributing to improved air quality and enable the creation of public realm. 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.

3.55 Park and 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

3.56 The three cost programmes within this bid include two rail schemes, Northumberland Line and Metro Flow. Both of these schemes provide high value for money and can transform the way people travel across large parts of the North East LEP region.

3.57 The Northumberland Line will provide a faster sustainable travel option into Newcastle, and the major employment site at the Port of Blyth increasing 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.

3.58 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.

3.59 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

3.60 Based on the appraisal carried out to date, 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)

– High Cost – High (BCR between 2 and 4)

4 Commercial Case

Commercial Viability

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 We believe that the schemes in our programme are all commercially viable as promoters have considered whole life costs during the development of the programme. 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 (Mainly walking and cycling)

4.02 In the case of infrastructure-only 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 as part of the individual SOBCs. As a consequence, 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 costs of operating the new trains and stations will fall to the service operator and be partially offset by farebox revenues. Northumberland County Council has undertaken to bridge the gap between service operating costs and fare revenues for the first three years of the service and is in discussion with DfT about a longer term revenue risk approach.

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. We will continue to assess the viability of these schemes and provide further assurance in our final SOBC submission.

North Shields Transport Hub

4.05 For the proposed new interchange in North Shields, discussions are ongoing with the scheme promoter about how the commercial viability of this asset can be achieved, as there are ongoing staffing and management implications that will need to be funded. We will provide an analysis of this scheme's viability in our final SOBC submission in November 2019.

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. Prior to completion of the final SOBC in November 2019 we will conduct a dialogue with bus operators to determine whether and how commitments to further improvements to the bus network may be secured as a result of this capital investment – through new vehicles, improved service levels, improved fares, etc.

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 18**.

Table 18 Outputs for Each Scheme in the High Cost Scenario Programme

Ref	Scheme Detail	Outputs
DU01	Walking and cycling improvements	10.32km of improved cycling and walking links in and around Durham City Centre, 1 no. pedestrian bridge across the River Wear.
DU02	Park and ride expansion, Durham City	Additional 331 spaces created and bus provision at Sniperley Park and Ride site. Creation of 550 spaces and bus provision at new Stonebridge Park and Ride. Inclusion of EV charging points.
DU03	Bus priority measures	354m of bus priority measures in and out of Durham city centre:- Shincliffe (252m) - 50 second saving per bus (5 per hour) for inbound bus movements in peak periods. Gilesgate (102m) - 62 second saving per bus (20 per hour) for inbound movements in peak periods.
DU04	Durham rail station access improvements	New stairs and walkway created (157m) linking station with A691. 2.5 minute saving time in comparison to existing route.
DU07	Durham bus station	Replace life expired bus station with new fit for purpose, fully accessible station with amenities and relocation of DIRO stand to increase speed of manoeuvres.
GA01	West Tyneside cycle route (upgrading existing routes)	12.26Km (7.62 miles) upgrade to existing cycle routes.
GA05	MetroGreen sustainable access	320m bus priority measures and 4.18km of cycling and walking improvements supporting development at Metro Green (adjacent to the Metrocentre) .
GA07	Askew Road	50m of new cycling / walking facilities and junction upgrades linking to key housing development sites in Gateshead.
GA08	Hills Street and Gateshead Quays sustainable access	740m upgrades to pedestrian, cycle and public transport environment on a key link to Tyne bridge and supporting growth of Gateshead Quays including the arena site.
GA09	Great North Cycleway – A167 Birtley to Eighton Lodge	4.1Km (2.55 miles) upgrading key cycle corridor, shared use footway and junction improvements. 1 no. roundabout converted to signalised junction with toucan facilities.
GA10	A184 cycle route	2 miles of new shared use pedestrian and cycle route and improvement of road crossings.
GA11	A195 bus lane	620m of new bus lane.

Ref	Scheme Detail	Outputs
GA13	Keelmans Way improvements	9.01Km (5.60 miles) - reinstatement and land stabilisation works along existing NCN cycle route.
GA16	Gateshead Interchange bus lane	340m reconfigured bus lane.
NE01	Transforming Newcastle City Centre	2km (1.24 miles) - improvements in and around the city centre addressing 'missing links', prioritisation for walking & cycling and public transport use including enhanced bus stops. Upgrades to all junctions not currently on UTC (Urban Traffic Control) within urban core.
NE02	Newcastle Central Station – Central Gateway	Fundamental part of Newcastle Central Gateway masterplan delivering upgraded pedestrian links into the station and tunnels, public realm enhancements around the station, major junction upgrades to ease access and a new access ramp to improved station drop off, taxi interchange and a relocated station car park.
NE03	Newcastle – North Tyneside strategic cycling infrastructure	6.78Km (4.21 miles) of new cycling infrastructure linking key housing areas with Newcastle city centre.
NE04	Newcastle Outer West	250m - improvement to junctions in 6 no. areas (typically the replacement of roundabouts with signalised controls and links to UTMC) to give priority to public transport.
NE08	Newcastle Streets for People	Circa 5km improved cycling / walking connections rolled out at 3 no. Metro stations initially with potential expansion to other identified Metro stations.
NX02	Park and ride enhancements	New smart and digital ticket solutions to enhance the attractiveness of park and ride and facilitate integration between modes. 6 no. Metro stations identified.
NX03	Metro Flow: twin tracking of Metro line between Pelaw and Bede / Metro capacity enhancement	More frequent services reduces waiting time and therefore generalised journey time.
NX04	Strategic park and ride sites – Follingsby park and ride and links to IAMP and Callerton Parkway	Follingsby P&R: Bus based park and ride, 500 space carpark and bus waiting facilities with passive provision for a rail station. Provision of new mobility services for cycling and car club. The demand work suggests that a bus only P&R service on a 10 minute frequency would attract 527 journeys per day, reducing car trips by 320 into surrounding urban areas. Callerton P&R: Double no. of existing car parking spaces to 394.

Ref	Scheme Detail	Outputs
NO01	Northumberland Line (Newcastle to Ashington)	Reintroducing passenger services - reopening 23.2km (14.41 miles) of existing track to passenger services with potential for hourly / half hourly frequency. 4 no. new railway stations (1 no. integrated with Metro station).
NE07 / NO02	Callerton - Airport -Ponteland cycle route	4.09Km (2.54 miles) new cycleway on disused railway line creating links to Callerton Parkway Metro station, Newcastle Airport Enterprise Zone and Ponteland.
NT02	Improvements to North Shields transport hub	New bus concourse on current vacant premises opposite North Shields Metro Station, canopy linking Metro Station to Bus Concourse, integrated retail space adjacent bus concourse linking to Indoor shopping centre, bus priority measures around the town centre, improved pedestrian and cycling linkages to Transport Interchange, enhanced facilities at Interchange consistent with Mobility Hubs package including cycle hub with hire and storage facilities, improved linkages between Transport Interchange and local Ferry - 1.2km of cycling, walking and bus improvements around the town centre.
NT08	Bus priority improvements along A188/A189 corridor phase 1	4.3 miles bus priority improvements and enhancement of existing P&R facility.
NT10	Healthy bus and Metro	5km of infrastructure measures, high quality walking and cycling linkages to 5 no. Metro stations public realm improvements.
ST04	Healthier Metro stations	3.7km of walking and cycling improvements into 2 no. Metro stations. Potential new EV parking options.
ST08a	Bus corridor improvements	1.4km of bus improvements around the borough, 1 no. level crossing removed and 1 no. new bridge installed over Metro line.
ST08b	South Shields to Sunderland City Council	1km bus improvements between South Shields and Sunderland including new section of bus lane.
SU03	Sunderland Central Station redevelopment	Construction of new fit for purpose and fully accessible rail station on footprint of existing site including Metro access and enhanced passenger facilities.
SU04	Holmeside bus rationalisation and priority measures	550m bus priority measures including improved cycle and pedestrian provision - super crossing provision.
SU05	Inner ring road improvements (bus priority)	700m bus priority measures.

Ref	Scheme Detail	Outputs
SU07	Holmeside / Sunderland station car park	160 car parking spaces created, P&R provision for national and local rail encouraging modal shift, EV charging points. Retail provision at ground floor level.
SU09	Chester Road bus corridor	3.74Km (2.32 miles) bus priority measures. Improved CCTV and UTMC connectivity.
SU10	A690 route action plan	5.21Km (3.24 miles) bus priority measures, safety for pedestrian users and improved CCTV and UTMC connectivity.
SU15	Strategic cycle network A690 corridor	5.91Km (3.67 miles) cycleway links into employment areas and provision of an improved crossing over the A19.
IN01	Intu cycle storage	3,056 sqft. Space for secure cycle storage and associated showering facilities including access for all provision.
ITS01	ITS Package of works - Regionwide	To be developed.

4.08 The overall outcomes that will derive from these outputs are described in detail in the Strategic Case and the Economic Case. The programme will deliver improved transport connectivity in key corridors in the region, which in turn will enhance the efficiency of existing journeys on sustainable transport modes, encourage journeys to switch from the private car to sustainable modes and encourage new journeys to be made using those modes. These outcomes will provide economic benefits by opening up new employment/training opportunities and expanding the viable labour markets for businesses, enabling increased business productivity. The outcomes will also enable social and environmental improvements to the region and open up opportunities for new and more sustainable development of homes, city/town centres and workplaces.

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

4.09 This programme is made up of schemes promoted by 9 partners:

Promoter	Nature of Organisation
Durham County Council	Local Authority
Sunderland City Council	
South Tyneside Council	
Gateshead Council	
Newcastle City Council	
North Tyneside Council	
Northumberland County Council	
Nexus	Passenger Transport Executive
INTU	Commercial Partner – Retail Landlord and Facilities Manager

4.10 Each of these promoters has their own procurement policies, which in the case of many public sector organizations is published. Generally speaking, our strategy is to for scheme promoters to follow their own procurement policies and to manage suppliers and risk through their established processes; however the follow paragraphs offer a guide of the general approach we expect to be taken across promoters.

4.11 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 of under £2m in value 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 of over £2m value are more likely to be delivered in partnership with a private sector contractor. Options to '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.

4.12 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.

4.13 Nexus is nearing completion of procuring a £350m contract to deliver new trains for the Metro system, this contract has been specified flexibly so that it can deliver the additional trains required to enhance the daytime service frequency from five trains to six trains per hour.

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 - Nexus' current intention is that the scheme will be delivered using a NEC3 design and build procurement.

4.15 For construction projects such as this Nexus uses an end-to-end strategy for defining the requirements of a project, designing it in incremental levels of detail and managing risks and finances of the project at a series of "Stage Gate" decision points. This process ensures that the scope and outputs of the project are kept under control and delivered in a way that achieves budget and manages risks. Design construction tasks are either tackled by Nexus in-house or contracted to external suppliers in accordance with resource availability and risk management priorities. Nexus retains an in-house Programme Assurance department to guide the process centrally and ensure that a Senior Responsible Owner will be in control of delivery and risks throughout the construction process.

4.16 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.

4.17 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. Given the timescale issues associated with this second option, it is assumed that the service will initially be delivered by the existing franchise holder to a specification included in the existing franchise agreement; and

– A number of 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. 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

4.18 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.

4.19 As the programme to be funded by TCF and delivered locally takes shape in more detail prior to the November 2019 final SOBC submission, 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.

5 Financial Case

Overview

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; and

Explain the process and assurance from Section 31 Officers.

5.01 The financial case for Tranche 2 TCF gives a breakdown of the anticipated programme cost components and the time profile for the investment. It considers the DfT capital costs and the yearly cost profile. In addition, it identifies where match (local or private) contributions will be obtained to meet the scheme costs.

5.02 Cost profiles have been obtained from individual scheme promoters and collated in Appendix O. The level of detail associated with cost profiles vary from scheme to scheme. For some schemes including the two rail schemes, a detailed analysis of capital costs, revenue costs and fare box incomes has been undertaken. 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.

Project Funding

5.03 Funding of the schemes will be from DfT and locally sourced funds. A summary of the funding sources is detailed in **Table 19**.

5.04 As indicated in the above table a significant sum of locally sourced funding is being allocated for the schemes which demonstrates our commitment to the successful delivery of the schemes. Local funding accounts for 14.1% of the overall programme costs and private funding equates to 1.6%. The sources of this local match funding varies from scheme to scheme but 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.

Table 19 Summary of TCF Funding Bid and Local Match Funding

	2019/20	2020/21	2021/2022	2022/23	Total
Total Programme Cost (£m)	21.293	97.314	133.833	198.051	450.492
DfT funding request (£m)	12.084	79.106	112.020	176.505	379.715
Local funding (£m)	8.650	16.837	20.739	17.450	63.676
Private funding (£m)	0.559	1.371	1.074	4.096	7.100
Total Match funding (£m)	9.209	18.208	21.813	21.546	70.777

5.05 In respect of the Metro Flow scheme, Nexus has proposed match funding to the capital cost of the scheme in the form of the cost of future upgrades to the single track sections of the line that have now been integrated into the Metro Flow programme. There are further discussions to be held within the region and with DfT about how this scheme can be supported by a match funding plan. In this context it is noted that the revenue costs of operating the infrastructure and the additional train operating on that infrastructure will be funded locally throughout the life of the project – via locally sourced revenues or via Nexus' revenue funding streams (which are also locally funded).

Analysis of Costs

5.06 The cost profiles and delivery project plans have been reviewed and a high-level comparison has been carried out to ensure the activities identified in the project plan and costs associated with the delivery of the scheme occur in the same financial year. Further analysis will be undertaken before the final SOBC submission to provide cost certainty.

Whole Life Costs

5.07 An initial consideration of whole life costs for the programme has been undertaken, this is set out in more detail in the commercial viability section within the Commercial Case. We will undertake further analysis of whole life costs for relevant schemes prior to submission of the final SOBC.

Section 31 Officer sign off

As Section 31 Officer for the North East Combined Authority on behalf of the North East Joint Transport Committee. I declare that the programme cost estimates quoted in this bid are accurate to the best of my knowledge and that the North East Combined Authority on behalf of the North East Joint Transport Committee:

- has ensured scheme promoters have allocated sufficient budget to deliver this programme on the basis of its proposed funding contribution;
- accepts responsibility for managing the devolved funding from TCF to deliver a programme of works that achieve the outcomes and benefits set out in this SOBC;
- has ensured scheme promoters accept responsibility for meeting any ongoing revenue and capital requirements;
- accepts that no further increase in DfT devolved funding will be considered beyond the maximum contribution requested and that no DfT devolved funding will be provided after 2022/23; and
- confirms that the necessary governance and assurance arrangements are in place.

Signed By:  Date: 20 June 2019

John Hewitt, Chief Finance Officer for North East Combined Authority
(on behalf of the North East Joint Transport Committee)

6 Management Case

In this section we

Explore the regions record in delivering similar complex programmes of schemes on time and to budget.

Evidence of Similar Projects

6.01 Authorities in the North East have extensive experience in the delivery of large capital investment projects, as summarised in the case studies below.

TCF Tranche 1

6.02 Of particular relevance to TCF is our successful bid for Tranche 1 funding, through which the North East city region was awarded £10 million for a range of five sustainable transport packages. Both the submission of the bid and the delivery of the schemes had extremely tight timescales, similar to the limited timescales of Tranche 2 considering the transformational element required by the guidance. Delivery of Tranche 1 is being managed within the North East Regional Transport Team which covers Durham, Northumberland and Tyne and Wear and which is now coordinating the bid for Tranche 2 funding. Grant funding agreements between the NECA and scheme promoters are now being finalised and delivery of Tranche 1 schemes is underway.

NELEP Local Growth Fund

6.03 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.

6.04 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

6.05 Nexus is the Passenger Transport Executive for Tyne and Wear owner and operator of the regions Metro system. Nexus has the appropriate powers to operate rail infrastructure and operates the Metro as an integrated railway in which is maintains and renews rail infrastructure as well as operating the train service.

6.06 The Nexus Asset Renewal Programme is a programme worth £352million 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.

6.07 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

6.08 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 programme funding.

Northern Spire Bridge, Sunderland

6.09 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.

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.

6.10 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 P) has been developed to capture three main phases:

– Draft SOBC- June 2019 Submission;

– Final SOBC- November 2019 Submission; and

– Delivery of schemes (2020-2023).

6.11 The project controller will carry out a weekly 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.

6.12 Dependencies have been considered for individual schemes, predecessors and successors have been incorporated where necessary in the project plan. As a result, delay to those activities will have a direct impact on completion date and therefore it is critical frequent communication is continued to help mitigate delays.

6.13 Furthermore, the interfaces and interdependencies which schemes have on each other have not been explored at this stage but will be detailed in the final SOBC submission. Additionally, detailed discussions with scheme promoters are required to ensure external projects will be managed to minimise impact on the delivery of the TCF programme.

Figure 14 Key Milestones for SOBC and Delivery Project Plans

Milestone	Forecast Date
Submission of Draft SOBC	June 2019
Submission of Final SOBC	November 2019
Newcastle scheme opening	April 2023
Gateshead scheme opening	April 2023
North Tyneside scheme opening	March 2023
South Tyneside scheme opening	April 2023
Sunderland scheme opening	September 2022
Durham scheme opening	December 2022
Northumberland scheme opening	December 2022
Nexus scheme opening	February 2023
Intu scheme opening	November 2020

Governance and Programme Management

In this section we

Detail the regions 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.

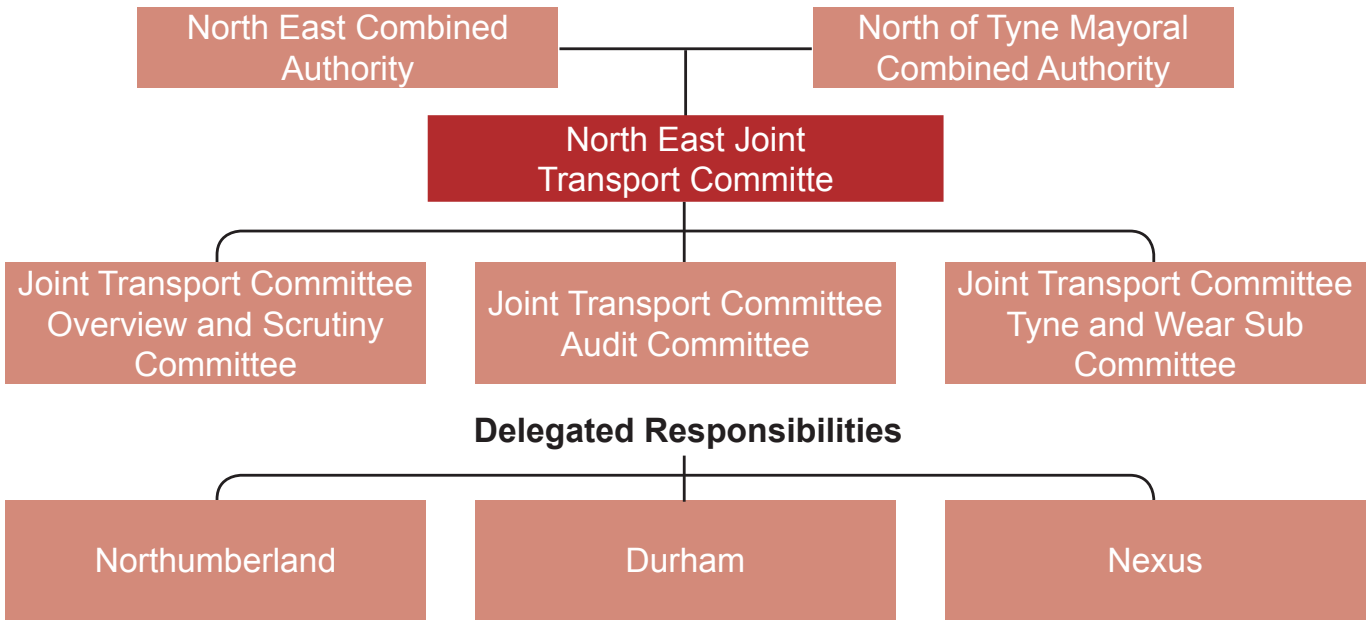
6.14 The North East region has developed a governance structure and associated assurance process to deliver the Tranche 2 programme. This structure is based on the governance that successfully delivers our Local Growth Fund monies held by the North East Local Enterprise Partnership (NELEP), suitably amended to match the particular characteristics of the schemes to be delivered via TCF.

6.15 Our Tranche 2 TCF programme envisages that funding for schemes not "retained" by DfT will be £152 million in the medium cost scenario, and in the range of £125-170 million depending on which cost scenario is successful in attracting funding from DfT. 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 governance structure set out below has been prepared based on the challenge of delivering a devolved programme of this scale.

6.16 The North East region will nominate a Senior Responsible Owner (SRO) for the devolved programme. Our current proposal is that 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.

6.17 Our proposed assurance framework 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 – we propose that this sign off is provided by our North East Joint Transport Committee (JTC), which comprises elected members from the local authorities in the region plus the elected regional mayor for the North of Tyne Combined Authority. The position of the JTC within the overall governance structure for transport matters in the North East is set out in **Figure 15**.

Figure 15 North East Governance Structure for Transport



6.18 While major spending decisions will be made by the JTC itself, other more modest sign-offs 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.

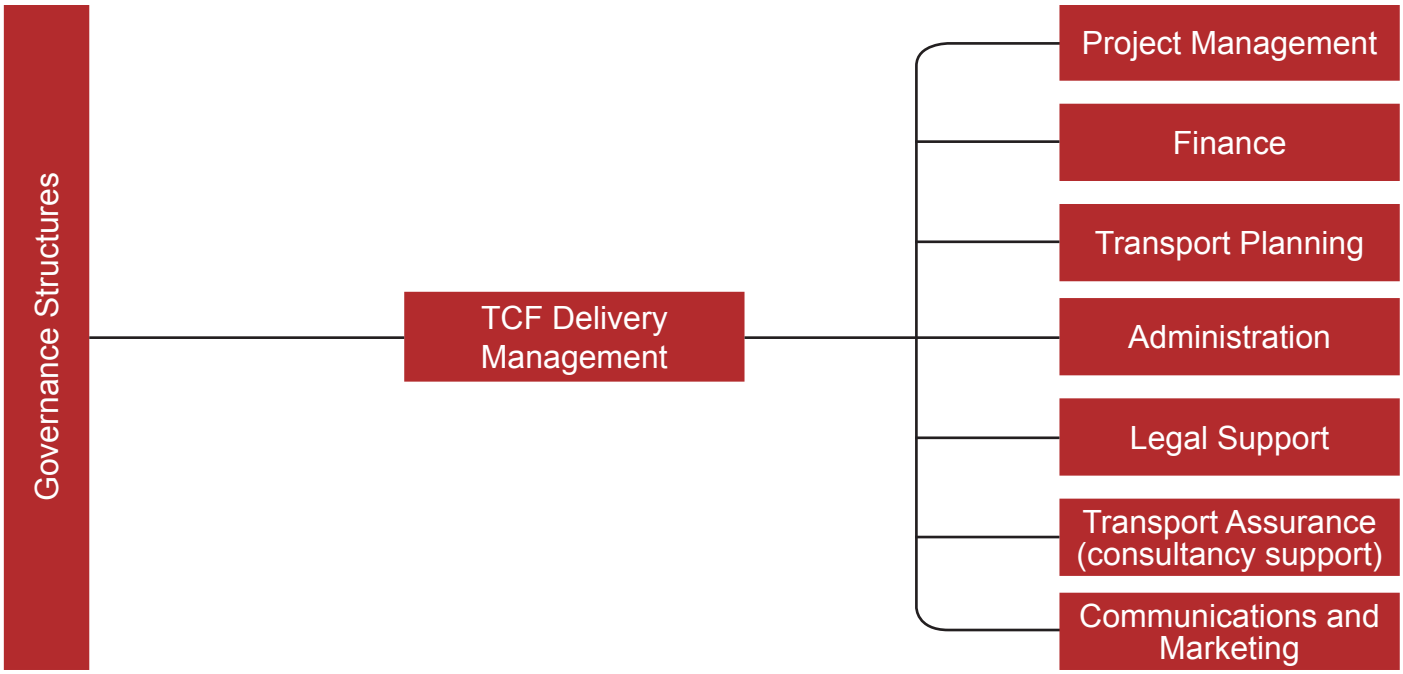
6.19 The spending decisions and delivered outputs/outcomes of the TCF programme will be subject to independent scrutiny from our Joint Transport Committee Overview and Scrutiny Committee. This Committee will review decisions and make recommendations for how the enactment of our assurance framework can be delivered to meet regional needs and comply with the Government's grant conditions.

6.20 The region has various senior officer groups in place that will scrutinise funding proposals before they are presented to JTC for approval. These include the North East Heads of Transport Group, the North East Economic Directors' Group and the North East Chief Executives' Group. Scrutiny of devolved funding proposals by these groups will ensure that appropriate decisions are made that deliver the transport, economic and wider strategic objectives of the TCF programme. In addition, our assurance framework requires that an independent scrutiny of funding proposals is undertaken before any decisions are made – this scrutiny is undertaken by an independent consultant that we will retain to support us through the programme delivery phase.

6.21 In order to support the SRO, manage the devolved decision making processes and deliver the region's assurance framework, a Programme Delivery Support team will be established within our Regional Transport Team (RTT). This team is to manage a programme comprised wholly of transport schemes so it will sit wholly within the RTT - this differs from current arrangements for the Local Growth Fund delivery team, which is split between the NELEP, the RTT and Sunderland City Council.

6.22 The proposed resource structure for this team is set out in **Figure 16** 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 estimate that the cost of retaining these resources to manage the delivery of our devolved funding in the North East will be £391,000 in 2020/21, £325,000 in 2021/22 and £290,000 in 2022/23 – 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 16 Proposed TCF Programme Delivery Resources



6.23 The multi-disciplinary resource team will deliver a range of tasks associated with delivering schemes in accordance with the assurance framework. This includes:

– the provision of transport assurance as individual projects pass 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 combined authorities 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, co-ordinating the necessary communications activities and marketing plans for individual schemes in that programme;

– production of regular progress reports for DfT and for regional governance structures;

– preparation of reports seeking approval for spending decisions; 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

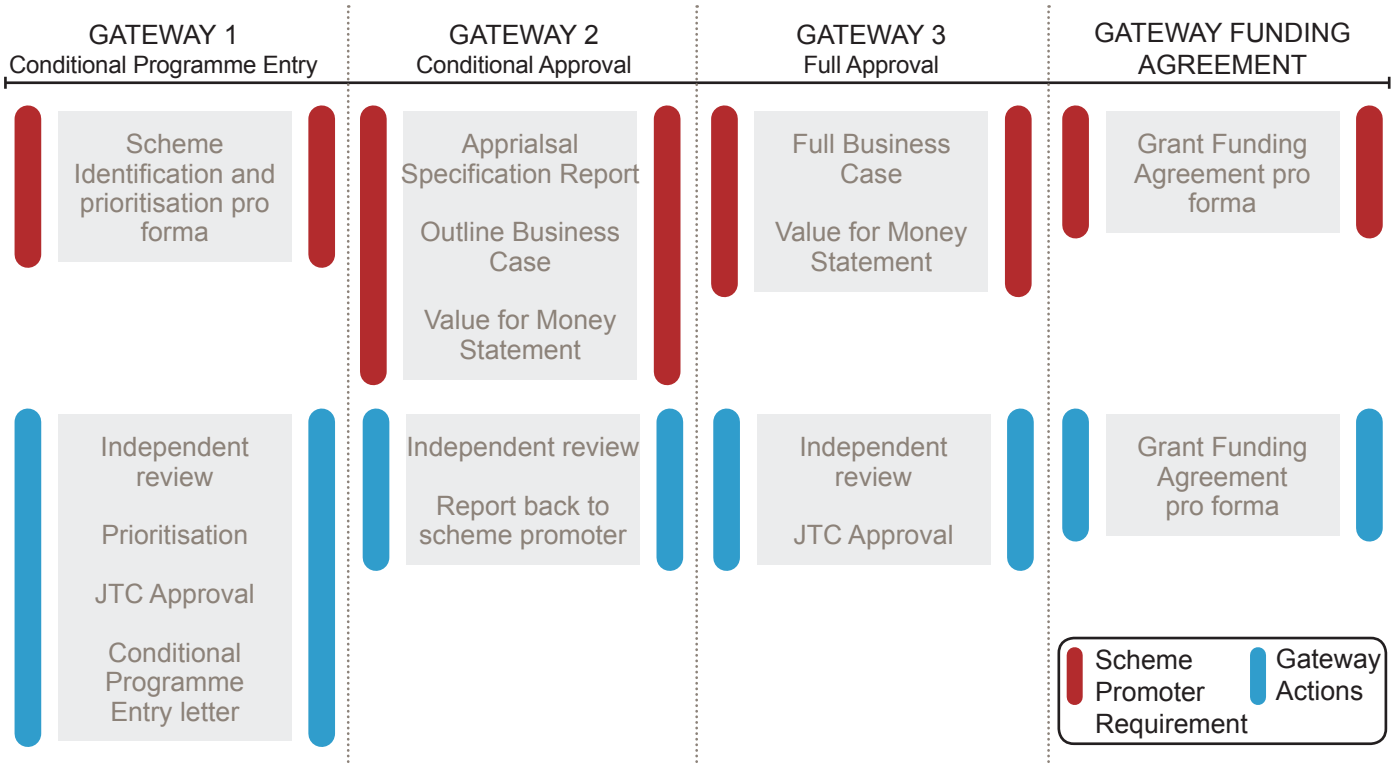
6.24 The funding devolved to the region through TCF for capital transport investment is likely to be considerable – our capital bid envisages that sum of £152 million will be devolved to the region in our medium cost scenario. The presence of a comprehensive, consistent and reliable assurance framework to guide the delivery of that programme is therefore essential.

6.25 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. Indeed, we have already tailored parts of the LGF Assurance Framework to prepare funding agreements for our TCF Tranche 1 schemes.

6.26 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 17** below.

6.27 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.

Figure 17 Overview of Project Assurance Framework



6.28 For the Tranche 2 programme submitted in this draft SOBC, the sifting exercise means that they are likely to comply with the requirements of Gateway 1 shown on the above figure. This will be confirmed once the assurance framework is up and running, prior to schemes moving on to Gateways 2 and 3 that lead towards the completion of a grant funding agreement.

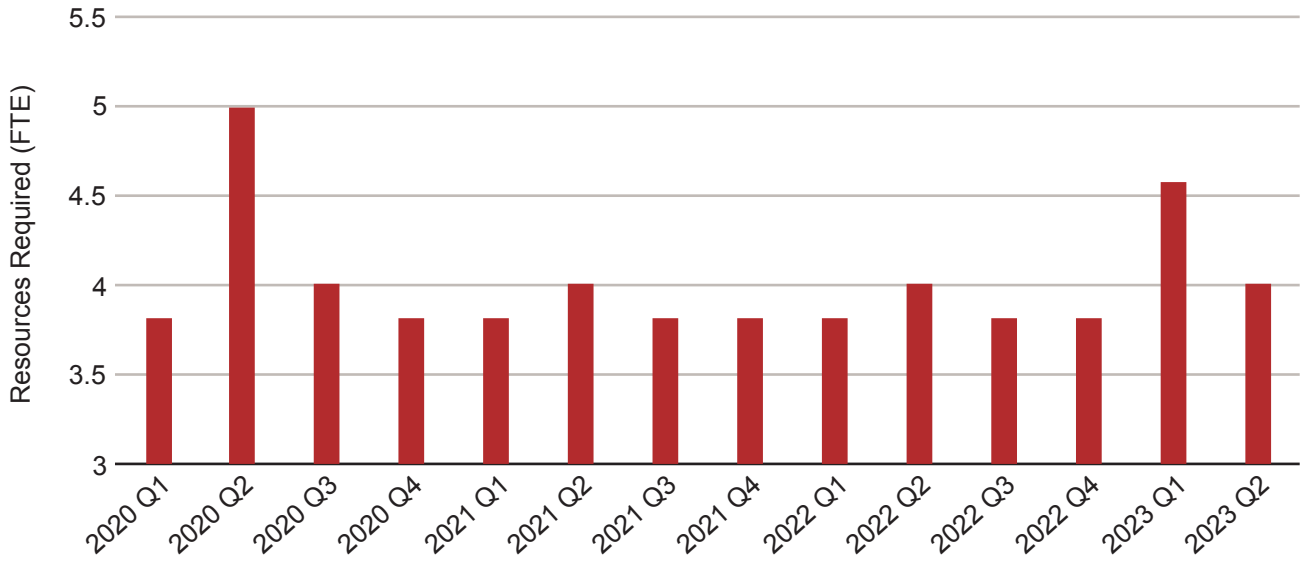
6.29 However it is possible that some schemes may eventually not proceed through this TCF Tranche 2 programme – for instance because they can be funded by another source that emerges unexpectedly, or because they are unable to be delivered within the window of TCF funding. Other schemes may have a lower 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.

6.30 Compliance with the assurance framework will be monitored by the Project Delivery Team described in the Governance section of this management case. That team 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 down and final reporting to DfT is being completed.

6.31 The profile of workload over the three year delivery programme for Tranche 2 is illustrated in **Figure 18** below.

6.32 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 WebTAG and those schemes will not be subject to our North East Transport Assurance Framework.

Figure 18 Project Delivery Team Resource Input



Communications Strategy

6.33 An outline communications strategy for the programme has been developed to which further detail will be added in the coming months. Incorporating a developing stakeholder engagement plan for deployment at a regional level, the strategy will:

– 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;

– Respond to media questions to ensure that reporting around the regional bid is accurate and is a positive reflection on the Government's industrial strategy and promotes use of the schemes once built to maximise benefits;

– Promote understanding and the benefits of the bid, its positive potential for region's economy, environment and communities, and address technical and deliverability questions amongst stakeholders;

– Recruit active bid advocates, who in turn can promote the benefits and opportunities presented by the schemes so that they can be enthusiastically adopted and utilised to best potential by the region to maximise realisation of benefits; and

– Produce and provide briefing to stakeholders such as national politicians and members of the North East LEP board who require bespoke styles of briefing around the bid aligned to their needs.

6.34 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;

– professional institutes and think tanks;

– special interest groups in the transport arena; and

– transport operators and delivery partners, including Network Rail.

6.35 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 draft SOBC.

6.36 Looking further forward, a communications plan will be developed to support the delivery of the devolved programme funded by DfT. A communications officer resource will be available to the Regional Transport Team's TCF Programme Delivery resource to co-ordinate this plan.

6.37 We will continue to engage with internal stakeholders through formal avenues, including Heads of Transport Group, Economic Directors, Chief Executives and the Joint Transport Committee. We will continue to work closely with our delivery partners, our seven Local Authorities, Nexus and Intu, in respect of developing the programme in detail and beyond this during delivery.

6.38 To date, lines of communication and relationships have been built through scheme 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.

6.39 We will agree on lines to take, media response, timings and methods of communication to best deliver key message. Proactive communications including a press release around the bid submission are likely to be included around the November submission. Milestones for review will be included within the project plan. Communication will be reviewed as a regular item on the risk register and progress meetings and project specific risks reviewed with scheme promoters.

6.40 Throughout detailed stakeholder and communications strategy we will seek to mitigate risk and improve customer experience. We will seek to draw on the expertise of partners in developing this strategy, exploring existing mechanisms, for example in identifying a coherent complaint handling process, e.g. Passenger Focus or similar, customer satisfaction surveys, customer panels, online forms and face-to-face workshops and events.

6.41 The successful implementation of this 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.

6.42 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.

6.43 All projects and programmes are subject to risk and opportunity. The objective of the risk management strategy is to minimise the impact of risks, whilst allowing maximum advantage to be taken of any opportunities. The earlier that risk management is applied to a project, the more opportunity there is to influence the outcome.

6.44 Identification of project risks is the first stage in the risk management process. There are numerous different techniques available to identify risks, for example brainstorming, questionnaires, consulting with stakeholders or reviewing common risks from other projects. The identification phase of risk management supports in populating and collating relevant risks to input in the risk register.

6.45 The primary output of the risk management strategy and process is the Risk Register- shown in Appendix Q. The populated risk register begins with programme delivery risks, followed by programme bid and development risks. The risk register seeks to identify and records risks, identify potential mitigation to eliminate or reduce risk and allocate or transfer 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. The Risk Register is a live document throughout the project and is regularly reviewed and updated.

6.46 The terminology used within the risk register are 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 have been identified within the risk register.

6.47 Risks and Early Warning will form an agenda item on weekly progress meetings going forward as we seek to reduce the level and mitigate against identified risks- this would be the responsibility of the project manager.

Key Risks to Delivery

6.48 The key risks to delivering schemes are very wide-ranging owing to the differing complexity in the types of schemes this programme will deliver. A high-level review of the risks identified for each scheme by promoters can be found in Appendix R. This is based on all schemes included in our three cost scenarios. It captures risk in the design development stages and on-site construction phases. This has been developed based on the information provided by scheme promoters and remains work in progress. In a majority of cases, promoters have engaged with delivery partners and stakeholders at least on an informal level to determine the base risks and this will be developed in detail to submission of the final SOBC.

6.49 Many of the more developed high-value, high-risk 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.

6.50 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).

6.51 Schemes are currently at varying stages of design development presenting varying degrees of risk. For example, Sunderland Central Station Redevelopment is at GRIP 3 Stage Gate stage. The promoter has evidenced this with a robust cost report providing more certainty on the deliverability of this proposal.

6.52 Marginal risk items such as in obtaining planning consent, securing match funding have been mitigated as far as possible thus far. As part of the prioritisation process in building the three cost scenarios, schemes deemed too high risk due to those marginal threats were discounted and identified as future pipeline projects.

6.53 As the final SOBC develops risk levels will be revisited with scheme promoters and where appropriate costed risk registers developed to apportion cost to the specific risk. If risk level is elevated to an unacceptable level and a project is no longer deliverable against the DfT objectives then this project will be withdrawn from the programme.

6.54 Assurances will be sought throughout the next stage that changes to scope will not impact significantly on the objectives of the programme or deliverability. A change control processes will be put in place to ensure that any changes follow proper processes in respect of obtaining authorisation.

6.55 Risks identified on individual schemes that may apply more widely will be addressed at a programme level with clear lines of communication to be detailed in the Communication Strategy.

6.56 We assume 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 RTT Programme Delivery team and scheme promoters to source additional match funding or reduce costs in other ways, through redesign or reducing project scope. The Final SOBC will seek to provide assurance to DfT that key risks have been addressed so far as possible and allowances made for residual risk. Given the early stage of some projects there remains a risk to delivery and the transformational impact of the programme as a whole.

6.57 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 an outline for monitoring and evaluation that will be worked up into full detail in time for final submission.

6.58 Monitoring and evaluation is an important element of the assurance framework that we will be requiring all schemes to comply with before they are funded. Scheme promoters have already anticipated this requirement and have built monitoring proposals into their schemes where appropriate.

6.59 For infrastructure only schemes the monitoring proposals will be based on installing highway counting equipment. The data generated by these counters will be assembled by our existing central data monitoring unit, TADU (Traffic and Accident Data Unit).

6.60 For public transport schemes, rail operators, bus operators and Metro all have comprehensive monitoring processes in place that assess journey times (through AVL data), patronage and revenue. These existing monitoring sources will form the basis of evaluating the impacts of bus and rail schemes.

6.61 At a programme level, the requirement in the assurance framework for scheme promoters to implement a monitoring strategy for each scheme will ensure that a programme-level monitoring and evaluation plan can be populated with a rich source of data. This monitoring and evaluation plan will be prepared in greater detail in our final SOBC submission.

7 Summary & Appendices

7.01 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."**

7.02 Through this bid we have demonstrated the opportunity to address core challenges that face our city region whether that be economic growth and productivity levels, social and health inequalities and air quality. This bid provides the platform to have a transformational effect on the region's economic, social and environmental ecosystem, by delivering projects that improve, the quality, capacity, frequency, safety and geographical reach of our public and sustainable transport network.

7.03 We have focused on core corridors for investment and working with stakeholders have identified deliverable thematic packages of interventions which make a demonstrable impact on current and future demand for travel in our region.

7.04 Through this fund we can deliver:

– An increase in Metro and rail patronage;

– Increasing bus punctuality and arresting the decline in patronage;

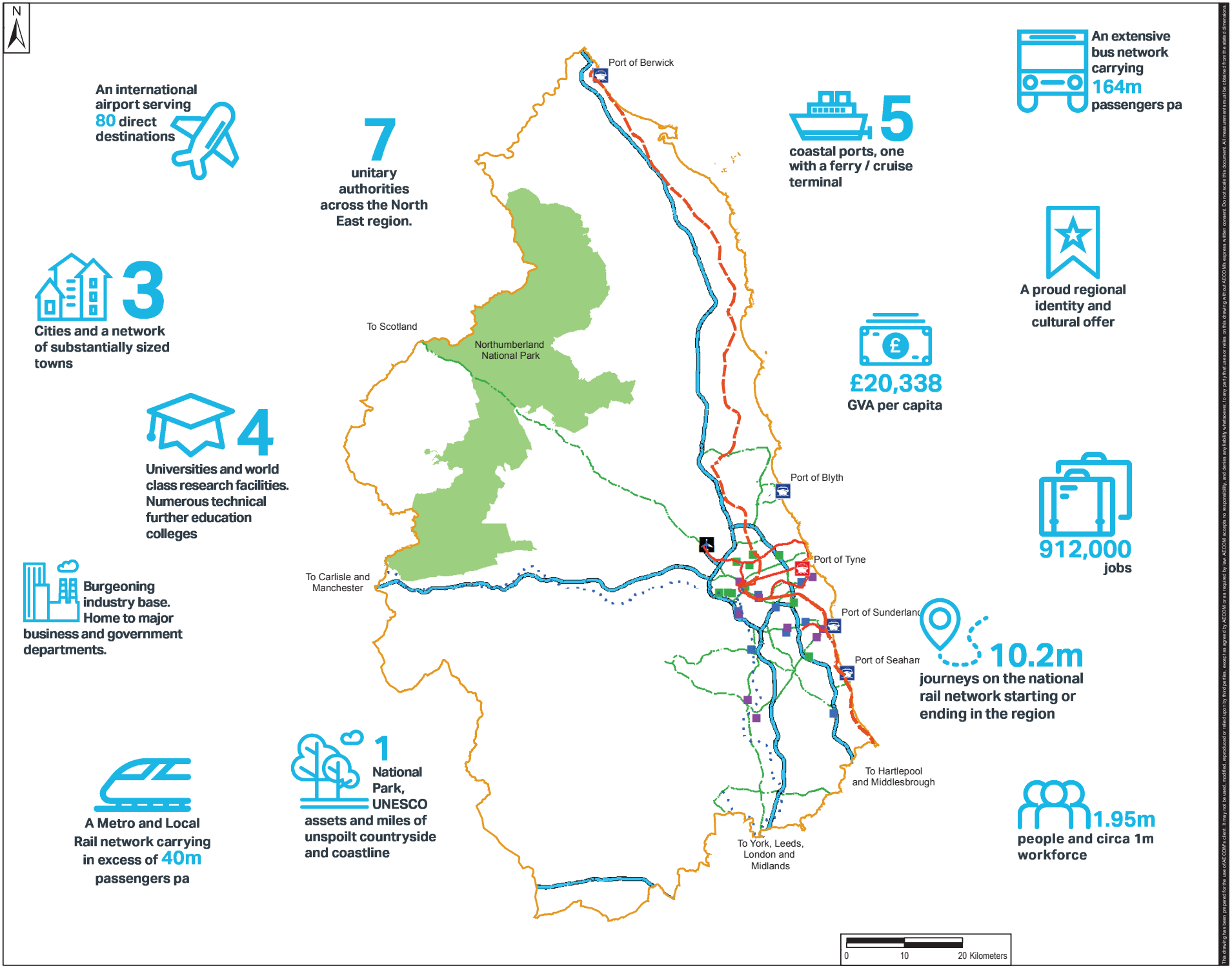
– Extending the reach of our network, supporting economic and housing growth; and

– Future proofing our transport network for new forms of mobility.

7.05 The region is committed to achieving a step change in the quality of our infrastructure which is critical to delivering so many interlinked goals, including our economic prosperity. To that end we have committed up to £70.8m of match funding for the project.

7.06 The region has a track record in managing substantial funds including our Local Growth Fund and the mechanisms in place to ensure are delivered and evaluated to meet our objectives.

APPENDIX A: NORTH EAST'S ECONOMY



neca North East Combined Authority
NORTH OF TYNE COMBINED AUTHORITY
INDUSTRIAL STRATEGY TRANSFORMING CITIES FUND

Project Title:
TRANSFORMING CITIES TRANCH2

Client:
NORTH EAST JOINT TRANSPORT COMMITEE

LEGEND
- Port
- Port of Tyne - Ferry Terminal
- Newcastle International Airport
- NELEP Boundary
- Metro Lines
- Railway Line
- East Coast Mainline
- Strategic Road Network
- Major Road Network
- National Park

LOCATION PLAN

Notes

AECOM Internal Project No:
60594462

Drawing Title:
TCF BID AREA + EXISTING NETWORK

Scale at A3: 1:596,000

Drawing No:			Rev:
APPENDIX A			001
Drawn:	**Chk'd:**	**App'd:**	**Date:**
JC	AD	MS	18/06/19

APPENDIX B: 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 Low, Medium and High bids 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 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 also drew on 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 come a long way from industrial decline and the hard knocks of the 2008 recession. 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 greater 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[1], 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[2]. 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.

[1] https://www.nexus.org.uk/sites/default/files/Nexus%20Annual%20Report%202016-17.pdf

[2] https://www.researchgate.net/profile/Madhav_Badami/publication/314580164_Transport_Reviews_What_influences_satisfaction_and_loyalty_in_public_transport_A_review_of_the_literature_What_influences_satisfaction_and_loyalty_in_public_transport_A_review_of_the_literature/links/5a5a28670f7e9b5fb3888a64/Transport-Reviews-What-influences-satisfaction-and-loyalty-in-public-transport-A-review-of-the-literature-What-influences-satisfaction-and-loyalty-in-public-transport-A-review-of-the-literature.pdf

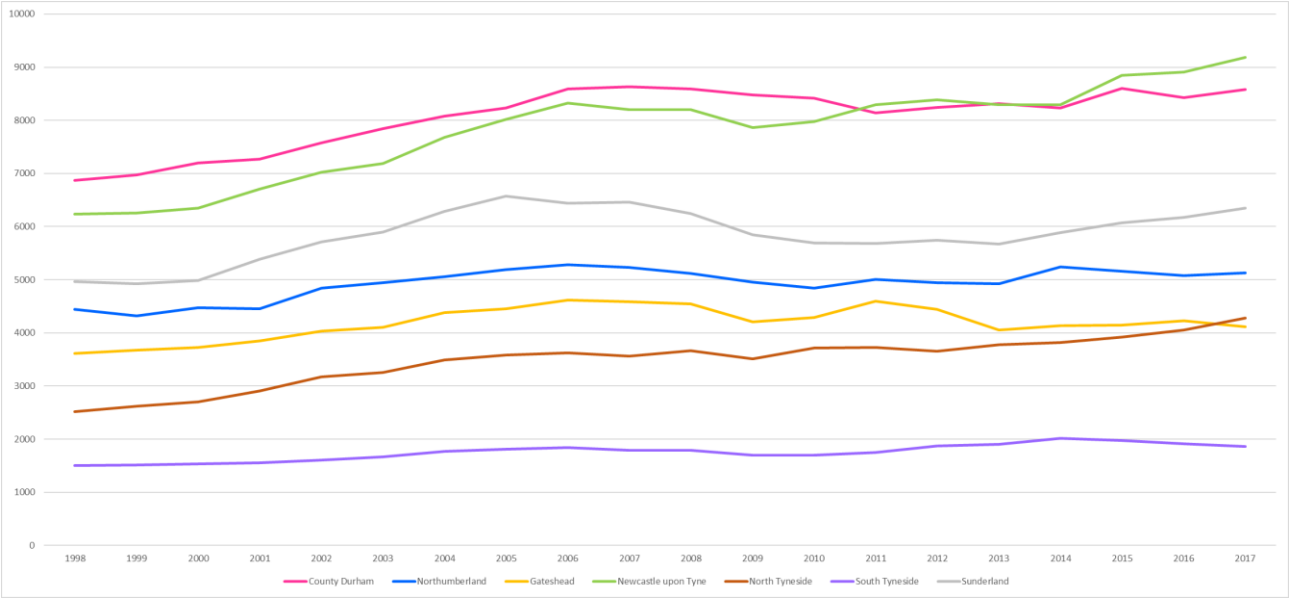


Figure 1: Regional gross value added (balanced), North East local authorities: chained volume measures in 2016 pounds, 1998 to 2017. Source: ONS[3]

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[4]. 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 2).

[3] https://www.ons.gov.uk/economy/grossvalueaddedgva/datasets/regionalgrossvalueaddedbalancedlocalauthoritiesbynuts1region
[4] https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/labourproductivity/articles/regionalandsubregionalproductivity-intheuk/february2019#results-for-nuts1-regions-and-countries

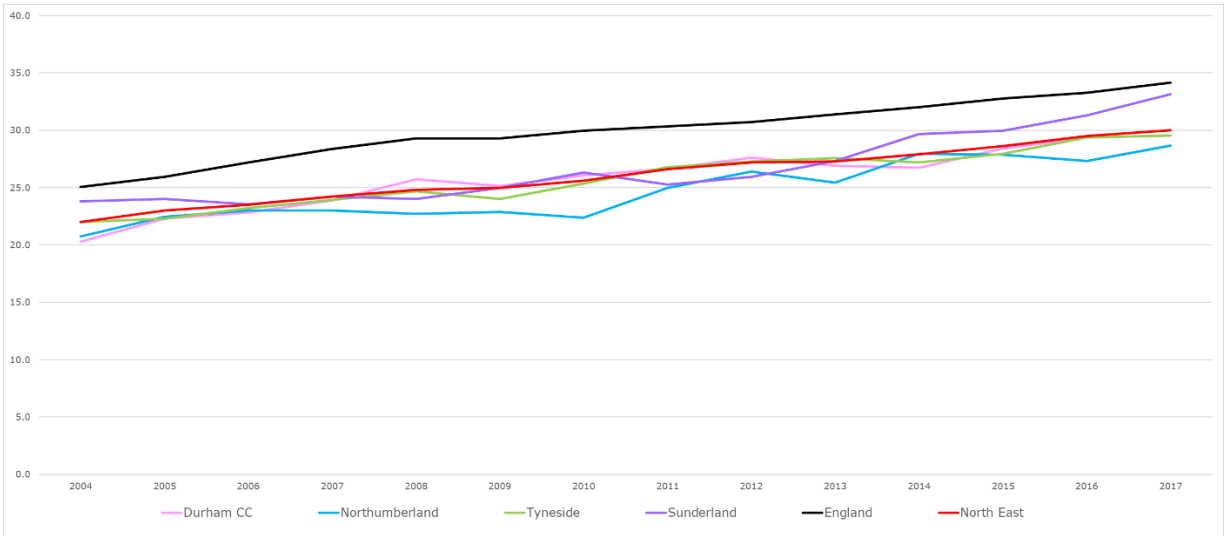


Figure 2: Nominal (unsmoothed) GVA per hour worked (£), NECA area NUTS 3 subregions, 2004 – 2017. Source: ONS[5]

The North East Strategic Economic Plan

The first Strategic Economic Plan for the North East was produced in 2014. Two major revisions, published in 2016 and early 2019[6], 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 match North East economic performance with that of the rest of England outside London. This will involve halving the gap in private sector density by half, the gap in the employment rate among working-age people, the gap in economic activity for the same age group, and – vitally – 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 digital transformation, business growth, innovation, skills and employment 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

[5] https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/labourproductivity/articles/regionalandsubregionalproductivity-intheuk/february2019#results-for-nuts1-regions-and-countries
[6] https://www.nelep.co.uk/wp-content/uploads/2019/02/north-east-strategic-economic-plan-jan-2019-final.pdf

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[7]. 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 accompanying Future Mobility Zone bid opens up the opportunity to facilitate journey planning through good quality on-board travel information.

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 IAMP and 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.

[7] https://www.nelep.co.uk/wp-content/uploads/2019/02/north-east-strategic-economic-plan-jan-2019-final.pdf

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[8]:

- 25 per cent of men and 12 per cent of women cycle once a week (the UK average is 4 per cent[9])
- 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.

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.

[8] https://www.sustrans.org.uk/bikelifenewcastle
[9] https://www.cyclinguk.org/statistics

- *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[10]. 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[11].

[10] https://www.nelep.co.uk/projects?spg_funding-profile%5B%5D=local-growth-fund&set_order=desc
[11] https://www.nelep.co.uk/projects/local-sustainable-transport-fund

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[12], 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 State of the Region reports set 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 2019). The region is well placed to help address all of the Grand Challenges identified in the government's Industrial Strategy (NELEP 2019). 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

[12] https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/509587/value-of-cycling.pdf

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 1 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.

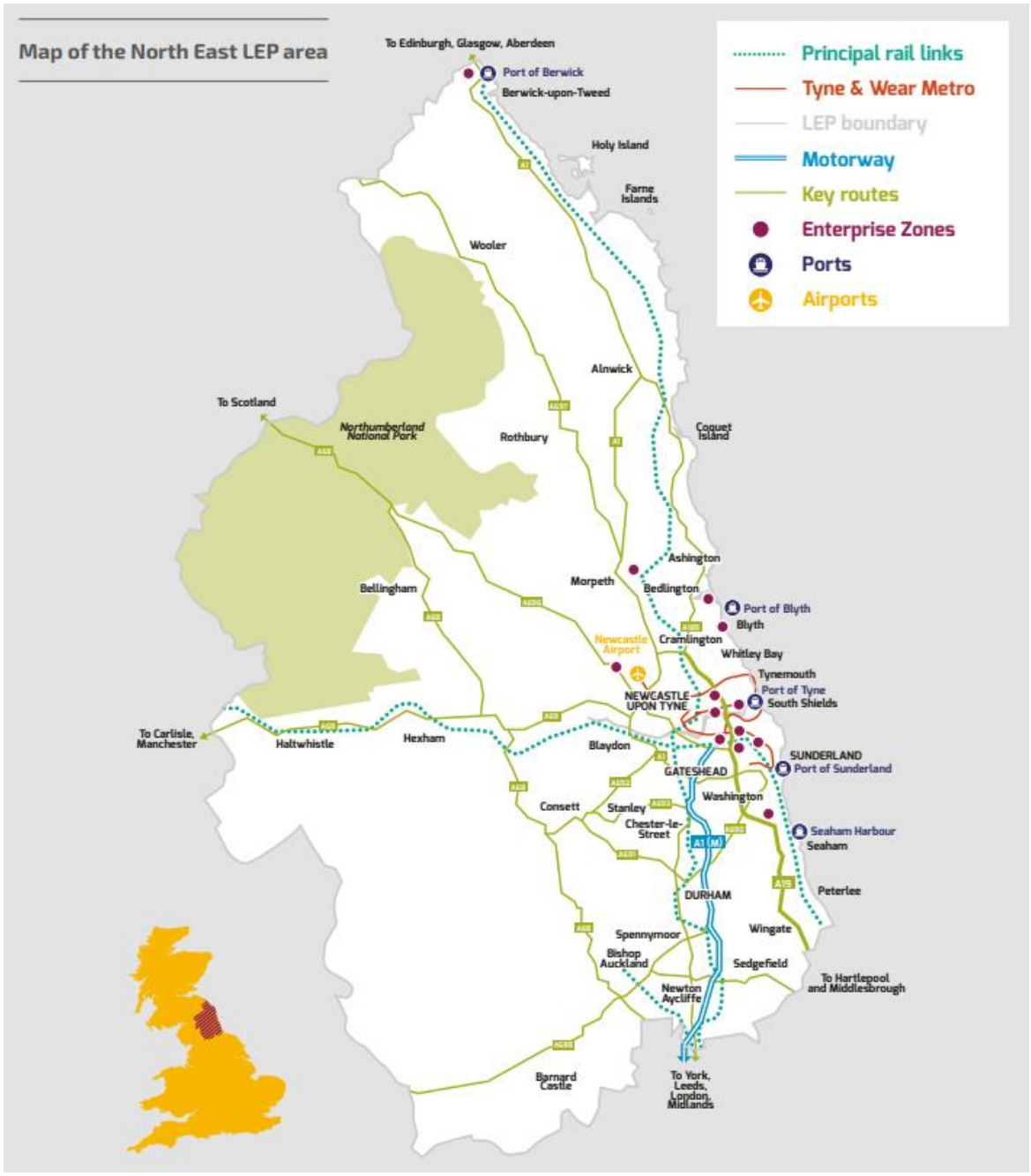


Figure 31: The North East LEP area and its key assets

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 IAMP and 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[13].
- 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 Durham Tees Valley 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 1 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

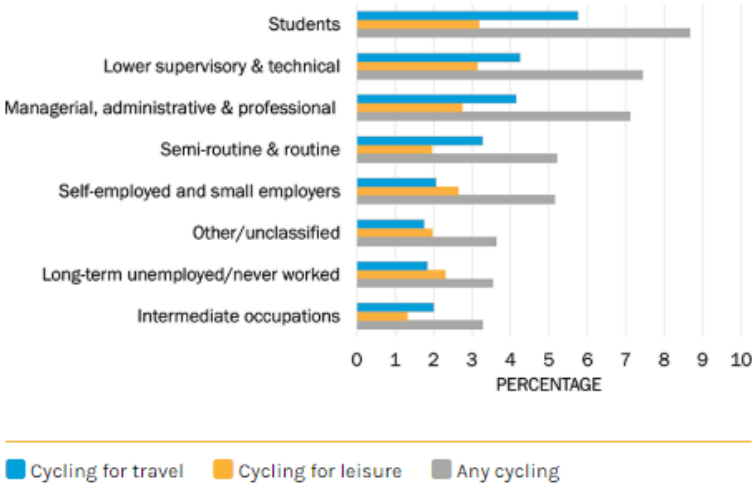
[13] (2017 annual report)

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[14] Buses are heavily used by lower-income workers and jobseekers: research 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; that jobseekers are more than twice as likely to use buses as the rest of the population; and a survey found that 58 per cent of unemployed people had relied on the bus when they were last in work (Mackie et al 2012; PTEG 2015; Johnson et al 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.



[14] http://shura.shu.ac.uk/16162/1/jrf-addressing-transport-barriers.pdf

Figure 4: Use of cycling by different demographic groups[15]

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.

[15] https://www.cyclinguk.org/statistics

Site	Scheme [s]	Theme[s]				Sector[s]				Notes
		Ideas	Jobs mix	Business Env't	External & export	Digital	Adv. man.	Health sci.	Energy	
Newcastle Helix	All city schemes	❍			❍			❍		Health sciences innovation focus
Royal Victoria Infirmary, Newcastle	All city schemes	❍	❍					❍		
Freeman Hospital, 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) NE03 (Newcastle-North Tyneside strategic cycling infrastructure)	❍	❍					❍		
International Advanced Manufacturing Park (IAMP)	NX04 (Strategic park and ride sites - Follingsby park and ride links to IAMP and Callerton Parkway) GA11 (2, bus lane, Gateshead)	❍		❍	❍		❍			International location for advanced manufacturing and EU scale supply chain industries, supported by NELEP, South Tyneside and Sunderland Councils. Aim is to create 7000 new jobs over 15 years, building on current and future investment (£400m to date)
South Nelson Industrial Estate & Atley Business Park	NO01 (Northumberland Line)	❍					❍			7000 jobs in the area around these sites; 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	
Queen Elizabeth Hospital, Gateshead	GA09 (Great North Cycleway - A167 Birtley to Eighton Lodge)	❍	❍					❍		
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)	❍	❍							Flexible small business spaces

Site	Scheme [s]	Ideas				Jobs mix				Business Env't Ideas
		Ideas	Jobs mix	Business Env't	External & export	Digital	Adv. man.	Health sci.	Energy	
Washington Business Centre	GA11 (2, bus lane, Gateshead)		❍	❍		❍	❍			Set up for smaller and growing companies, with flexible provision
Evolve Business Centre	GA13 (Keelmans Way improvements)	❍		❍	❍	❍	❍			State-of-the-art business centre with incubator spaces for start-ups and large bases for established multinationals; aim is to foster collaboration & innovation
Viking Industrial Park	ST08a&b (Bus corridor improvements, South Tyneside) ST04 (Healthier Metro Stations) 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)		❍	❍			❍			Diverse industrial and trading estate; home to TEDCO business support which has helped 3600 SMEs access finance, creating 1350 additional jobs

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)	❍	❍					❍		

Table 1: Schemes and key sites for employment

Site	Scheme [s]	Theme[s]				Sector[s]				Notes
		Ideas	Jobs mix	Business Env't	External & export	Digital	Adv. man.	Health sci.	Energy	
A19 Corridor (Sunderland)		❍		❍	❍		❍			The UK's first designated area for Ultra Low Carbon Vehicles, this site is close to the UK home of Nissan. The sites located here focus on low carbon vehicles and advanced manufacturing, and offer proximity to global automotive supply chain and skills expertise
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
Swans Offshore Energy Park	NX2&03 NE03 (Newcastle-North Tyneside strategic cycling infrastructure)	❍	❍		❍				❍	EZ: state-of-the-art facility for offshore energy, subsea and marine firms

Site	Scheme [s]	Theme[s]				Sector[s]				Notes
		Ideas	Jobs mix	Business Env't	External & export	Digital	Adv. man.	Health sci.	Energy	
Royal Quays Enterprise Park	NT02 (Improvements to North Shields transport hub)		❍		❍					EZ (in development): close to Port of Tyne & large retail and leisure complex
Northumberland Energy Park	NO01 (Northumberland Line)	❍							❍	EZ (in development): hub for energy distribution with major assets
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 IAMP and 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 IAMP and 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	
Ashwood 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
Holborn Riverside Quarter	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) ST04 (Healthier Metro Stations) ST08a&b (Bus corridor improvements, South Tyneside)		❍	❍						EZ (in development): plan to create office accommodation

Table 2: Schemes and Enterprise Zones

Notes to tables

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 Weir 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, over-crowding on Metro and reliability of the existing fleet are growing issues, as is station quality.

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 regions 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 3), with particularly strong growth in the proportion of the population with high qualifications in the period between 2012 and 2017:

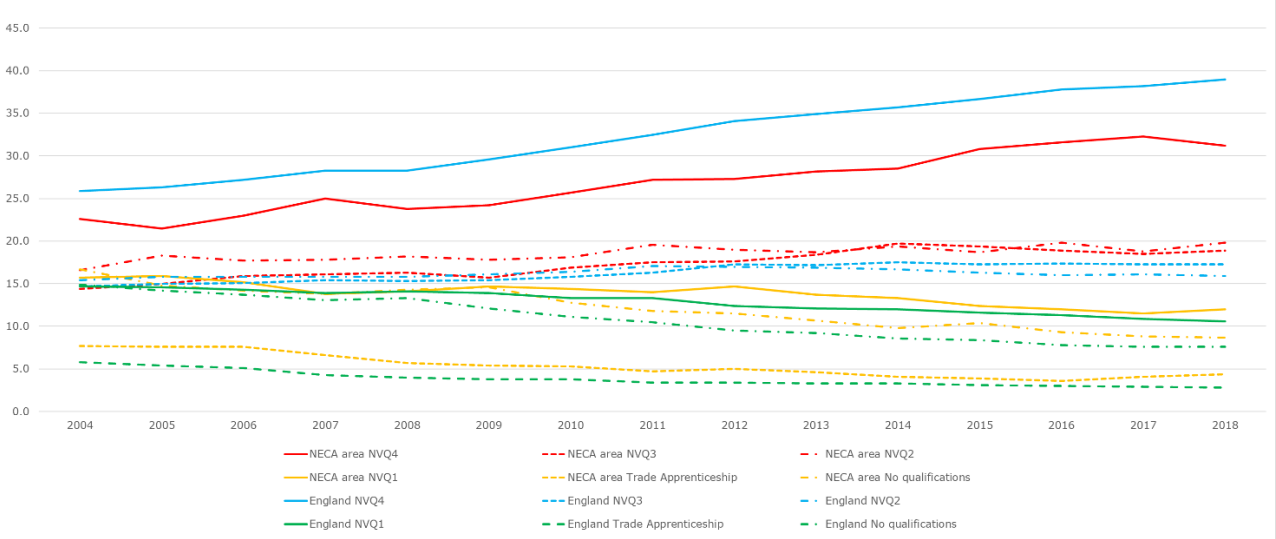


Figure 3: Proportion of population aged 16-64 with each type of qualification as their highest qualification level, NECA area and England, 2004-2018. Source: NomisWeb

Qualifications rates in the NECA area are markedly higher for younger residents than for older ones (Figure 4). 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 NECA 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 NECA area is to remain competitive. The rate of apprenticeship qualification is higher for all age groups.

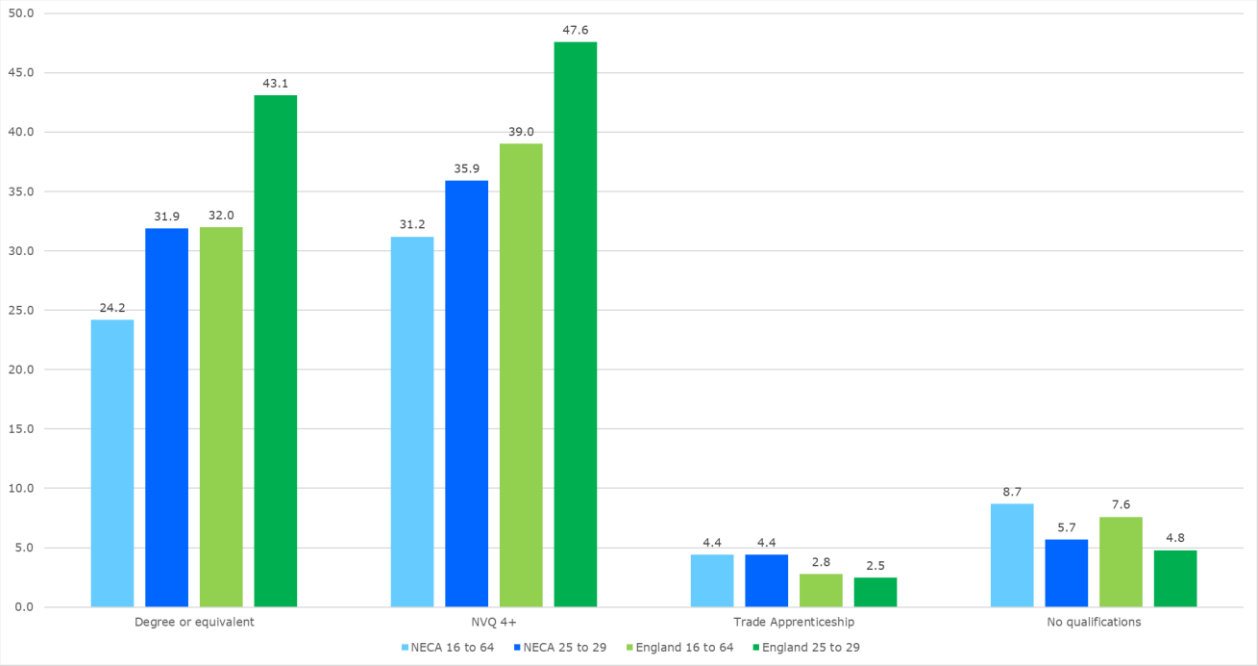


Figure 4: Proportion of population aged 16-64 and aged 25-29 with 'high' qualifications, Trade Apprenticeships and no qualifications, NECA area and England, 2018. Source: NomisWeb

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.

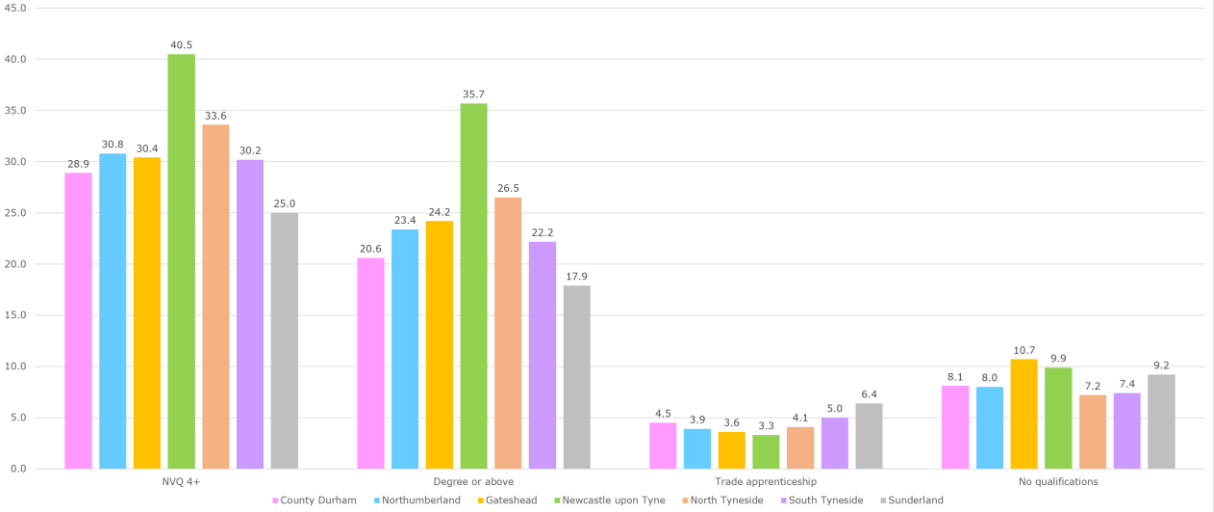


Figure 5: Proportion of population aged 16-64 and aged 25-29 with 'high' qualifications, Trade Apprenticeships and no qualifications, North East Local Authority areas, 2018. Source: NomisWeb

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 6). 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 7).

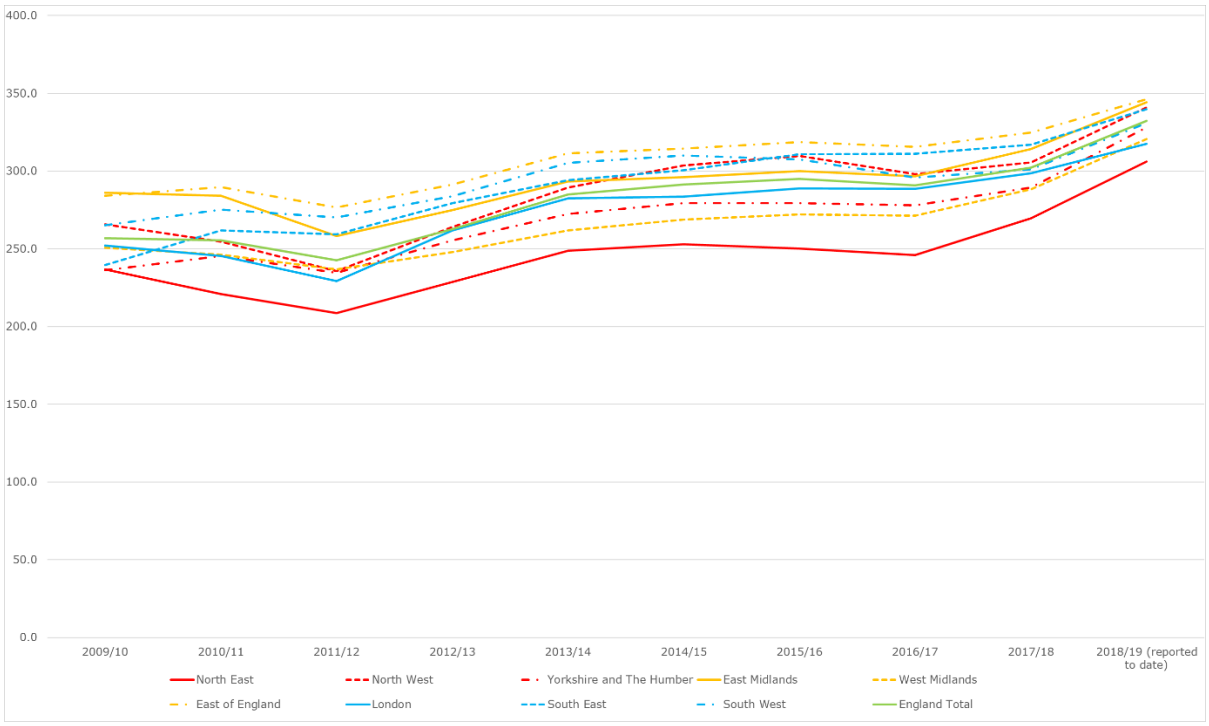


Figure 6: Workplaces employing apprentices, per 1000 apprentices, English regions. Source: DfE[16] (IPPR North calculations; data for 2018/19 are as reported at April 2019).

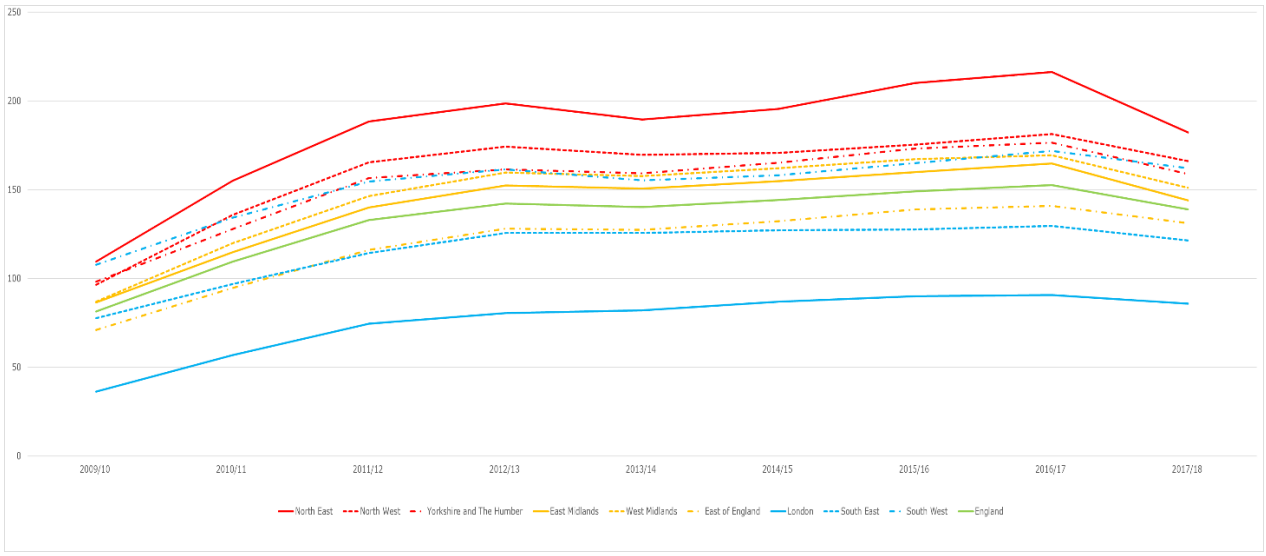


Figure 7: Participation in apprenticeship programmes, per resident aged 16-24, English regions. Source: DfE[17] and NomisWeb (IPPR North calculations; data for 2018/19 are as reported at April 2019). *Note that some apprentices are aged over 24 so these figures do not indicate the proportion of the population in that age group who are apprentices; the aim is to give a rough indication of participation rates in relation to the general population.*

[16] https://www.gov.uk/government/statistical-data-sets/fe-data-library-apprenticeships
[17] https://www.gov.uk/government/statistical-data-sets/fe-data-library-apprenticeships

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.

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)[18]. Physical activity increases as a result 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 users[19].

The health benefits of cycling are well-known, and the physical activity associated with regular cycle commuting has a substantial impact on health[20]. 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 investment in large-scale cycling networks both encourages the use of bikes as a form of transport *and* improves population health as a result, due to increased physical activity levels[21]. The proposed programme will help the North East to share in these benefits.

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

[18] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5349496/
[19] https://academic.oup.com/jpubhealth/advance-article-abstract/doi/10.1093/pubmed/fdy099/5035071
[20] https://www.tandfonline.com/doi/full/10.1080/01441647.2015.1057877
[21] https://ehp.niehs.nih.gov/doi/abs/10.1289/isee.2016.3566

around £121 annually[22] 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[23]. 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[24].

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[25] Sustainable transport and 'walkable' environments help to reduce social isolation and build social cohesion and capital, because of the social interactions that they facilitate[26]. 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[27]. and 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[28].

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

[22] http://www.avere-france.org/Uploads/Documents/152879228236476690cc516267e8de491a2937d48b-The_health_costs_of_air_pollution_from_cars_and_vans_20180518.pdf
[23] Schünemann J, Bloom D, Canning D, Kotschy R and Prettner K (2018), Health and Economic Growth: Reconciling the Micro and Macro Evidence, Beiträge zur Jahrestagung des Vereins für Socialpolitik 2018: Digitale Wirtschaft - Session: Development Economics III, No, G14-V2, ZBW - Leibniz-Informationszentrum Wirtschaft, Kiel, Hamburg; Bloom D and Canning D (2000), The health and wealth of nations, Science, 287(5456): 1207-1209; De Vol R and Bedroussian A (2007), An unhealthy America: the economic burden of chronic disease, Charting a new course to save lives and increase productivity and economic growth, Milken Institute
[24] https://journals.plos.org/plosmedicine/article?id=10.1371/journal.pmed.1002602
[25] http://eprints.staffs.ac.uk/4845/1/Zijlema%202018%20-%20NE%20and%20active%20commuting%20and%20MH.pdf
[26] http://discovery.ucl.ac.uk/1470258/8/HotM2%20ch%205%20update%202015_Post-review%20submission.pdf
[27] https://jech.bmj.com/content/72/5/361.abstract
[28] https://royalsocietypublishing.org/doi/full/10.1098/rsif.2015.0315

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 a robust FMZ proposal 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.

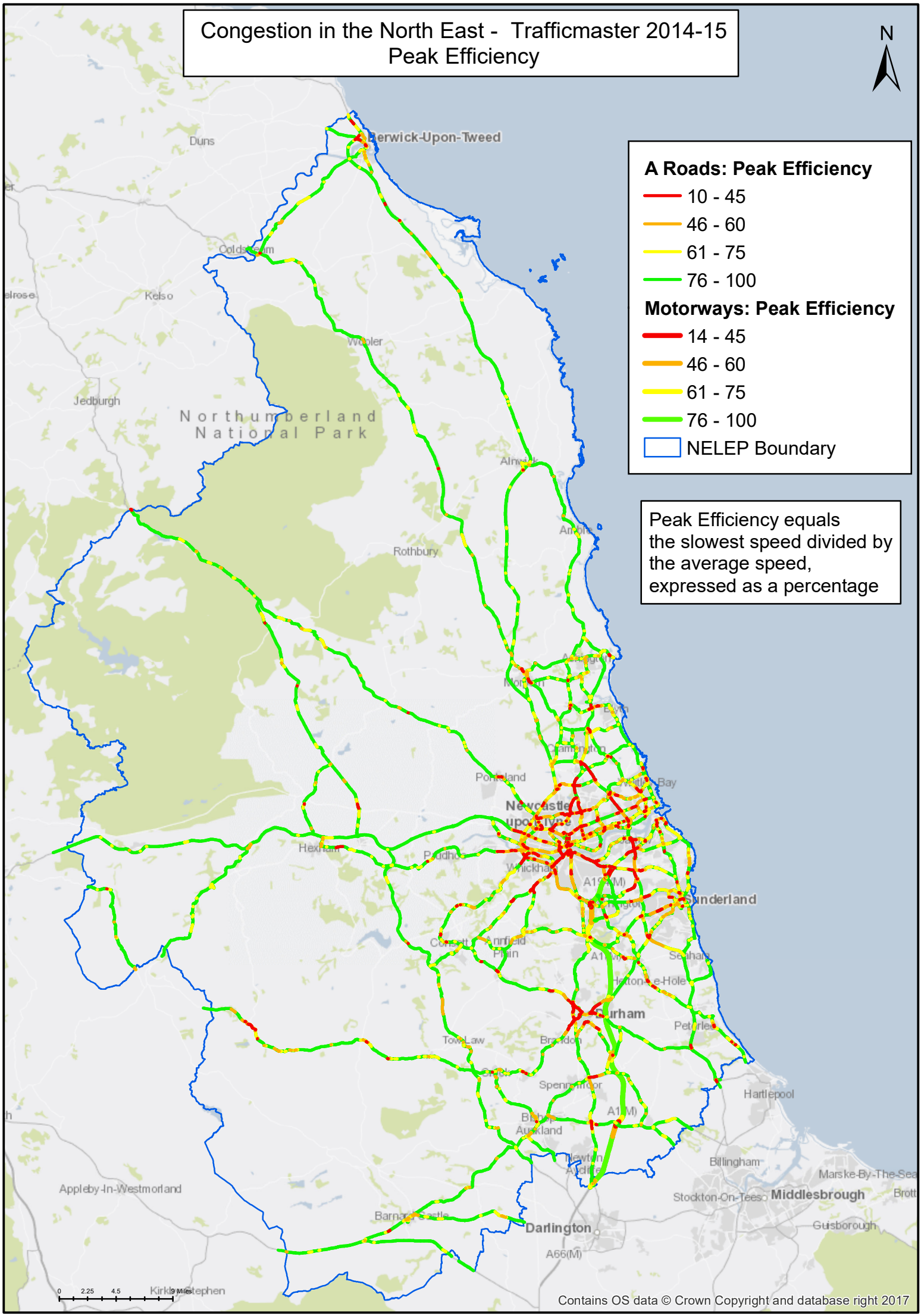
This programme of work may have a further impact on the delivery of homes in the region but this information is not available at the time of drafting.

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.

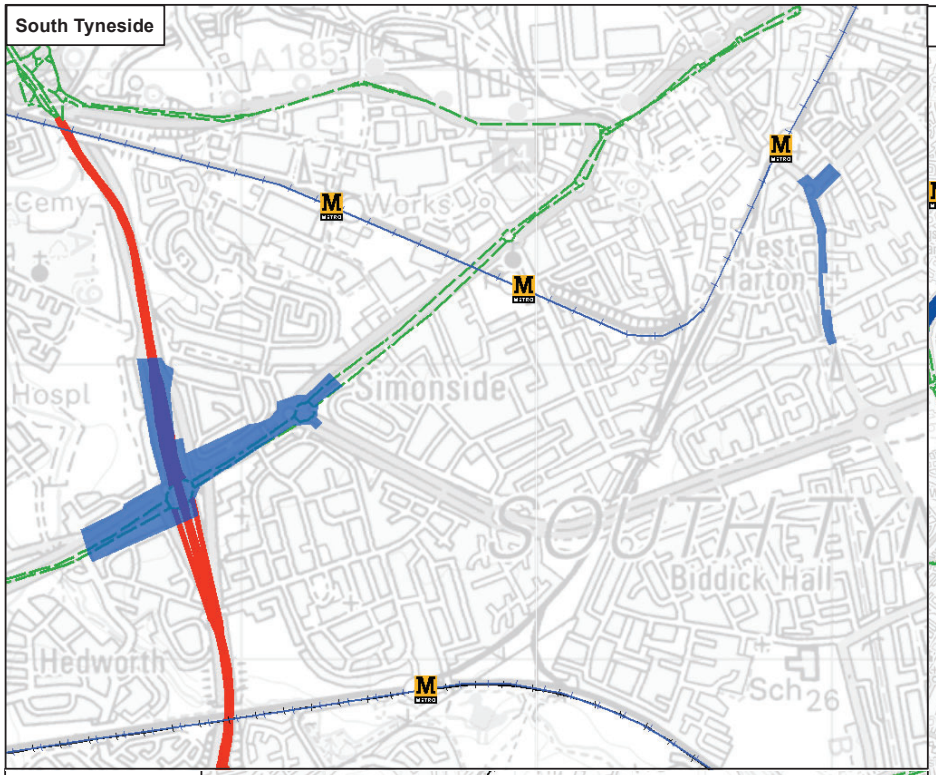
Investment in sustainable transport will help the North East to build on this track record. At present the region is creating high quality job opportunities, as shown by the success in meeting SEP objectives; it needs to connect people to these via low-carbon, low-cost transport. It needs to create attractive 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.

APPENDIX C: CONGESTION MAP FOR THE REGION

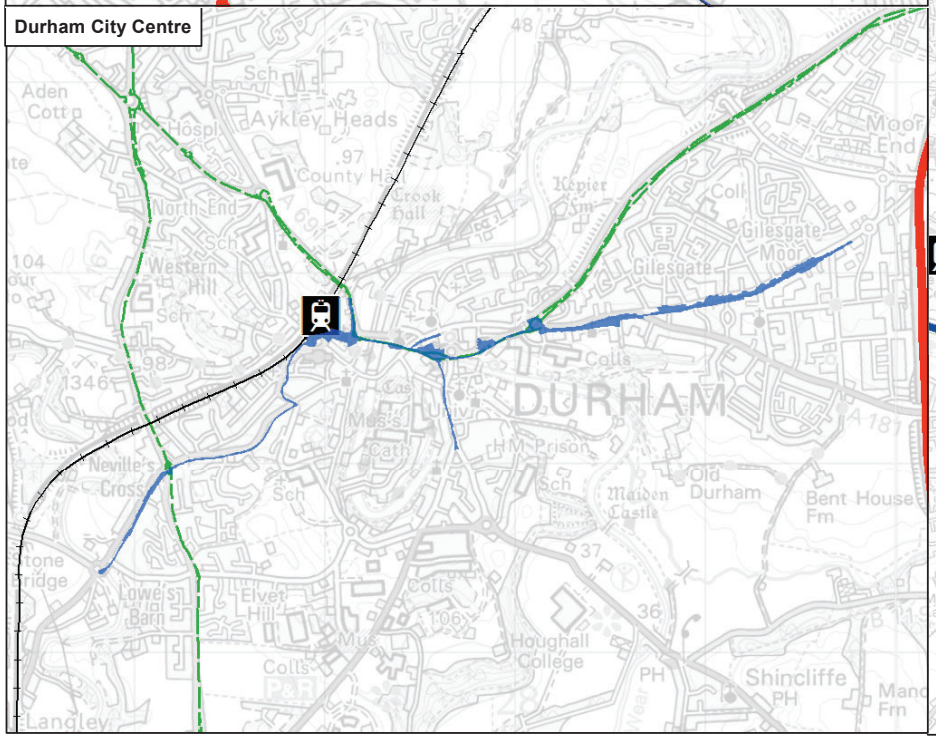

Congestion in the North East - Trafficmaster 2014-15
Peak Efficiency
N
A Roads: Peak Efficiency
10 - 45
46 - 60
61 - 75
76 - 100
Motorways: Peak Efficiency
14 - 45
46 - 60
61 - 75
76 - 100
NELEP Boundary
Peak Efficiency equals the slowest speed divided by the average speed, expressed as a percentage
Berwick-Upon-Tweed
Duns
Kelso
Jedburgh
Northumberland National Park
Rothbury
Hexham
Newcastle upon Tyne
Sunderland
Durham
Darlington
Hartlepool
Middlesbrough
Billingham
Stockton-On-Tees
Appleby-In-Westmorland
A1(M)
A66(M)
0 2.25 4.5 9 Miles
Contains OS data © Crown Copyright and database right 2017

APPENDIX D: AIR QUALITY MANAGEMENT AREA MAP

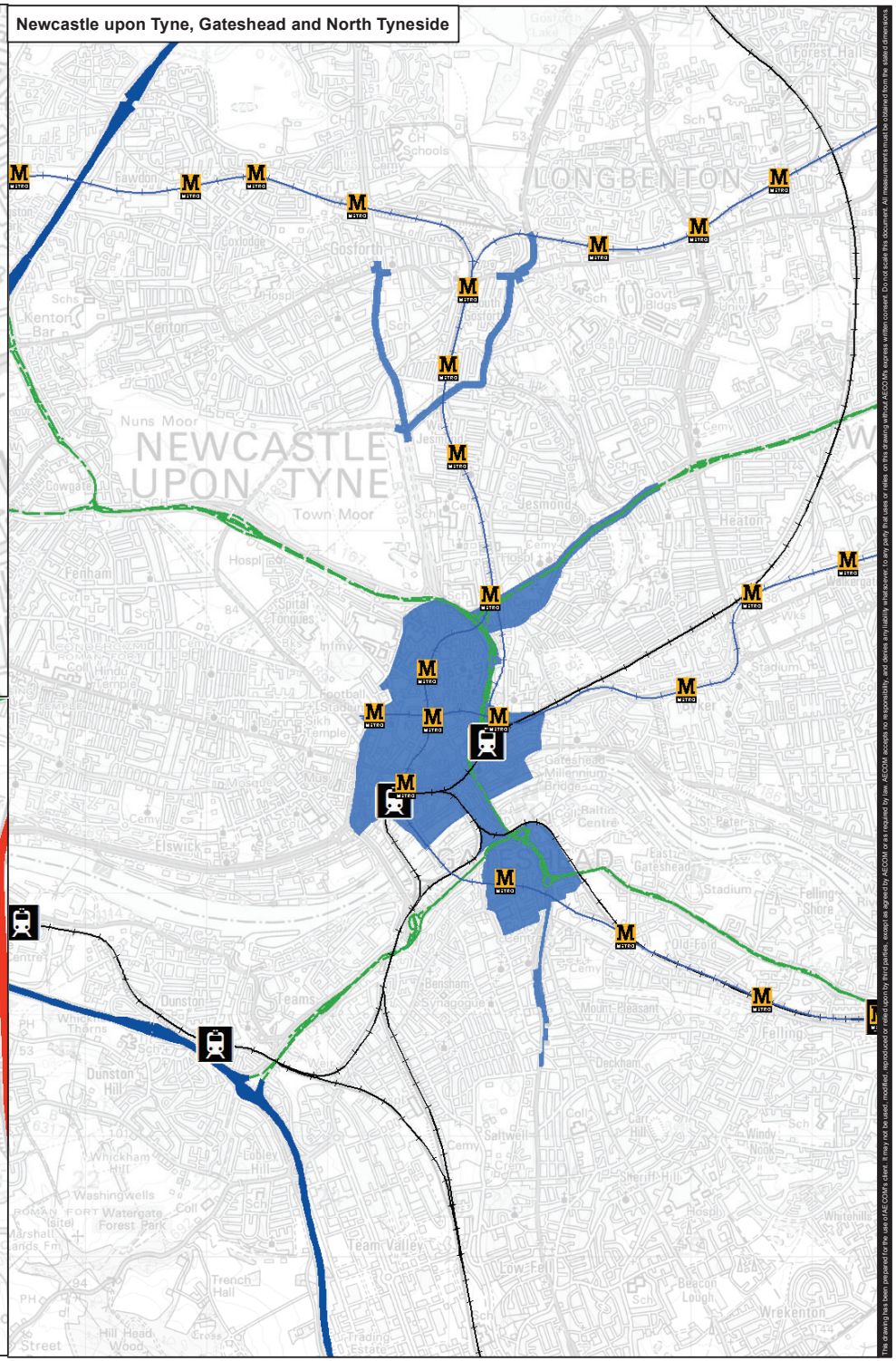
South Tyneside



Durham City Centre



Newcastle upon Tyne, Gateshead and North Tyneside



North East Combined Authority
NORTH OF TYNE COMBINED AUTHORITY

INDUSTRIAL STRATEGY
TRANSFORMING CITIES FUND

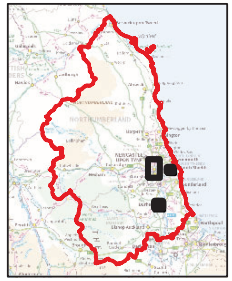
Project Title:
TRANSFORMING CITIES TRANCHE 2

Client:
NORTH EAST JOINT TRANSPORT COMMITEE

LEGEND

- North East
- NELEP Boundary
- Metro Network
- Metro Lines
- National Rail Stations
- Railway Track
- Strategic Road Network
- Major Road Network

LOCATION PLAN



Notes

Copyright:

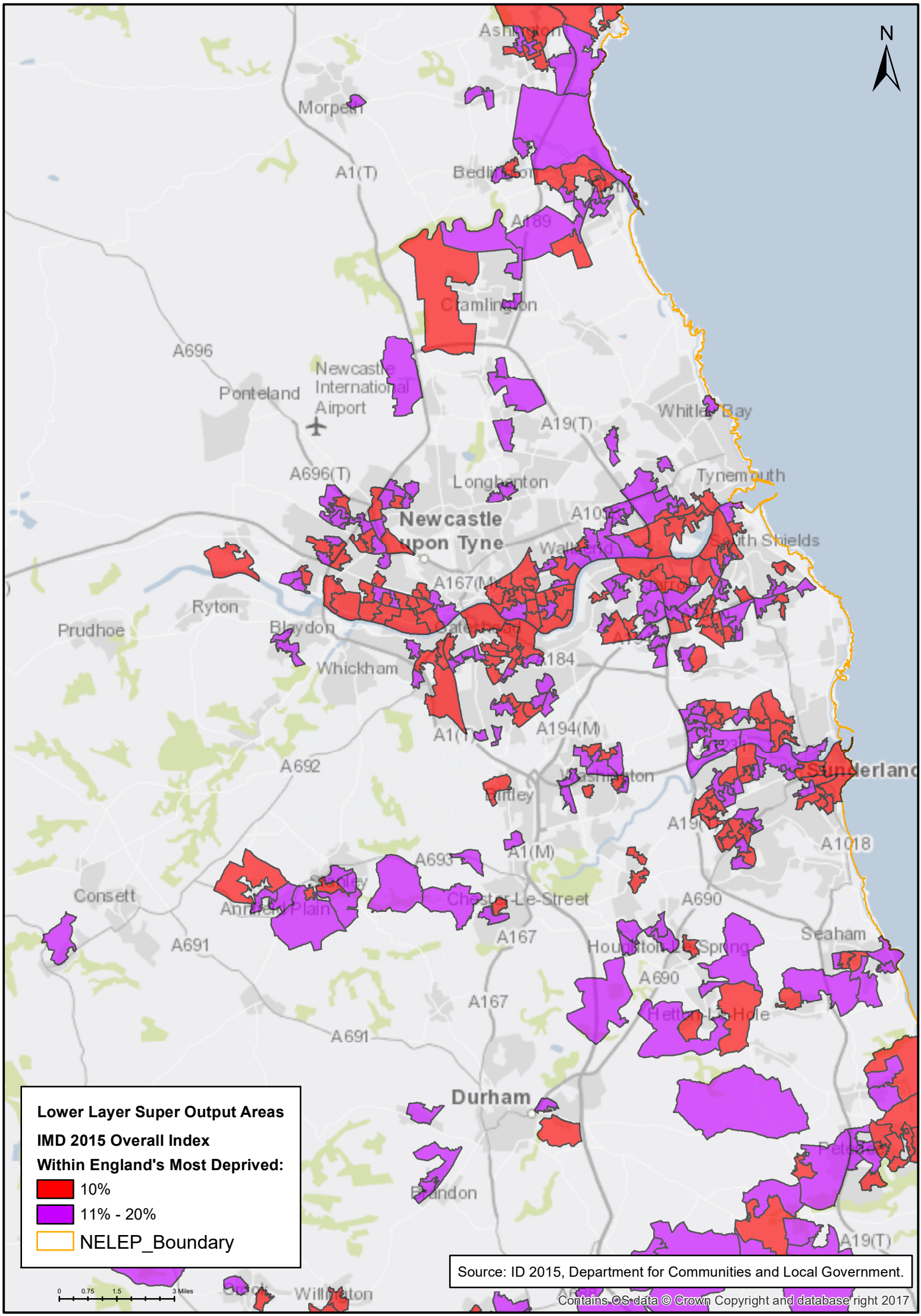
AECOM Internal Project No:
60594462

Drawing Title:
TCF BID AREA + AQMA LOCATIONS

Scale at A3: 1:40,000

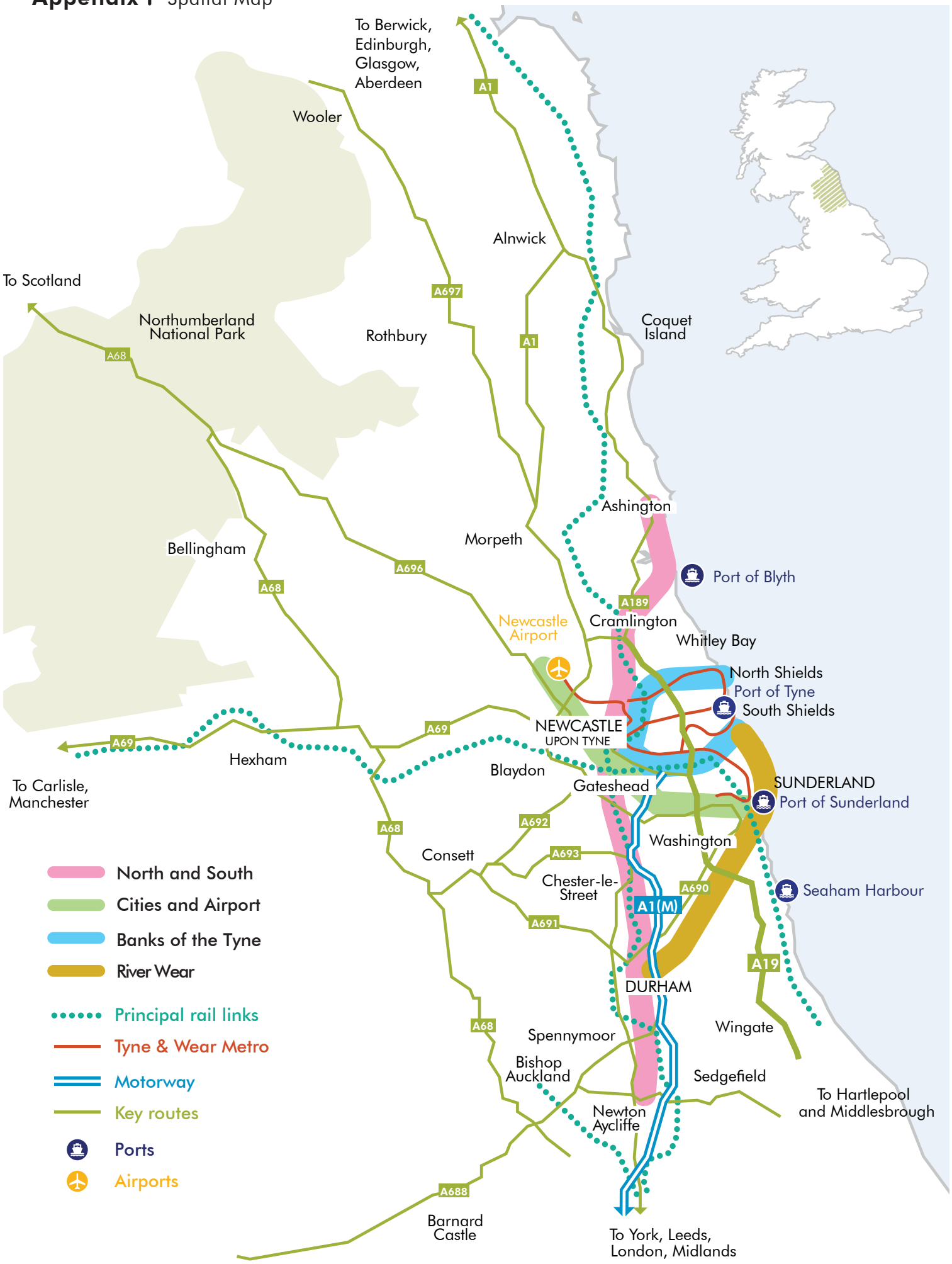
Drawing No:			Rev:
APPENDIX D			001
Drawn:	**Chk'd:**	**App'd:**	**Date:**
JC	AD	MS	18/06/19

APPENDIX E: CONCENTRATIONS OF DEPRIVATION NORTH EAST


N
Morpeth
A1(T)
Bedlington
A189
Cramlington
A696
Ponteland
Newcastle International Airport
A19(T)
Whitley Bay
A696(T)
Longbenton
Tynemouth
Newcastle upon Tyne
A167(M)
South Shields
Ryton
Prudhoe
Blaydon
Whickham
A184
A1(T)
A194(M)
A692
Washington
Sunderland
Birtley
A1(M)
A693
A1018
Consett
Chester-le-Street
A690
A691
A167
Seaham
A690
A167
A691
Durham
Willington
Lower Layer Super Output Areas
IMD 2015 Overall Index
Within England's Most Deprived:
10%
11% - 20%
NELEP_Boundary
0 0.75 1.5 3 Miles
Source: ID 2015, Department for Communities and Local Government.
Contains OS data © Crown Copyright and database right 2017

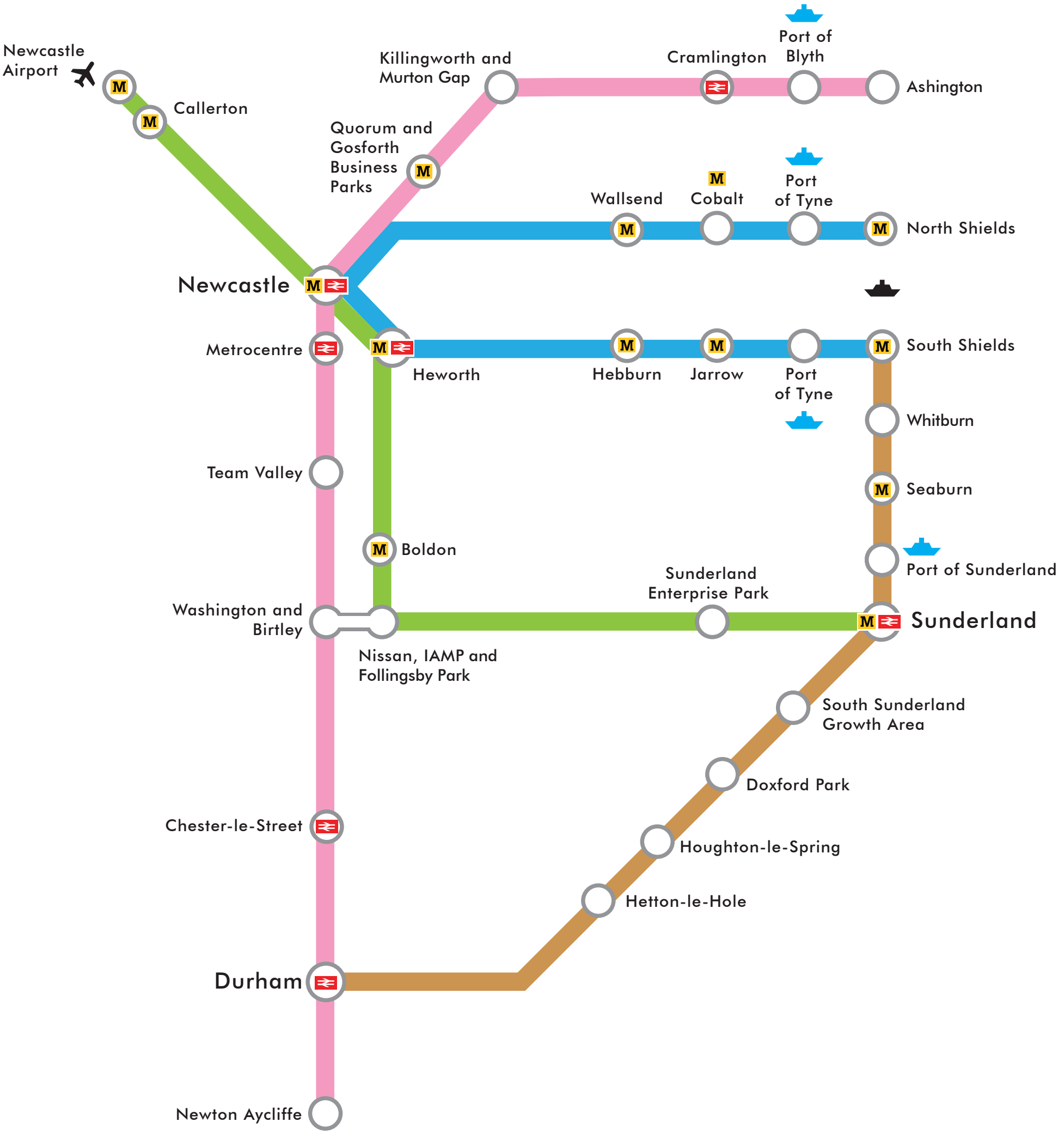
APPENDIX F: PRIORITY CORRIDORS FOR INVESTMENT – SPATIAL FORM

Appendix F Spatial Map



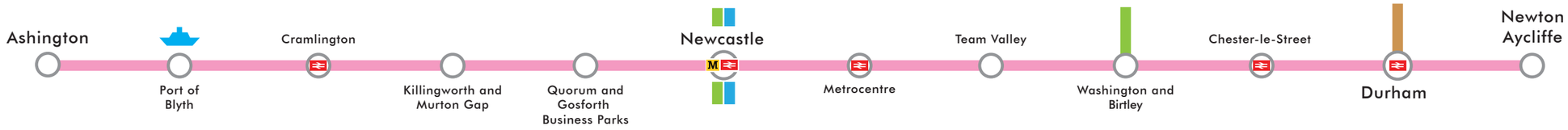
APPENDIX G: PRIORITY CORRIDORS FOR INVESTMENT – SCHEMATIC FORM

Appendix G Priority Corridors

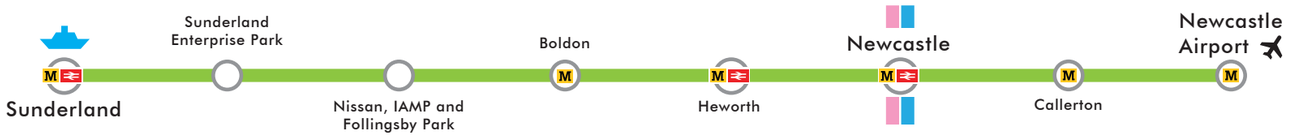


Appendix G Priority Corridors

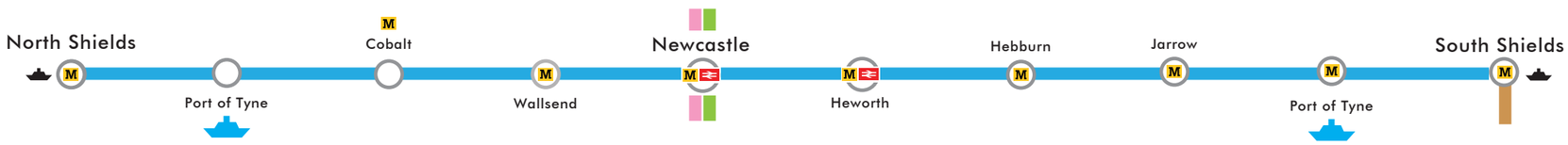
North and South



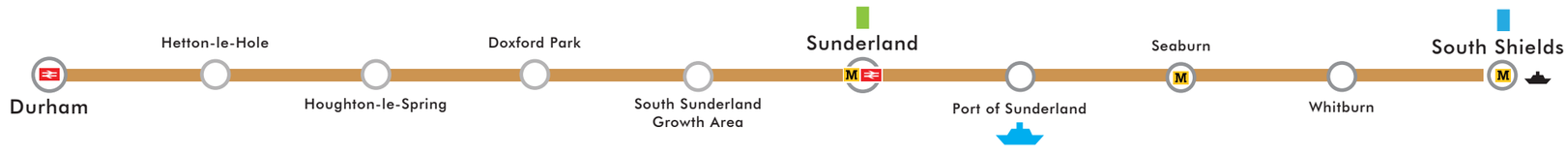
Cities - Airport

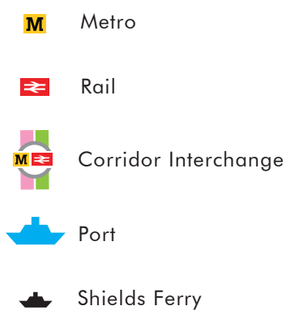


Banks of the Tyne



River Wear





APPENDIX H: ECONOMIC GROWTH POTENTIAL [TO FOLLOW]

APPENDIX I: LETTERS OF SUPPORT

intu Eldon Square

Mike Scott,
Transforming Cities Fund Project Lead,
North East Regional Transport Team,
2nd Floor NE Pavilion,
Gateshead Civic Centre,
Regent Street,
Gateshead, NE8 1HH

Wednesday 12th June 2019

Dear Mike,

Re: North East City Region - Transforming Cities Fund Tranche 2 Bid

We are writing on behalf of intu Eldon Square shopping centre to express our support for the North East City Region's draft bid to Government for capital investment into the region through the Transforming Cities Fund.

intu Eldon Square is the retail heart of Newcastle; over 4000 people work across our centre and we welcome over 36 million people through our doors each year, thus are by far one of the most popular and busiest destinations in Newcastle, playing a vital role in the city's economic output. We have invested heavily into our centre; most recently undergoing a £25m redevelopment of Grey's Quarter in 2016, bringing over 15 new restaurants to the city, helping further enhance Newcastle's evening economy.

Given our central location, intu Eldon Square does benefit from a high proportion of staff and customers who currently travel to the centre by sustainable modes. We are, however, always keen to encourage more people to consider travelling sustainably, in particular by working in partnership with other organisations and supporting funding bids such as this one. At a time when poor air quality, increasing congestion and issues surrounding public health are of local and national concern, opportunities such the Transforming Cities Fund are vital in supporting significant change in behaviours, whilst helping deliver new transport projects and infrastructure developments to ensure a vibrant future for our region.

Our sustainable travel team are continuously exploring ways of increasing levels of cycling to/from our centres and we are very proud to work closely with the various local authorities across the North East to support an uptake in cycling in the region. Evidence from our staff travel surveys suggests around 2% of the workforce currently cycle, however it is believed this proportion could be higher, as illustrated by the number of intu colleagues signed up to the intu Cycle to Work scheme, representing c.20% of the intu-employed staff headcount at any given time. As such, in weighting these two measures, a reasonable estimate of cycling to work potential would be in the region of 6%-10% of the overall intu Eldon Square workforce. We wish to see this proportion increase.

Through previous programmes, such as Cycle City Ambition Funding, significant investment and effort has gone into creating a network of safe and dedicated cycle routes to/from Newcastle city centre. It is encouraging to learn of proposals included in the overall Transforming Cities Bid for additional investment to add a further 29 miles to this network. Nevertheless, a comment we hear all-too-often for people not choosing to cycle is the lack of a safe and secure cycle parking facility at their workplace and/or within the city centre.

As such, we very much welcome this opportunity to work alongside the North East City Regional bid team to put forward a funding bid to help deliver such a facility at intu Eldon Square. From the outset, the intention is for this secure cycle store to not only be of use to our staff, retailers and customers, but to be provided and promoted as an essential facility from which the wider city will benefit.

In supporting this element of the bid, our team will directly oversee all project management activities associated with designing and constructing the secure cycle facility. We have agreed a match funding contribution through the provision of security access control systems and CCTV monitoring, plus the staffing costs for regular cleaning and maintenance as required.

We are also very much encouraged by the scale and ambition of the additional workstreams contained with this Transforming Cities Fund bid. Unlocking much-needed capacity on the Tyne & Wear metro network, coupled with new Park & Ride locations and reinstated heavy rail services on the Northumberland Line to reconnect towns in South East Northumberland will all have a significant impact on the region's congestion levels, whilst helping to open up many new employment opportunities.

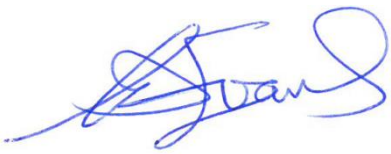
The suite of bus corridors listed for transformational improvements has the potential for tackling reliability issues which have plagued the local bus industry for far too long. Buses are a mode of transport often undervalued by many, yet is one which provides a crucial means of getting around our region for numerous individuals, so the socio-economic benefits of these proposals will be substantial.

Finally, the transformation of our city gateways, enhancing the experience for regular travellers and providing a more enticing welcome for visitors to our region can only make the North East an even better place to live, work and play.

We wish you and the team every success with this initial stage of the process and very much look forward to working together on the next stages in due course.

Yours sincerely,

Phil Steele, General Manager
intu Eldon Square



Gareth Evans, National Sustainable Travel & Transport Manager
intu Properties

Go North East | Journeys taken care of

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18th June 2019

Tranche 2 Transforming Cities Fund – support letter for bus based schemes

Dear Mike,

I am writing on behalf of the region's largest bus operator, Go North East, to express our support for the North East City Region's draft bid to Government for capital investment in the region through the Transforming Cities Fund in relation the 'Transforming bus corridors' schemes set out in the bid.

Anything that gives greater priority to local bus services as the largest provider of public transport journeys and additionally helps tackle congestion, noting that buses are the most efficient use of road space, is to be welcomed and will enable us to deliver better journeys for passengers. 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 investment in vehicles and routes to offer more sustainable services, in turn delivering air quality improvements.

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 and I look forward to the opportunity to also take forward bus integration with the other schemes in the bid to support inward/onward journey connectivity.

I am aware that the short timeframe of the current bidding window means it has not been possible for local authority partners to work with bus operators on ideas for more ambitious bus schemes on this occasion, but please rest assured that we remain committed to playing our part in this and will work with the authorities involved, where opportunities allow, to work up more bus based, and wider integrated public transport, schemes for any future bidding opportunities.

Yours sincerely,

Martijn Gilbert
Managing Director
Go North East

North East
Local Enterprise Partnership

Mike Scott
Transforming Cities Fund Project Lead
North East Regional Transport Team
2nd floor NE Pavilion,
Gateshead Civic Centre,
Regent Street
Gateshead
NE8 1HH

12th June 2019
Sent by email

Dear Mike,

Tranche 2 Transforming Cities Fund (TCF) – North East Outline bid

I refer to the work and significant progress that has been made in recent months to develop the Tranche 2 TCF proposal for the region and to formally express the North East LEPs support. As you know the North East LEP is fully behind this outline bid and has assisted the regional transport team with £100,000 to help ensure that proposals are robustly developed and tested with regional stakeholders.

The four corridors of investment set out in the outline TCF bid are consistent with the North East LEPs Strategic Economic Plan, updated and re-launched in February 2019. The TCF four priority corridors for investment will help facilitate the sectoral and growth ambitions set out in the SEP. Both the 'Banks of the Tyne' and 'Cities and Airport' corridor plans will not only directly improve access to our Enterprise Zone sites but also enable better access for businesses engaged in international trade to Port and Airport facilities.

The proposed re-opening of the Northumberland line, a key element in the 'North-South corridor', will enable modal shift for commuters and students and increased journey times through a strategic employment and housing growth corridor stretching through South East Northumberland via North Tyneside into the heart of the Newcastle City Centre, where the North East LEP is currently supporting Newcastle City Council and Network Rail to undertake phase 1 access and amenity improvements to Central Station. These TCF plans are very much aligned to and will build upon our current LGF transport investment programme.

Later this year the new Nexus South Shields Training Centre will be opened, supported with £6m from the LGF programme, creating high quality and timely training facilities for young people across the region who may aspire to a career in the expanding rail industry. The TCF investment proposals to overcome the metro line

capacity pinch point linking to South Tyneside and to improve access to existing Metro stations will provide work experience for new apprentices and trainees in the years to come.

Regional partners have successfully delivered over £80m in the past 3-4 years on strategic LGF programme transport schemes, working collaboratively and helping to ensure that the North East LEPs overall LGF capital programme is delivered in line with our Growth Deals with Central Government.

I am, therefore, confident that we have the commitment and necessary partnership structures in the North East to deliver a bold, strategic and sustainable TCF tranche 2 programme.

We look forward to working with you in the months ahead.

Yours sincerely,

Helen Golightly
Chief Executive

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13th June 2019

Dear Mike,

Tranche 2 Transforming Cities Fund

Sustrans would like to offer a letter of support in regard the Tranche 2 bid by the North East Joint Transport Committee representing the North East Combined Authority and North of Tyne Combined Authority to the Government's Transforming Cities Fund.

As the charity that makes it easier for people to walk and cycle, we support the measures included in the bid to increase levels of walking and cycling through investment in infrastructure.

Sustainable travel must be central to plans to transform travel activity across the region, particularly with regard to the challenges around poor air quality. Investment in cycling and walking infrastructure must be prioritised as part of wider measures to help tackle our air pollution crisis.

The schemes put forward in the bid address the region's productivity challenge; improve air quality particularly in areas with exceedances; and improve the sustainable transport network, allowing more people to switch from driving vehicles in our region's towns and cities to active and sustainable travel.

Sustrans fully supports the vision contained in the bid:
"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."

With kind regards,

Jonah Morris

Partnerships Manager, North East and Cumbria

APPENDIX J: SCHEME SHORTLIST; MEDIUM, HIGH AND LOW

APPENDIX J1

Details of Schemes included in the Core Bid (Medium Cost) Programme, High Cost Programme and Low Cost Programme

Code	Scheme name	Scheme promoter	Summary	Total cost	TCF ask	Overall score against TCF objectives
DU01	Walking and cycling improvements	Durham County Council	Improved walking and cycling links into the city as well as links to Sunderland and Newcastle: • 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	£6,142,478	£3,981,604	9
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
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
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
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
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	£2,000,000	£1,800,000	9
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 priority measures	£5,000,000	£4,500,000	10
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	£1,711,000	£1,540,000	9
GA08	Hills Street and Gateshead	Gateshead Council	Upgrading of pedestrian, cycle and public transport environment on key link to Tyne Bridge:	£1,500,000	£800,000	10

Code	Scheme name	Scheme promoter	Summary	Total cost	TCF ask	Overall score against TCF objectives
	Quays sustainable access		• 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
GA10	A184 cycle route	Gateshead Council	Creation of new shared use pedestrian and cycle route along north side of A184 (Felling Bypass) and improvement of facilities for crossing side roads with traffic signals	£3,000,000	£2,700,000	7
GA11	A195 bus lane	Gateshead Council	Northbound bus lane on A195 north of A194(M) on the approach to its junction with New Road. Buses using the route link Heworth interchange with Follingsby/Washington/Houghton le Spring	£1,200,000	£1,080,000	10
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	£1,800,000	£1,620,000	5
GA16	Gateshead Interchange bus lane	Gateshead Council	A reconfiguration of the north bound bus lane out of Gateshead interchange towards Newcastle. Current arrangements has been causing 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	£500,000	£450,000	9
NE01	Transforming Newcastle City Centre	Newcastle City Council	Significant upgrades to Newcastle City Centre. This includes: • Restriction of vehicles on Blackett Street • Public transport priority improvements on Percy Street • Improvements to Gallowgate/Percy Street Junction • Improvements to junctions at Market St/John Dobson St and Market Street / Pilgrim Street	£15,000,000	£12,250,000	11

Code	Scheme name	Scheme promoter	Summary	Total cost	TCF ask	Overall score against TCF objectives
			• 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	• East Concourse - new access ramp to improved car park/public realm; access from Orchard Street, upgrade Orchard Street and Clavering Place tunnels • Westmorland Road junction upgrade	£21,700,000	£18,400,000	10
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
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
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	£3,000,000	£2,800,000	10
NX02	Park and ride enhancements	Nexus	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	£3,600,000	£3,240,000	8

Code	Scheme name	Scheme promoter	Summary	Total cost	TCF ask	Overall score against TCF objectives
			perceptions of safety and security including improved CCTV and lighting. At following sites: • Northumberland Park • Four Lane Ends • Callerton • Regent Centre • Stadium of Light • Bank Foot			
NX03	Twin tracking of Metro line between Pelaw and Bede / Metro capacity enhancement	Nexus	The Metro twin tracking scheme entails Nexus taking over 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 twin tracking 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 five new Metro trains. Freight trains will still be able to run over the tracks taken over by Nexus	£117,300,000	£108,400,000	12
NX04	Strategic park and ride sites – Follingsby park and ride and links to IAMP and Callerton Parkway	Nexus	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. Capacity doubled at existing park and ride site at Callerton, whilst future proofing for further development, 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.	£7,500,000	£6,760,000	12
NO01	Northumberland Line	Northumberland County Council	The Northumberland Line proposals will introduce passenger trains on the existing freight railway between Ashington, Bedlington, Blyth, Northumberland Park and the East Coast Main Line at Benton. Trains will operate hourly between Newcastle and Ashington, more regularly in peak hours. Stations will be constructed at Ashington, Bedlington Station, Newsham (for Blyth) and Northumberland Park (integrating with Metro services). Further stations may be constructed in future, but these require regulatory permissions that cannot be obtained within the funding timeframe of TCF. The principal cost items for this project are the upgrade of several level crossings to accommodate a more frequent train service and the provision of new stations, parking and highway infrastructure	£117,216,520	£99,400,000	12

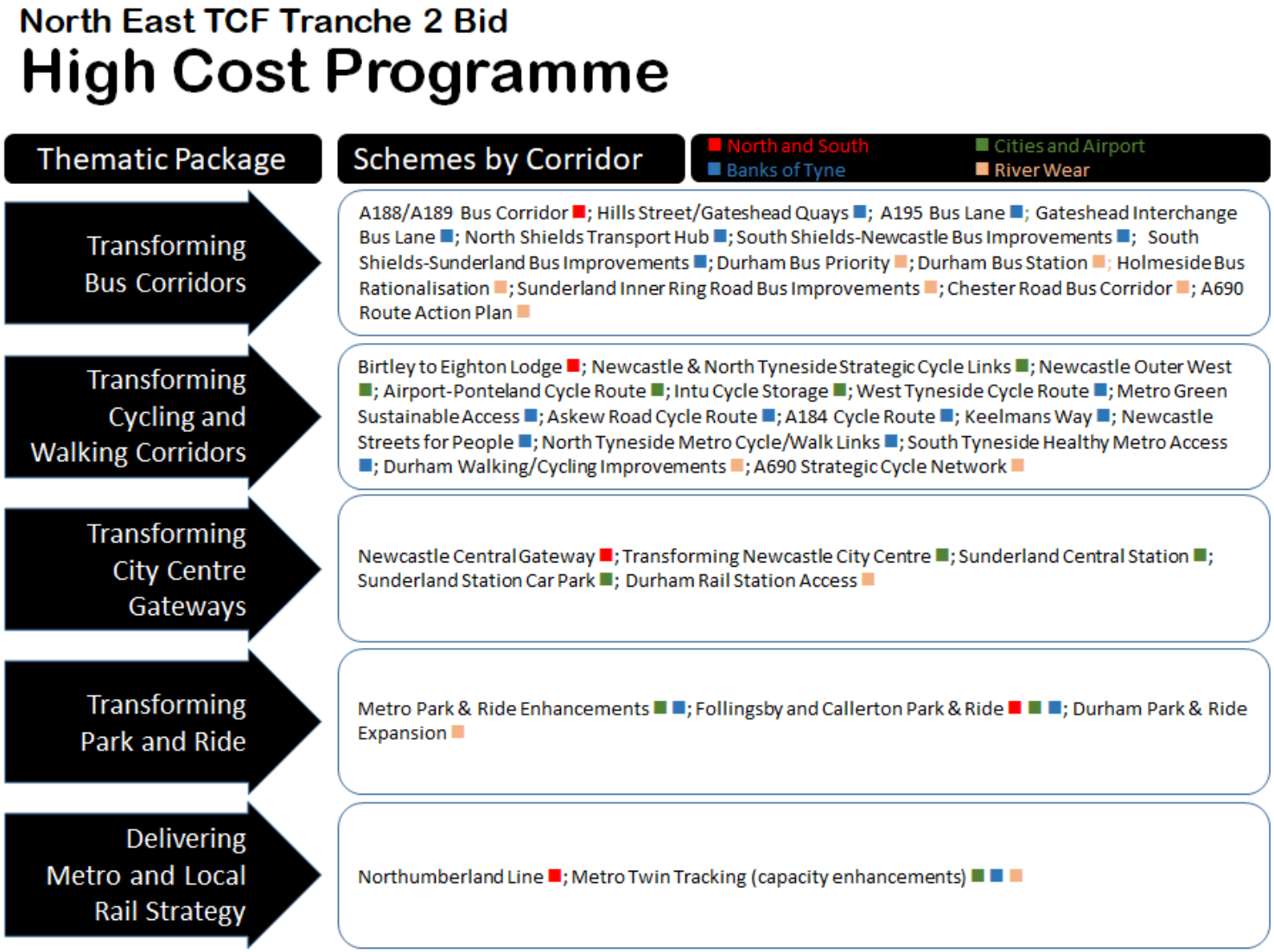
Code	Scheme name	Scheme promoter	Summary	Total cost	TCF ask	Overall score against TCF objectives
NE07 / NO02	Callerton - Airport -Ponteland cycle route	Northumberland County Council (lead); Newcastle City Council	Connection between Newcastle Airport, Callerton and Ponteland using existing disused rail alignment in Northumberland and offroad alignments where possible. Links into development in Ponteland and Airport Enterprise Zone	£800,000	£700,000	8
NT02	Improvements to 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, limited new retail and improved public realm, cycle hub, improved cycling and walking links into interchange, bus priority measures on routes into town centre and Shields Ferry landing	£25,000,000	£22,500,000	8
NT08	Bus priority improvements along A188/A189 corridor phase 1	North Tyneside Council	• Bus priority improvements along A188/A189 corridor including Four Lane Ends interchange • Enhancement of existing park and ride facility at Four Lane Ends interchange. The possible provision of a new bus Park & Ride site in the A189 corridor (between Northumberland and Newcastle) will be considered as part of phase 2 of this project.	£6,219,000	£4,500,000	10
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
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
ST08 a	Bus corridor improvements	South Tyneside Council	South Shields to Newcastle City Centre and to Durham City Centres: • Whiteleas Way Bus Lane • Stanhope Road / Boldon Lane Junction • Boldon / Tileshed Level Crossing Removal - New Bridge • New Road / Boker Lane Junction • Boldon ASDA/ New Road / Junction Improvements	£17,500,000	£11,000,000	10
ST08 b		South Tyneside Council	South Shields to Sunderland City Centre: • Westoe Fountain / Dean Road / Sunderland Road Junction • The Nook PT Improvements • A183 Bus Lane into Whitburn	£2,500,000	£2,000,000	10
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	£14,000,000	£12,600,000	11

Code	Scheme name	Scheme promoter	Summary	Total cost	TCF ask	Overall score against TCF objectives
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: • Super crossing provision • Signalised shuttle working • Potential one way system	£1,000,000	£900,000	10
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	£7,000,000	£6,300,000	10
SU07	Holmeside / Sunderland station car park	Sunderland City Council	To provide park and ride facilities for national and local rail passengers encouraging modal transfer- linked to Holmeside proposals. Includes electric vehicle charging infrastructure. The location of the scheme is approximately 150m from the southern entrance to Sunderland Station, the upgrade of station facilities is included in SU03. The plans are currently for a 160 multi storey car park with retail facilities at ground floor level, this could be downscaled to a surface level car park or upscaled to include more storeys	£5,000,000	£4,500,000	10
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 pedestrain links. To provide a gateway to the University and the City. Better CCTV and UTMC connectivity	£5,600,000	£5,040,000	10
SU10	A690 route action plan	Sunderland City Council	Aim is 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.	£6,000,000	£5,400,000	10
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	£4,000,000	£3,600,000	7
IN01	Intu cycle storage	Intu	• 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	£605,600	£300,000	10

Code	Scheme name	Scheme promoter	Summary	Total cost	TCF ask	Overall score against TCF objectives
			• 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	ITS Package of works - Regionwide	Regionwide – being developed by Gary Macdonald (AECOM)	Intelligent Transport Systems (ITS) technology is required to facilitate corridor-based improvements across the region and to support non-corridor schemes. ITS will collect data from various sources and implement strategies to better inform mode and departure time choice. The scheme specifically focuses on carbon reduction through improved traffic flow and improving the reliability of motorised modes. The scheme provides the foundations for a Future Grand Mobility Challenge that will see a phased roll-out of ride-sharing and slow modes as alternatives to single-occupancy car travel whilst improving conditions for public transport users. The scheme will also support the development of Future Mobility Zones for the area	TBC	TBC	11

APPENDIX J2

Schemes in Core Bid (Medium Cost) Programme, High Cost Programme and Low Cost Programme, arranged by thematic package and TCF Key Corridor



North East TCF Tranche 2 Bid

Medium Cost Programme

Thematic Package	Schemes by Corridor
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 ■
Transforming Cycling and Walking Corridors	Newcastle Outer West ■; Airport-Ponteland Cycle Route ■; Intu Cycle Storage ■; West Tyneside Cycle Route ■; Metro Green Sustainable Access ■; Askew Road Cycle Route ■; Newcastle Streets for People ■; North Tyneside Metro Cycle/Walk Links ■; South Tyneside Healthy Metro Access ■; Durham Walking/Cycling Improvements ■
Transforming City Centre Gateways	Newcastle Central Gateway ■; Transforming Newcastle City Centre ■; Sunderland Central Station ■; Sunderland Station Car Park ■; Durham Rail Station Access ■
Transforming Park and Ride	Metro Park & Ride Enhancements ■ ■; Follingsby and Callerton Park & Ride ■ ■ ■; Durham Park & Ride Expansion ■
Delivering Metro and Local Rail Strategy	Northumberland Line ■; Metro Twin Tracking (capacity enhancements) ■ ■ ■

■ North and South ■ Banks of Tyne ■ Cities and Airport ■ River Wear

North East TCF Tranche 2 Bid

Low Cost Programme

Thematic Package	Schemes by Corridor (■ 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 ■; South Shields-Newcastle Bus Improvements ■; South Shields-Sunderland Bus Improvements ■; Durham Bus Station ■; Holmeside Bus Rationalisation ■; Sunderland Inner Ring Road Bus Improvements ■; Chester Road Bus Corridor ■; A690 Route Action Plan ■
Transforming Cycling and Walking Corridors	Newcastle Outer West ■; Intu Cycle Storage ■; West Tyneside Cycle Route ■; Metro Green Sustainable Access ■; Askew Road Cycle Route ■; Newcastle Streets for People ■; North Tyneside Metro Cycle/Walk Links ■; South Tyneside Healthy Metro Access ■; Durham Walking/Cycling Improvements ■
Transforming City Centre Gateways	Newcastle Central Gateway ■; Transforming Newcastle City Centre ■; Sunderland Central Station ■; Sunderland Station Car Park ■
Transforming Park and Ride	Follingsby and Callerton Park & Ride ■ ■ ■; Durham Park & Ride Expansion ■
Delivering Metro and Local Rail Strategy	Northumberland Line ■; Metro Twin Tracking (capacity enhancements) ■ ■ ■

APPENDIX J3

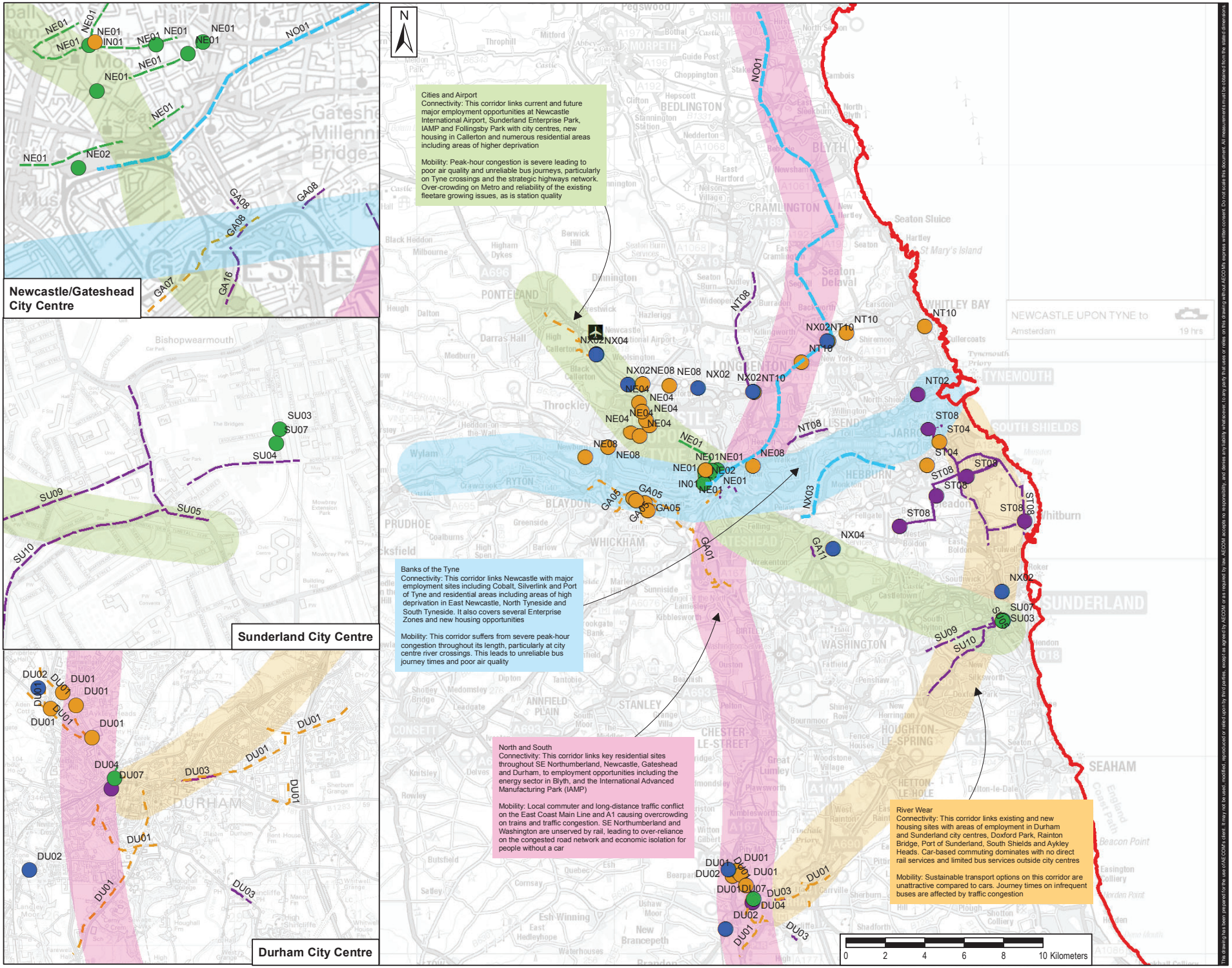
Schemes Not Progressed to the TCF Tranche 2 Programme – A Pipeline for Future Funding Opportunities

Scheme name	Unique code	Scheme description	Reason Not Progressed
UTMC	DU05	Durham City and the corridors linking with Newcastle and Sunderland	Removed by the promoter.
Durham Northern Relief Road	DU06	Removal of significant volume of traffic from Durham City	Sifted out at first pass on sustainable transport criteria.
West Tyneside cycle route (bridge over ECML)	GA02	New bridge over East Coast Main Line between Chowdene and Team Valley	Sifted out on deliverability grounds
West Tyneside cycle route (new Tyne crossing)	GA03	New bridge over River Tyne between Blaydon and Newburn	Sifted out on deliverability grounds
Dunston Hill bus facilities	GA04	Upgrading of bus facilities in association with new development	Removed by the promoter
Hills Street	GA06	Upgrading of pedestrian, cycle and public transport environment on key link to Tyne Bridge	Merged into GA09
Follingsby rail based P&R	GA12	Rail based park and ride site at Follingsby	Duplicate scheme being promoted by Nexus
Durham Road, Low Fell	GA14	Sustainable transport improvements along Durham Road corridor in Low Fell. This phase of works covers the south end of Low Fell High Street. It is envisaged they will include new cycle routes and measures to improve the existing junction which is a major delay point for bus services.	Removed by the promoter.
Gateshead Interchange	GA15		Removed by the promoter.
ITS Upgrades - Public Transport Corridors	NE05	Upgrades to traffic management, bus priority and Intelligent Transport Systems on key public transport corridors into Newcastle	Removed by the promoter.
Transforming Air Quality and Traffic Management in Tyneside	NE06	Tyne and Wear has an existing comprehensive UTMC and a nation-leading co-located Urban Observatory at Newcastle University which provides detailed real-time monitoring using embedded sensors.	Removed by the promoter.
Public transport Information Enhancements	NX06	Addressing the perception of reliability and convienence of public transport, as highlighted through market research, through the provision of accurate and easy to access information.	No available match funding
Metro service enhancements	NX08	Purchase of additional rolling stock to enhance the frequency of services to an optimised frequency on Metro and extend hours of operation to grow patronage on Metro through increasing capacity, enhancing service frequency to reduce customer dwell time at stations and therefore improving customer convenience.	Removed by the promoter.
Cobalt Link Metro Extension	NT01	Cobalt Link Metro Extension	Sifted out of T2 due to deliverability concerns in the programme.
North East Smart Corridors	NT03	North East Smart Corridors: upgrade to arterial corridors to Tyneside which would incorporate active traffic control with ANPR. Potential to integrate with air quality sensors to have innovative traffic control and public transport priority	Removed by the promoter.
New and improvements to Strategic Cycling Routes to Newcastle, South Tyneside and Northumberland	NT04	Build new and improvements to Strategic Cycling Routes; linking North Tyneside to Newcastle and to South Tyneside (Banks of Tyne) and Northumberland (North and South)	No available match funding

Scheme name	Unique code	Scheme description	Reason Not Progressed
EV infrastructure	NT05	Provide EV infrastructure, e.g. chargepoint clusters and 'filling stations', at key locations (business parks, local centres, major destinations etc.)	Removed by the promoter.
New Metro station at Murton Gap	NT06	New Metro station at Murton Gap in North Tyneside (on the northern Metro loop) in line with Nexus' 'station of the future' best practice standard, and associated infrastructure	Uncertainty over delivery of the wider station linked to the development and available match funding
New Metro station at Killingworth Moor	NT07	New Metro station at Killingworth Moor in North Tyneside (on the northern Metro loop) and associated infrastructure, including additional Metro fleet vehicles.	Sifted out of T2 due to deliverability concerns in the programme.
Enhancement of P&R facilities	NT09	Enhancement of existing Park & Ride facilities (Four Lane Ends and Northumberland Park)	Removed by the promoter.
New Mobility Hubs at Metro stations	NT11	Delivery of New Mobility hubs at Metro stations/public transport interchanges	To be taken forward as part of FMZ
Bus priority improvements	NT12	Bus priority improvements on key strategic bus corridors	This has been merged with NT08
Travel behaviour change package (capital elements)	NT13	Development of emerging modes of flexible transport e.g. car clubs, electric bikes, and use of digital information to support more sustainable transport use (e.g. provision of equipment and back office technology).	Removed by the promoter
Travel behaviour change package (revenue elements)	NT14	Development of emerging modes of flexible transport e.g. car clubs, electric bikes, and use of digital information to support more sustainable transport use (e.g. funding to kick-start scheme and support operations for an initial defined period).	Removed by the promoter
IAMP / Boldon East Curve (Improved Metro Connectivity to IAMP / Sunderland) Including Pelaw Chord and Pelaw Flyover infrastructure upgrades	ST01	Enabling the metro system to offer service provision from South Tyneside into the IAMP via the Leamside Line. Further opportunity to extend the metro network to offer service provision between South Shields and Sunderland.	Removed as scheme reliant upon the reopening of the Leamside Line railway, so more long term
Track Dualling between Bede and Pelaw including new Mill Lane Metro Station (New Metro Station)	ST02	Relieving of the single-track between Bede and Pelaw Consideration to an additional Metro Station between Hebburn and Pelaw at the Mill Lane site	Forms part of a Nexus scheme NX03
Leamside Phase 1 (Follingsby Park / IAMP Park and Ride)	ST03	Leamside Line Phase 1 New metro station at Follingsby / IAMP Park and Ride Facilities Provision of Shuttle Bus between Employment Areas	Sifted out due to deliverability concerns
Increased Park and Ride at Public Transport stations (Metro, Rail, Ferry and Bus)	ST05	Consideration to extending park and ride facilities at multi-modal interchanges across the North East region. Not just limited to metro stations, but also bus / train stations. With improvements required at Hebburn, Tyne Dock, East Boldon and Fellgate within South Tyneside.	Sifted out of T2 due to deliverability concerns in the programme. Schemes to be developed as part of wider TCF opportunity, if available.
Traffic Signal Improvements / Junction improvements on routes into City Centres	ST06	Improved traffic signal operation at junctions on bus corridors / Links to UTMC facility which would improve journey time reliability across the bus network within the North East region.	Incorporated into ST08

Scheme name	Unique code	Scheme description	Reason Not Progressed
Improved connections to the National Cycling Network from localised links	ST07	Extension of the cycling links to the National Cycling Network, this would enable the development of strategic cycling improvements across the North East region. South Tyneside specific improvements would be the A194 and A184 routes.	Removed from scheme promoter as TCF T1 bid successful for strategic cycling links.
Level Crossing Closure Scheme	ST09	Level Crossing Closure at Boldon Lane / Tileshed through the provision of a New Road Bridge and Highway Links to remove congestion and improve road safety, whilst bringing forward development sites (1000 homes)	Incorporated into ST08a
Mill Lane Metro Station	ST10	New Metro Station	Sifted out of T2 due to deliverability concerns in the programme.
Improvements to A1231 (SSTC 4)	SU01	Improvements to A1231 between north bridgehead of Northern Spire (SSTC Phase 2) and junction with A19.	Sifted out at first pass on sustainable transport criteria
Interface improvements with Highways England network (SSTC 5)	SU02	Developing interface improvements with Highway's England network. Improvements to A1018 between southern bridgehead of Wearmouth Bridge and the roundabout junction of Hendon Road with Commercial Road (Including dualling).	Sifted out on sustainable transport objectives
Civic Centre Car Park	SU06	Refurbishment and staffing of existing multi-storey car park. The car park is essential for the south side economic prosperity of the city and is located adjacent to a major transport interchange (Metro/Patk Lane Bus interchange). To be promoted as park and ride facility for Metro.	Sifted out at first pass on sustainable transport criteria
Vaux Site car park	SU08	To provide multi storey car park on a major redevelopment project. Can reduce through traffic movement along St Mary's Boulevard, where there are potentially high pedestrian crossing movements.	Sifted out at first pass on sustainable transport criteria
Vaux - Stadium Village Footbridge	SU11	To provide improved links to the historic St Peters Church and the Stadium of Light. To improve walking and cycling routes and to promote the use of such modes of transport. To improve links to and promote the use of public transport and promote and assist in development of the Bonnersfield and Stadium Village development sites.	Sifted out on deliverability grounds.
Queen Alexandra Bridge / Camden Street Gyratory	SU12	Incorporating improvements to signals and cycling network. Improved access to northern section of Stadium Village via Keir Hardie Way.	Removed on delivery grounds by promoter
Queen Alexandra Bridge southern bridgehead junction	SU13	Replace Existing Roundabout with signalised junction. Improved bus priority and pedestrian/cycle crossing movements.	Removed on delivery grounds by promoter
City Centre Movements Monitoring	SU14	Purchase of real time survey equipment to track and monitor origin and destination movements on the Inner Ring Road and detailed pedestrian and cycle activity. Enabling real time traffic management leading to more efficient highway network.	Removed on delivery grounds by promoter
Strategic Cycle Network A19 Corridor	SU16	Sunderland has a strong transport policy (LTP, DfT) imperative and political support for the continued development of a strategic cycle network across the city.	Concerns regarding the deliverability of the propsoals in the timescales available.
Bus measures package North of Tyne	BM01	Cramlington P&R, South East Cramlington housing development, Cramlington A1171/B1505 bus gate onto Moor Farm roundabout, North Tyneside bus super highway, Gosforth 'red route' and Great North Road bus lane extensions, Blyth bus link (Amersham Road - Sandringham Drive), Blyth provision of proper walking access from Chase Farm housing development to Bishopdale Avenue/Swaledale Avenue and bus shelter facilities, A1058 Coast Road, Newcastle City Centre bus interchange	Concepts discussed at the bus measures workshop on 26/4 and included where possible in promoters schemes

APPENDIX K: SCHEME LOCATION PLANS



North East Combined Authority
NORTH OF TYNE COMBINED AUTHORITY
INDUSTRIAL STRATEGY
TRANSFORMING CITIES FUND

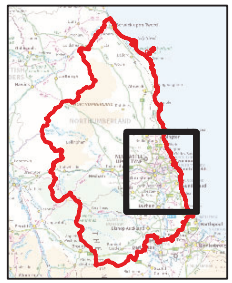
Project Title:
TRANSFORMING CITIES TRANCHE2

Client:
NORTH EAST JOINT TRANSPORT COMMITEE

LEGEND

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

LOCATION PLAN



AECOM Internal Project No:
60594462

Drawing Title:
TCF BID AREA + MEDIUM COST SCENARIO

Scale at A3: 1:175,000

Drawing No:	Rev:
APPENDIX K1	001

Drawn:	Chk'd:	App'd:	Date:
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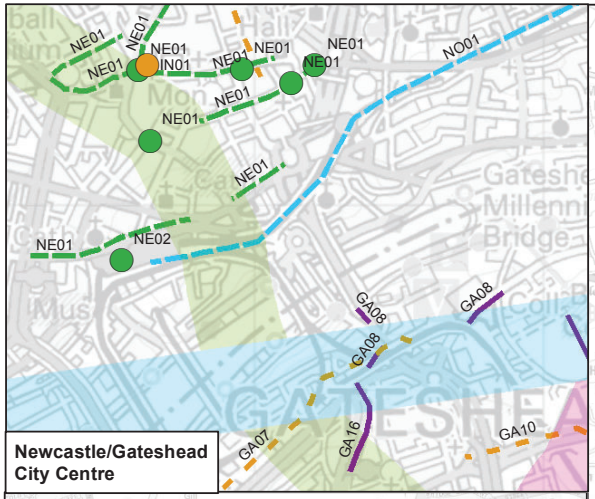
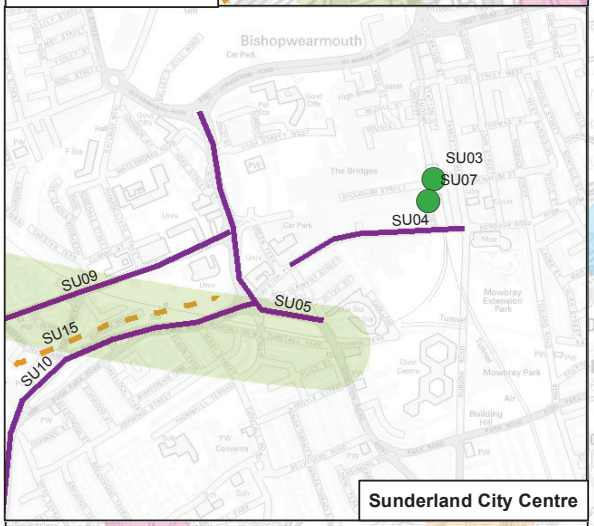
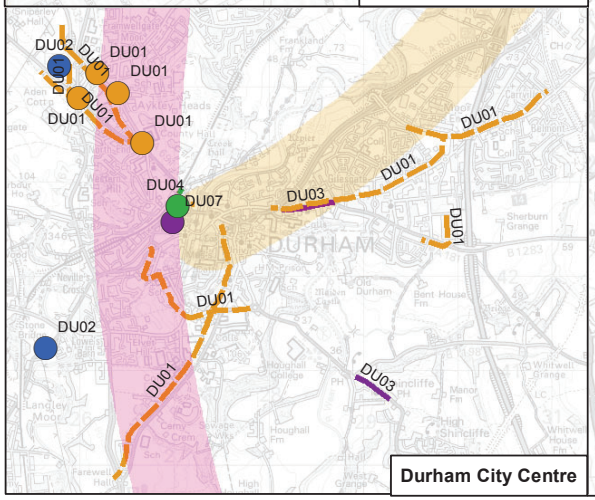
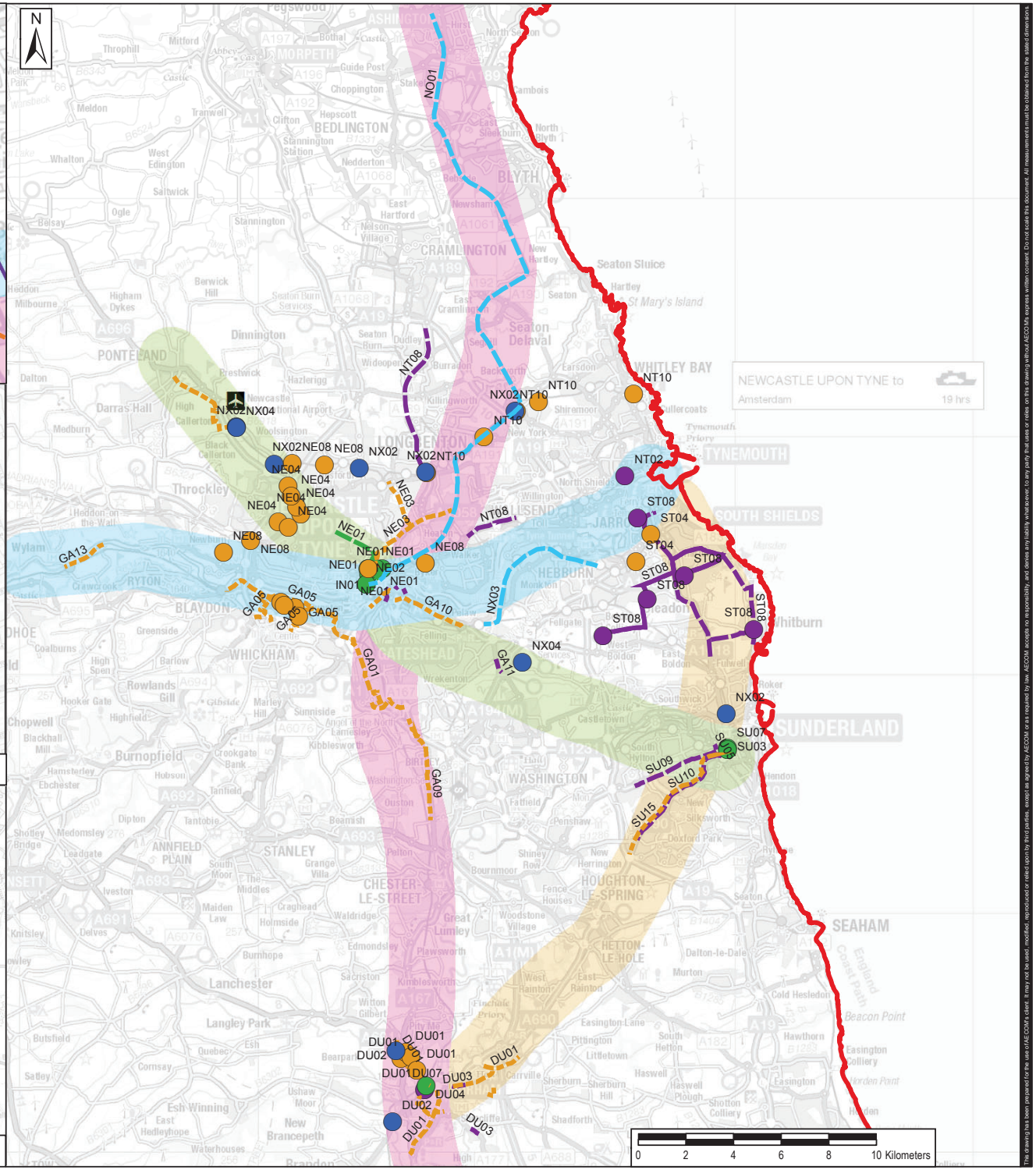








North East Combined Authority
NORTH OF TYNE COMBINED AUTHORITY
INDUSTRIAL STRATEGY
TRANSFORMING CITIES FUND

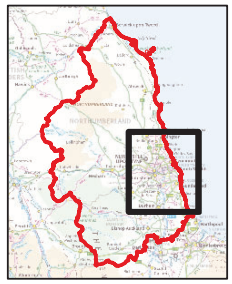
Project Title:
TRANSFORMING CITIES TRANCHE2

Client:
NORTH EAST JOINT TRANSPORT COMMITEE

LEGEND

- High Cost Scenario Park & Ride
- High Cost Scenario Cycle and Walking
- 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

LOCATION PLAN



AECOM Internal Project No:
60594462

Drawing Title:
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Scale at A3: 1:175,000

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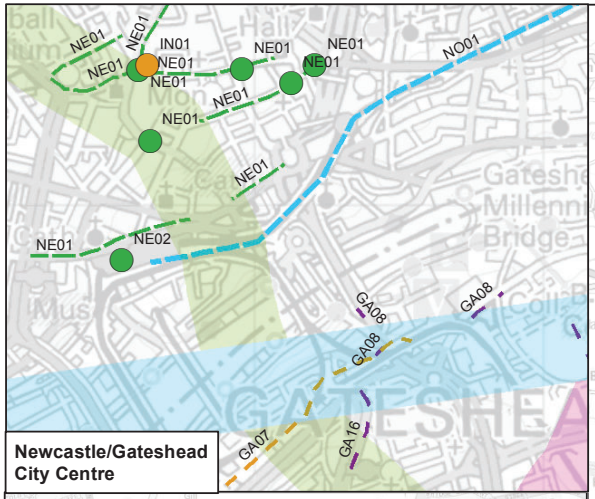

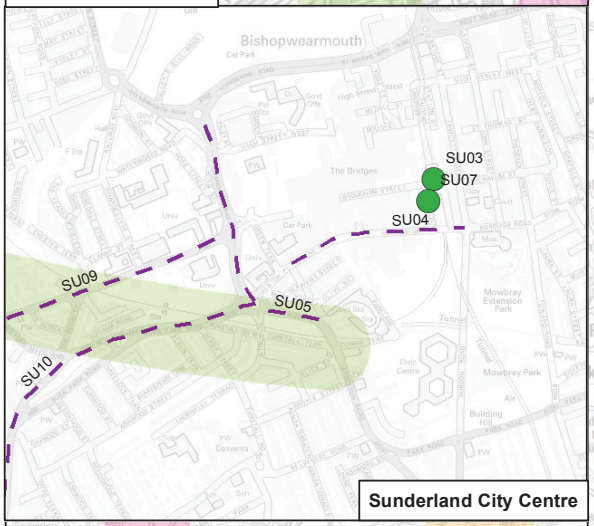

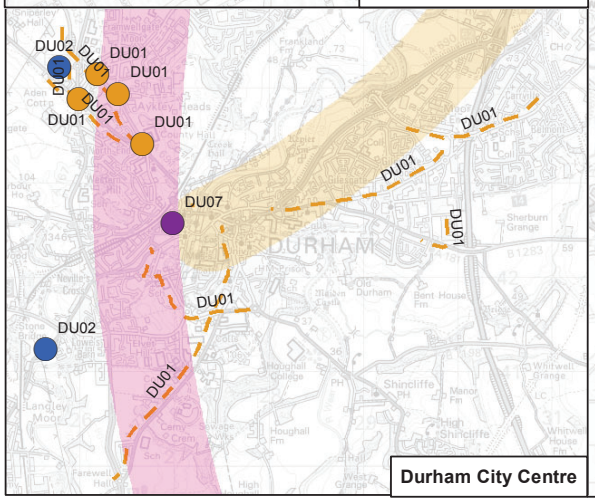

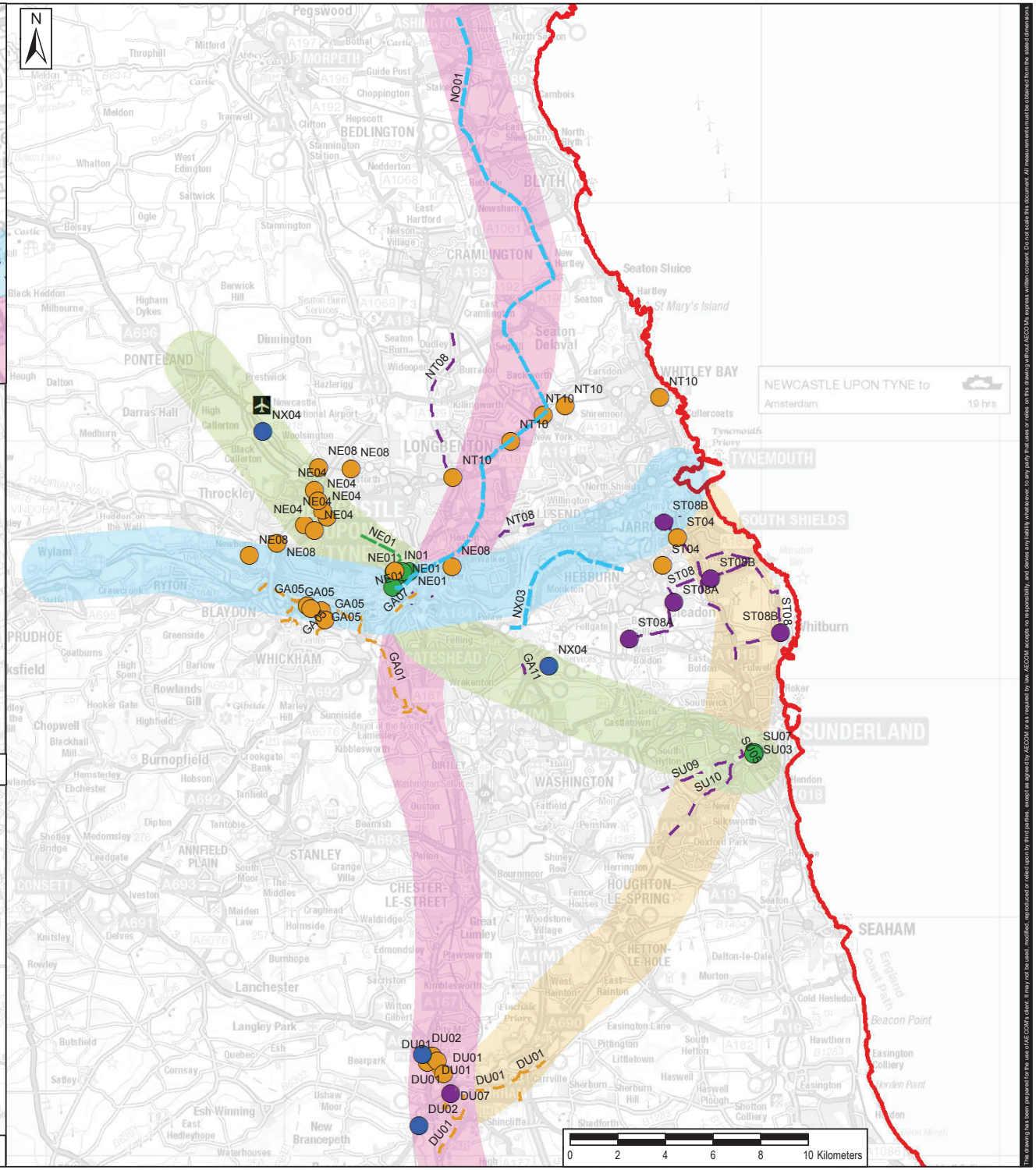

North East Combined Authority
NORTH OF TYNE COMBINED AUTHORITY
INDUSTRIAL STRATEGY
TRANSFORMING CITIES FUND

Project Title:

TRANSFORMING CITIES TRANCHE2

Client:

NORTH EAST JOINT TRANSPORT COMMITEE

LEGEND

- Low Cost Scheme Park & Ride
- Low Cost Scheme Cycle and Walking
- Low Cost Scheme Cycle and Walking
- Low Cost Scheme City Centre Gateways
- Low Cost Scheme City Centre Gateways
- Low Cost Scheme Bus Corridors
- Low Cost Scheme Bus Corridors
- Low Cost Scheme Delivering the Metro and Local Rail Strategy
- Newcastle International Airport
- Banks of the Tyne
- Cities and Airport
- North and South
- River Wear

LOCATION PLAN

AECOM Internal Project No:

60594462

Drawing Title:

TCF BID AREA + LOW COST SCENARIO

Scale at A3: 1:175,000

Drawing No:			Rev:
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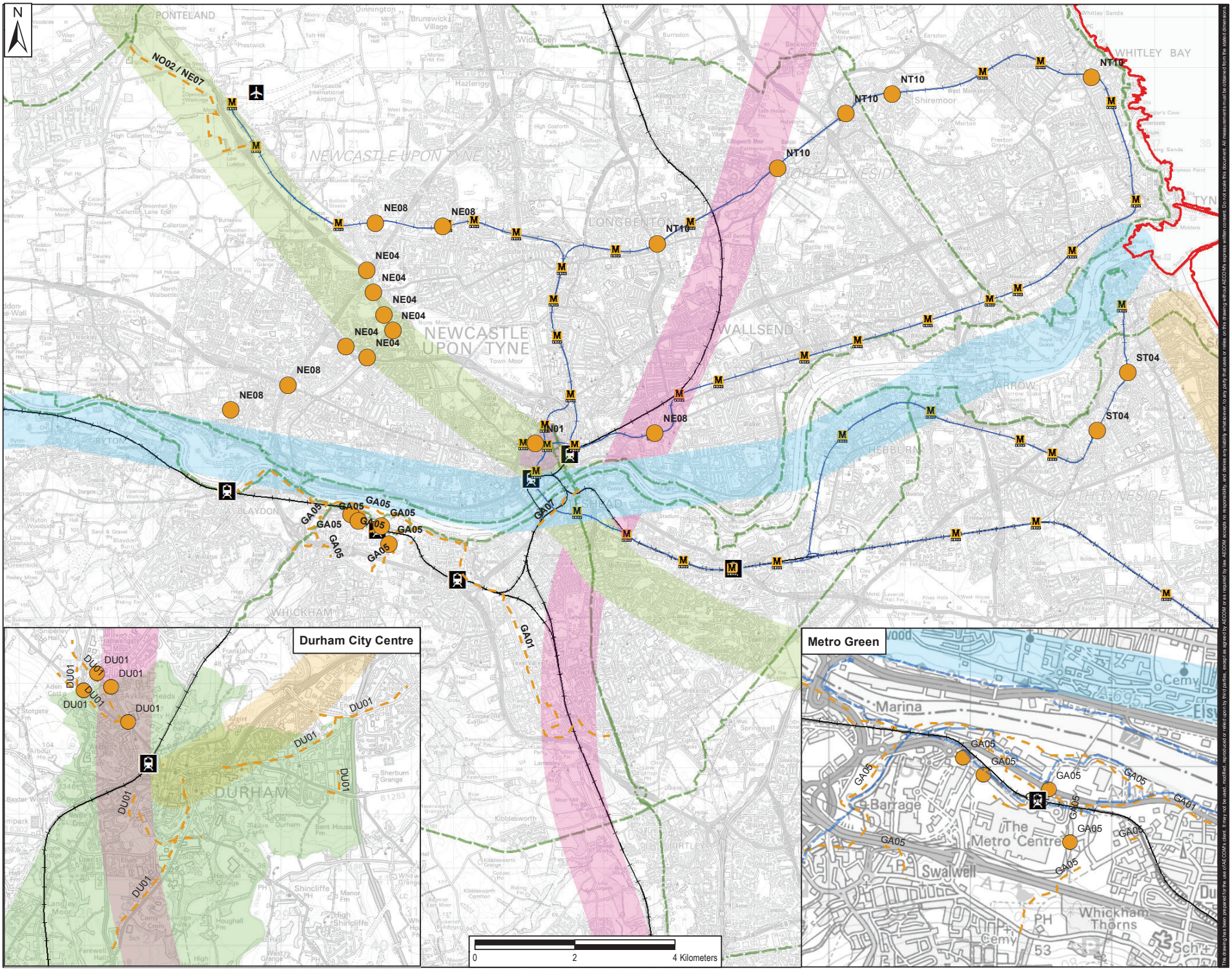


neca North East Combined Authority — NORTH OF TYNE COMBINED AUTHORITY

INDUSTRIAL STRATEGY — TRANSFORMING CITIES FUND

Project Title:

TRANSFORMING CITIES TRANCHE2

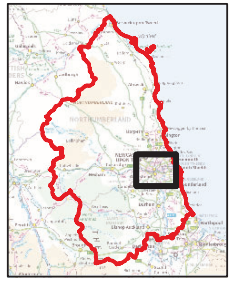
Client:

NORTH EAST JOINT TRANSPORT COMMITEE

LEGEND

- Medium Cost Schemes Cycling and Walking
- Medium Cost Schemes Cycling and Walking
- Durham City Centre
- Newcastle City Centre
- Sunderland City Centre
- NELEP Boundary
- Metro Network
- National Rail Stations
- Metro Lines
- Railway Track
- National Cycle Network
- Newcastle International Airport
- Banks of the Tyne
- Cities and Airport
- North and South
- River Wear

LOCATION PLAN



Notes

Copyright:

AECOM Internal Project No:

60594462

Drawing Title:

TRANSFORMING WALKING AND CYCLING CORRIDORS

Scale at A3: 1:69,000

Drawing No:			Rev:
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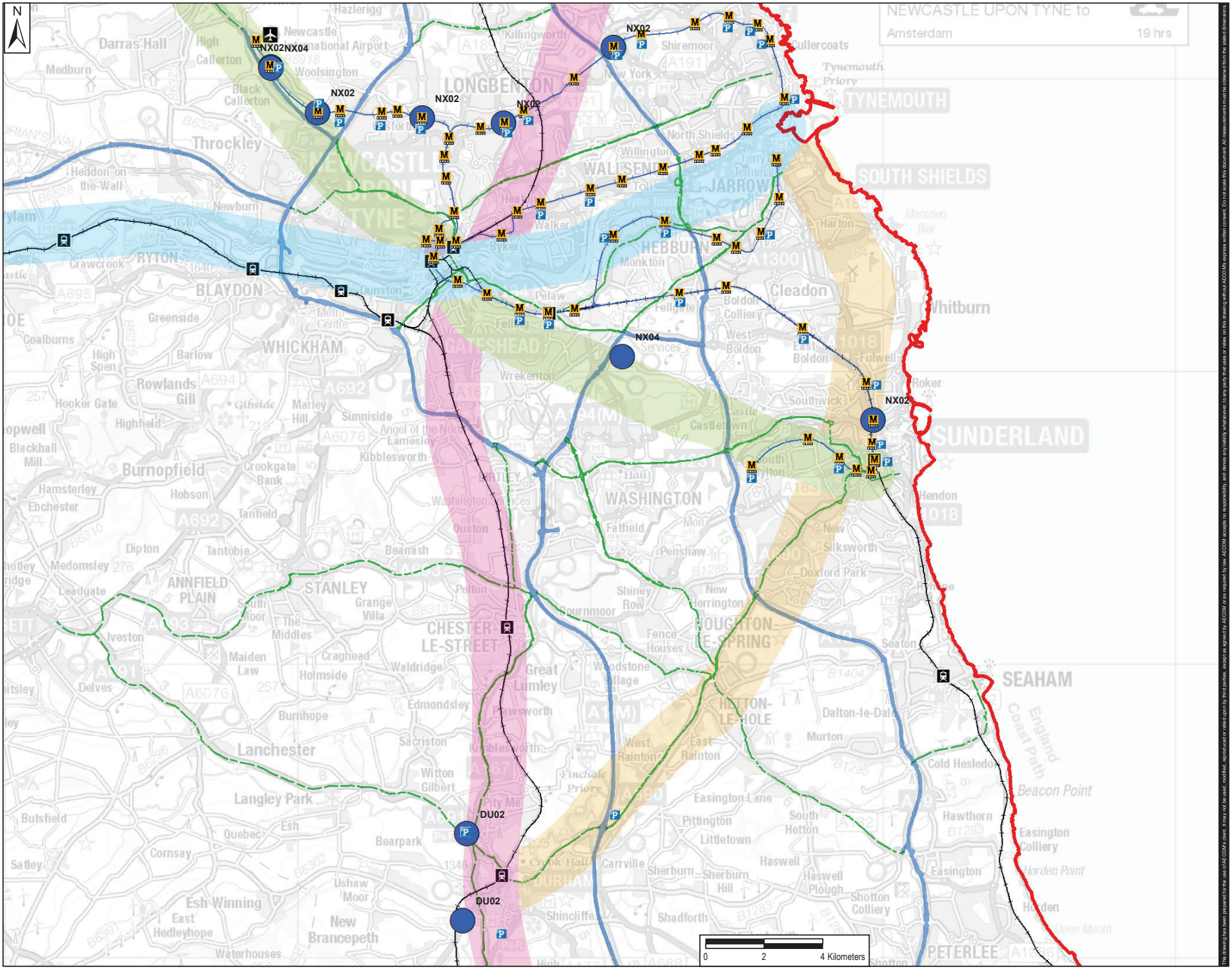


neca North East Combined Authority — NORTH OF TYNE COMBINED AUTHORITY

INDUSTRIAL STRATEGY — TRANSFORMING CITIES FUND

Project Title:

TRANSFORMING CITIES TRANCHE2

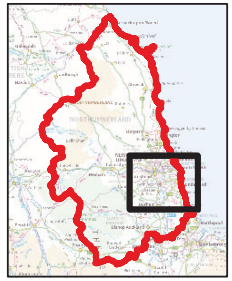
Client:

NORTH EAST JOINT TRANSPORT COMMITEE

LEGEND

- Medium Cost Scheme Park&Ride
- Metro Network
- Metro Lines
- National Rail Stations
- Railway Track
- Existing Car Parks
- Strategic Road Network
- Major Road Network
- Newcastle International Airport
- Banks of the Tyne
- Cities and Airport
- North and South
- River Wear

LOCATION PLAN



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Copyright:

AECOM Internal Project No:

60594462

Drawing Title:

TRANSFORMING PARK & RIDE

Scale at A3: 1:118,000

Drawing No:	Rev:
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Drawn:	Chk'd:	App'd:	Date:
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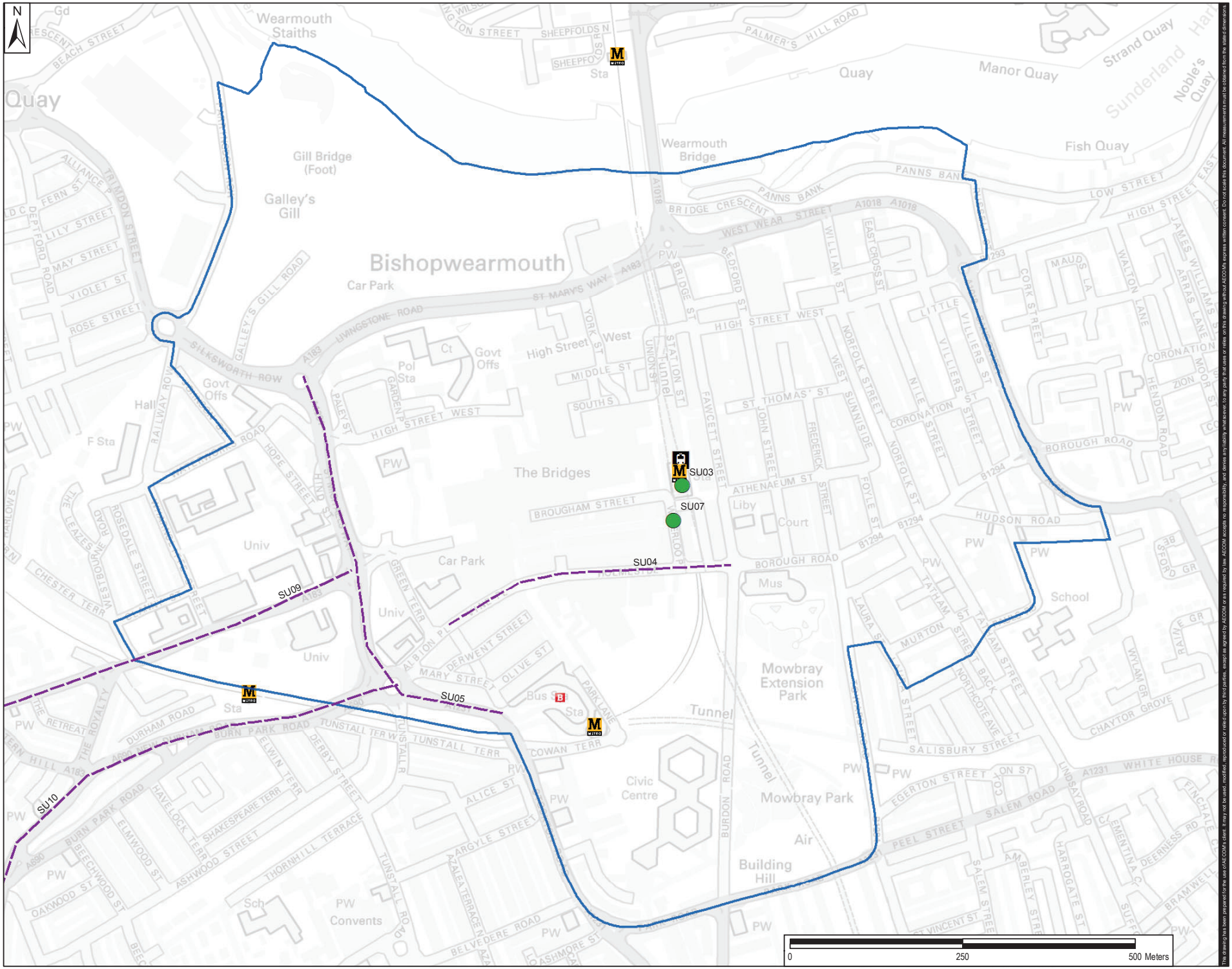


neca North East Combined Authority — NORTH OF TYNE COMBINED AUTHORITY

INDUSTRIAL STRATEGY — TRANSFORMING CITIES FUND

Project Title:

TRANSFORMING CITIES TRANCHE2

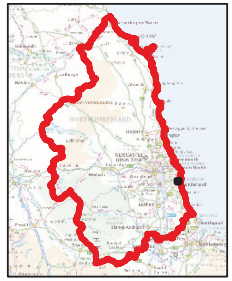
Client:

NORTH EAST JOINT TRANSPORT COMMITEE

LEGEND

- Sunderland City Centre
- Medium Cost Schemes City Centre Gateways
- Medium Cost Scheme Bus Corridors
- Bus Station
- Metro Network
- National Rail Stations

LOCATION PLAN



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Copyright:

AECOM Internal Project No:

60594462

Drawing Title:

TRANSFORMING CITY CENTRE GATEWAYS SUNDERLAND

Scale at A3: 1:5,000

Drawing No:			Rev:
APPENDIX K6			001
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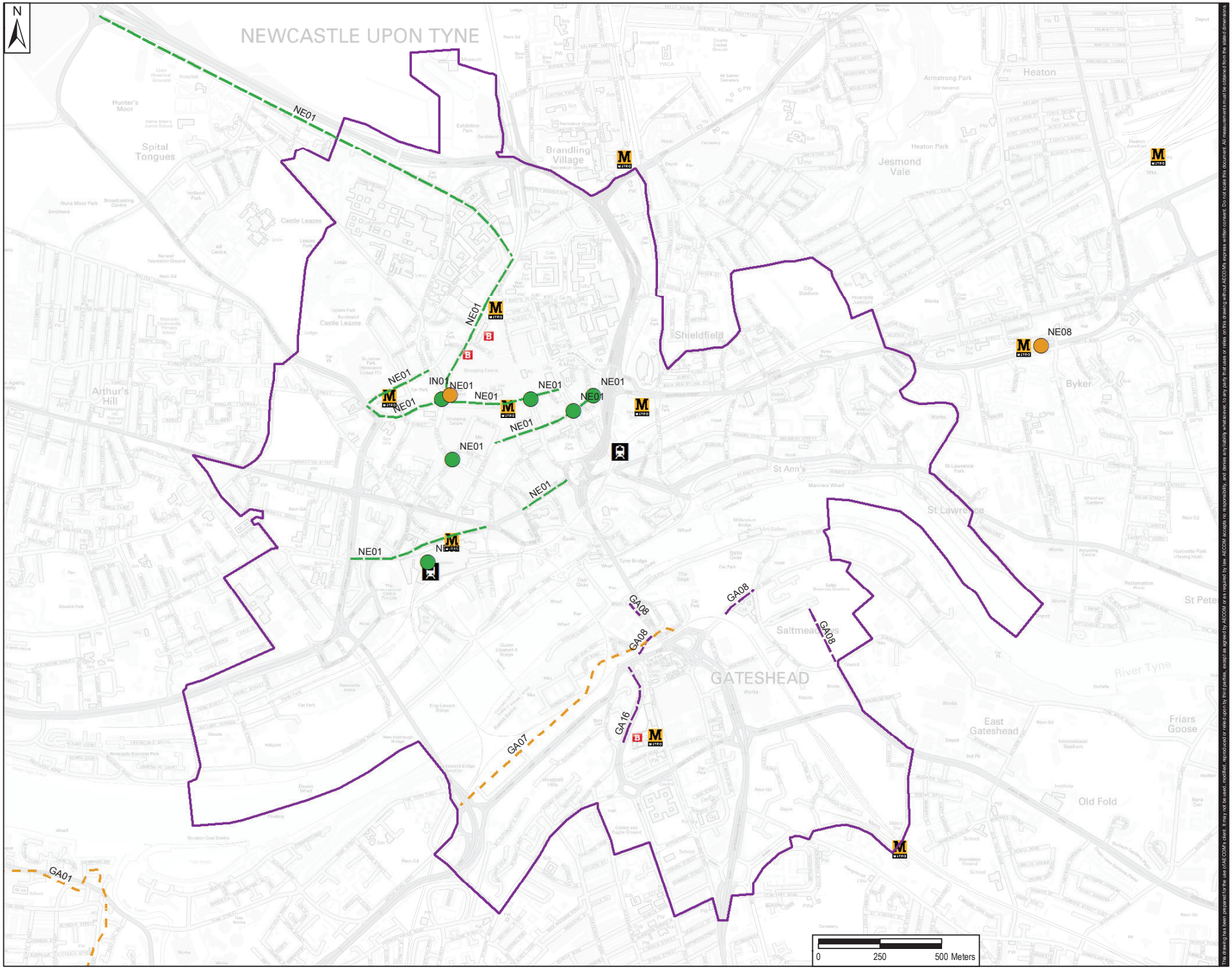


North East Combined Authority
DURHAM · GATESHEAD · SOUTH TYNESIDE · SUNDERLAND
NORTH OF TYNE COMBINED AUTHORITY

INDUSTRIAL STRATEGY
TRANSFORMING CITIES FUND

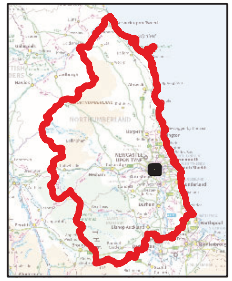
Project Title:
TRANSFORMING CITIES TRANCHE2

Client:
NORTH EAST JOINT TRANSPORT COMMITEE

LEGEND

- Medium Cost Schemes City Centre Gateways
- Medium Cost Schemes City Centre Gateways
- Medium Cost Scheme Cycle Walking
- Medium Cost Scheme Cycle Walking
- Medium Cost Scheme Bus Corridors
- Metro Network
- National Rail Stations
- Bus Station

LOCATION PLAN



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Copyright:

AECOM Internal Project No:
60594462

Drawing Title:
TRANSFORMING CITY CENTRE GATEWAYS NEWCASTLE

Scale at A3: 1:14,000

Drawing No:			Rev:
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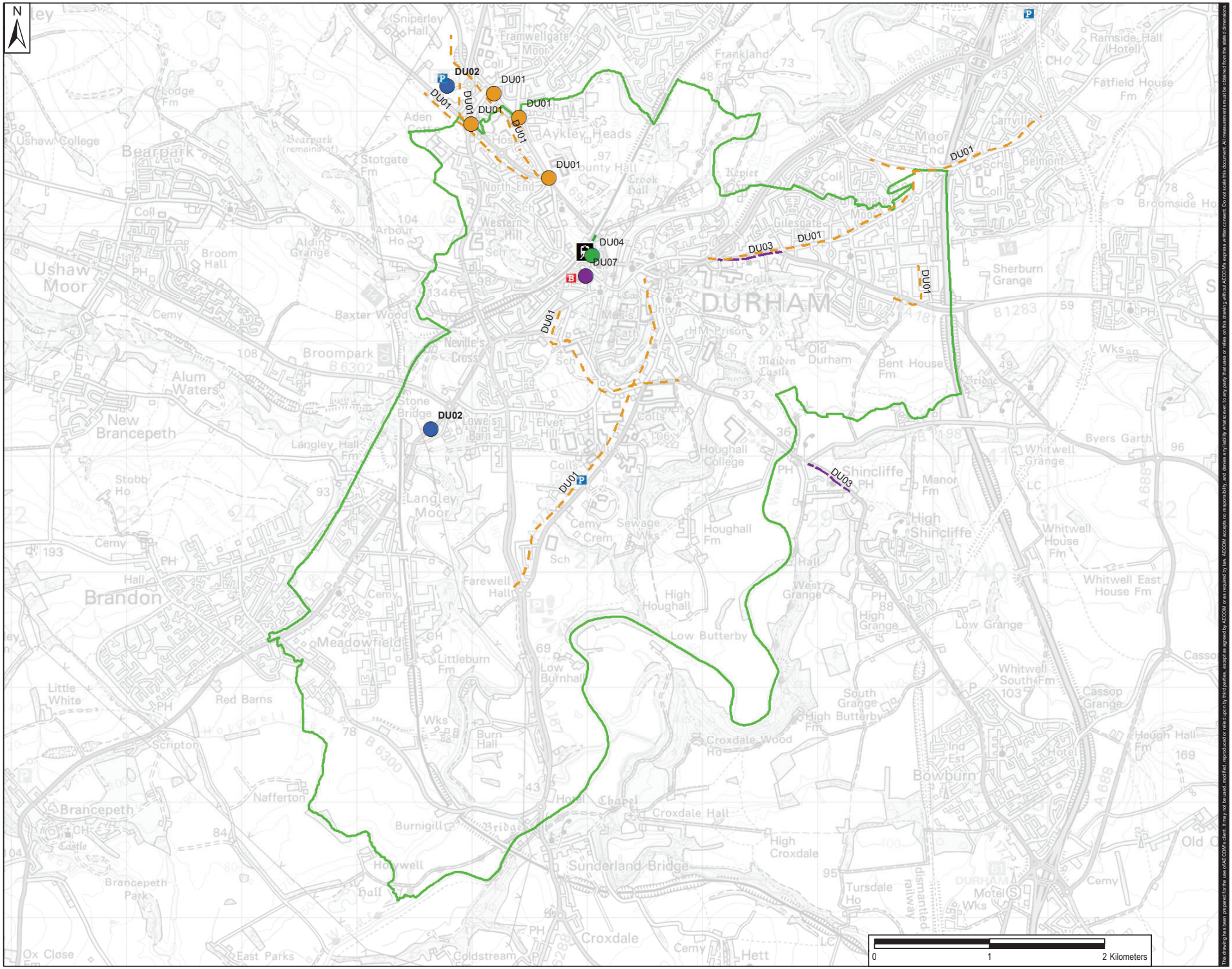


North East Combined Authority
NORTH OF TYNE COMBINED AUTHORITY
INDUSTRIAL STRATEGY
TRANSFORMING CITIES FUND

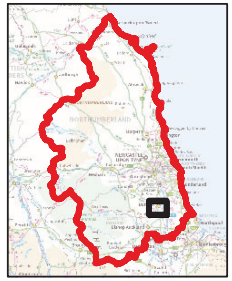
Project Title:
TRANSFORMING CITIES TRANCHE2

Client:
NORTH EAST JOINT TRANSPORT COMMITEE

LEGEND

- Durham City Centre
- Medium Cost Schemes City Centre Gateways
- Medium Cost Schemes City Centre Gateways
- Medium Cost Scheme Cycle Walking
- Medium Cost Scheme Cycle Walking
- Medium Cost Scheme Bus Corridors
- Medium Cost Scheme Bus Corridors
- Medium Cost Scheme Park&Ride
- Bus Station
- Existing Car Parks
- National Rail Stations

LOCATION PLAN



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Copyright:

AECOM Internal Project No:
60594462

Drawing Title:
TRANSFORMING CITY CENTRE GATEWAYS DURHAM

Scale at A3: 1:30,000

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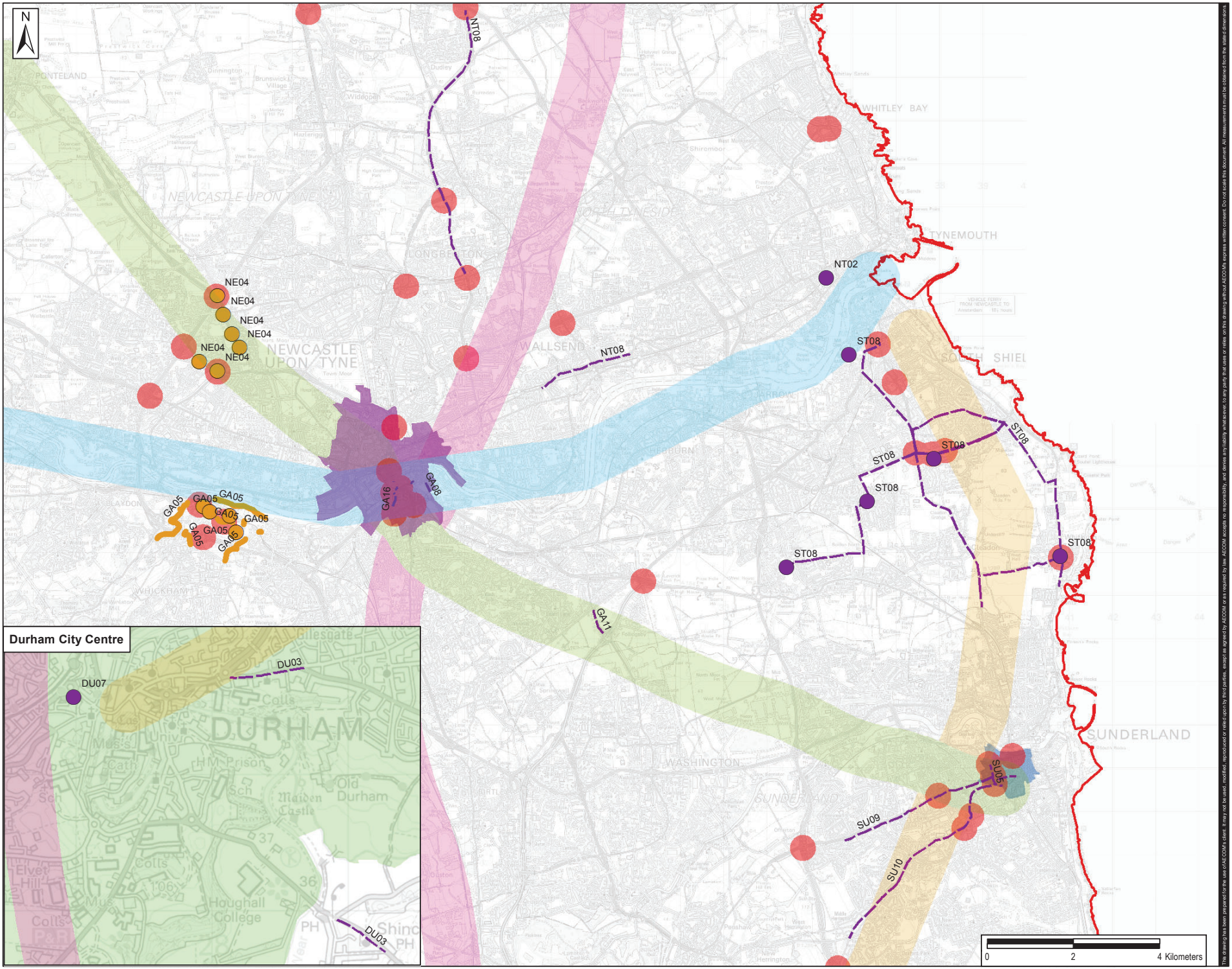


neca North East Combined Authority — NORTH OF TYNE COMBINED AUTHORITY

INDUSTRIAL STRATEGY — TRANSFORMING CITIES FUND

Project Title:

TRANSFORMING CITIES TRANCHE2

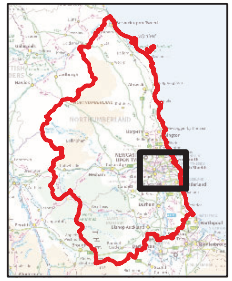
Client:

NORTH EAST JOINT TRANSPORT COMMITEE

LEGEND

- Medium Cost Scheme Bus Corridors
- Medium Cost Scheme Bus Corridors
- NELEP Boundary
- Newcastle City Centre
- Durham City Centre
- Sunderland City Centre
- Bus Congestion Location
- GA05 - Metro Green Sustainable Access
- GA05 - Metro Green Sustainable Access
- NE04 - Newcastle Outer West
- Banks of the Tyne
- Cities and Airport
- North and South
- River Wear

LOCATION PLAN



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Copyright:

AECOM Internal Project No:

60594462

Drawing Title:

TRANSFORMING BUS CORRIDORS

Scale at A3: 1:80,000

Drawing No:			Rev:
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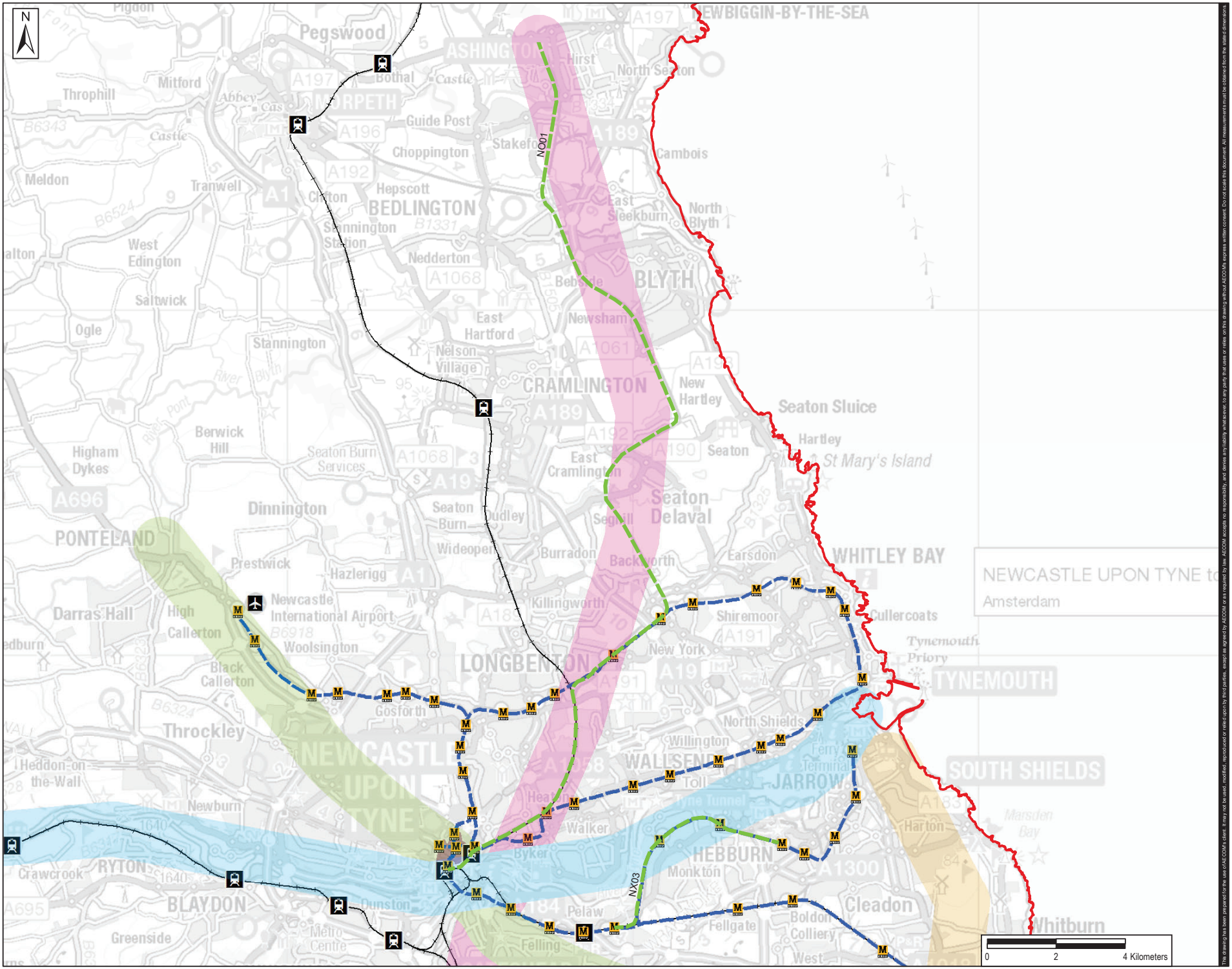


neca North East Combined Authority — NORTH OF TYNE COMBINED AUTHORITY

INDUSTRIAL STRATEGY — TRANSFORMING CITIES FUND

Project Title:

TRANSFORMING CITIES TRANCHE2

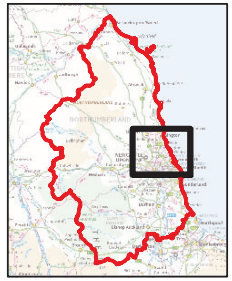
Client:

NORTH EAST JOINT TRANSPORT COMMITEE

LEGEND

- Medium Cost Schemes Delivering the Metro and Local Rail Strategy
- 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

LOCATION PLAN



Notes

Copyright:

AECOM Internal Project No:

60594462

Drawing Title:

DELIVERING THE METRO AND LOCAL RAIL STRATEGY

Scale at A3: 1:100,000

Drawing No:			Rev:
APPENDIX K10			001
Drawn:	**Chk'd:**	**App'd:**	**Date:**
JC	AD	MS	18/06/19

APPENDIX L: APPRAISAL SPECIFICATION REPORT (ASR)

NECA Transforming Cities Fund Tranche 2: Programme Level Appraisal Specification Note (19-6-19)

Introduction

This note outlines our proposed approach to the appraisal of the North East Transforming Cities Tranche 2 programme. It is structured as follows:

- DfT requirements – an overview of the appraisal and submission requirements set by DfT.
- Programme overview – a description of the elements of the programme.
- Proposed appraisal approach – a discussion of our proposed appraisal approach.

This note is a "live" document and will be maintained and updated as the programme evolves, and/or as new information becomes available.

DfT requirements

The appraisal requirements of the programme are set out in the document "Transforming Cities Fund Supplementary Guidance for Shortlisted City Regions: Tranche 2" (DfT, January 2019). Section 3 of this guidance covers the process and criteria to be followed. The key elements of this guidance, in terms of the economic appraisal of the programme, are set out below.

- Section 3.2 – The Department's assessment will be consistent with the Transport Business Case process covering strategic, economic, financial, commercial, and management cases.
- Section 3.3 – The principles for assessing value for money follow the guidance set out in DfT's Value for Money framework.
- Section 3.5 – Formal funding approval will be taken at a programme level, with all or most investment decisions on individual components of the package to be made locally in accordance with the city region's assurance frameworks.
- Section 3.5 – Any individual scheme decision of £40 million or over, even if the Fund contribution is less than that, will also require the approval of the Department.
- Section 3.6 – Investment packages should be prepared for low, medium and high funding levels…. Options assessment for the different packages and their respective funding should be included, with estimated Benefit-Cost Ratios and detailed identification of non-monetised impacts. Details should also be provided on the transport and economic modelling undertaken, alongside a Transport Economic Efficiency Table.
- 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 3.9 – Promoters are required to submit a full appraisal in line with the Department's Transport Business Case Guidance and Transport Appraisal Guidance (WebTAG). For individual schemes over £40 million, business cases will also be expected to successfully progress through Outline Business Case (OBC) and Full Business Case (FBC) stages to be fully awarded funding,
- 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. A

proportionate approach should be adopted, for example the use of supplementary economic modelling is not encouraged for an SOBC.

Our interpretation of this guidance is as follows:

- A WebTAG compliant economic appraisal is required with key output summary tables, such as the TEE table and AST required.
- The appraisal should be undertaken at the full programme level. Appraisals of the low, medium and high cost options should be provided.
- In deference to the fact that the programme is at Strategic Outline Business Case stage, a proportionate appraisal is expected. We aim to define a proportionate approach that is consistent with this requirement whilst making best use of existing data and appraisal and assessment work.
- It will be required to consider the impacts of interdependencies between various elements of the scheme (e.g. the cumulative impacts of different scheme elements may result in greater benefits, by contrast some schemes may compete for users with other existing, or new, schemes or services and the impacts of potential mode share changes need to be considered).

Programme Overview

This section briefly outlines the proposed programme. It is currently structured in five themes:

Theme 1 – Transforming bus corridors

Theme 2 – Transforming Cycling and Walking Corridors

Theme 3 – Transforming City Centre Gateways

Theme 4 – Transforming Park and Ride

Theme 5 – Delivering Metro and Local Rail Strategy.

Proposed appraisal approach

General Appraisal Approach

Our proposed appraisal approach is considered in this section. WebTAG Unit A2.1 Table 2 is reproduced below and outlines 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. Appraisal will be carried out using TAG software such as TUBA and WITA where possible. However, it should be noted that, in the absence of a suitable transport model covering the region, with the exception of the larger schemes, this will not be possible.

Table 2 - Relationships between Wider Economic Impacts, Levels of Analysis and Land Use assumptions

	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

***Note that the arrows signify the previous levels of analysis are required**

Where business cases and appraisals have been undertaken it is proposed to lift appraisal results directly from these business cases and incorporate them into the programme wide business case being prepared here. At the time of writing, these business cases have not been reviewed by the TCF team, so it is not possible to identify which elements will be incorporated. However, it should be noted that some elements of the programme have a value greater than £40m and a comprehensive business case, sufficient to meet the requirement of the DfT in assessing TCF submissions, is expected. It is expected that an appropriate range of user benefits (including consideration of journey time savings, quality benefits and impacts on users of other modes) will be included and it is our understanding that Level 2 analysis, considering Wider Economic Impacts will also be undertaken, although this is more likely to be provided by late 2019.

Of importance for this submission are the interdependencies between these schemes and other existing, or proposed schemes or services. It is important to understand the additional benefits of any synergies between schemes as well as avoiding the double counting of benefits. It is understood that this issue is addressed (at least in part) in the appraisal work already carried out and this will be reviewed and incorporated into this appraisal where appropriate. The section below, considering wider interdependencies, is also relevant to this question

Where prior appraisal is not available, schemes will be assessed on a scheme-by-scheme basis. The general approach to appraisal of different scheme types and/or elements is as follows:

- **UTMC/traffic signals**
  It is expected that schemes proposed here will cover significant whole corridors or areas. It is also expected that detailed scheme appraisal will not be undertaken in the short-term. Therefore, it is proposed to follow an appraisal approach similar to that used for similar schemes in Tranche 1. The key source for defining benefits is proposed to be the report “NECA UTMC Review”, prepared by AECOM on behalf of NECA in March 2016. One of the outputs of this report is a comprehensive review of the benefits of enhancements of this type of scheme, drawing on experience following the

implementation of similar systems elsewhere, including the identification of monetised benefits where possible. This includes adaptive signal control, both fully coordinated and isolated sites (benefits per junction), and real-time travel/road information systems (benefits per individual junction). Benefits consist largely of reductions in delays and stops with benefits to user time-savings and potentially local air quality.

- Other data sources e.g. to establish total potential users affected will be drawn on where appropriate. These might include highway and public transport patronage counts with standard methods being used to value the savings to users. The requirement for robust patronage and volume data is acknowledged. Local data, collected and collated on an ongoing basis by the Traffic and Accident Data Unit (TADU), will be used as a primary source of data, with other local data collected for the development of schemes and/or models used as appropriate. Public transport patronage data can be provided from local bus operators.

- **Cycle schemes**
  The DfTs AMAT tool will be used to assess the benefits of cycle schemes. This requires as its inputs key information on scheme length, type, existing and proposed users etc. This approach was used extensively in the appraisal of the Tranche 1 scheme and an identical approach is proposed here. 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 are not available the Propensity to Cycle Tool (PCT) will be used. Given the methodology of the PCT, journey to work data will only be used in circumstances where local data and the PCT tool are not available,

- An allowance would be made for the potential interdependencies between schemes of all modes by considering scheme location, any reduction in roadspace etc. This is considered in more detail, with reference to all schemes in the programme, later in this note.

- **Walking/public realm**
  The AMAT is proposed as the main assessment tool using the same approach as defined above. In the case of urban realm, additional economic benefits may be found. The approach here is still to be fully defined but a quantitative approach, using the VURT tool, will be undertaken if possible. Care will be taken to ensure that double counting of benefits in the VURT and AMAT tool does not occur (particularly for areas such as journey quality benefits accruing to pedestrians). Otherwise, a qualitative approach to wider impacts will be used drawing, in part, on the Economic Narrative being prepared for the scheme.

- **Bus schemes**
  The approach here would be to make use of and review existing analysis or, where none is available, bus AVL and patronage data to assess the potential journey time benefits and patronage achievable from proposed interventions. These journey time benefits would be valued using standard WebTAG principles and values. Journey time savings will typically be 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. As an example, for a scenario where delay is identified in the AM peak period a typical approach would be to assume that the interpeak journey time could be achieved with the scheme in place. The assumptions in this regard will be fully explained on a scheme-by-scheme basis. Initial investigations suggest that suitable disaggregate patronage data generally is available from operators, providing average hourly/period volumes. Where no patronage data is available, the WebTAG value will be used, however, the preference remains to make use of available data where possible.

  No comprehensive public transport model of the region currently exists. Therefore, instead, the impact of mode shift will potentially be assessed using logit models or elasticity methods if possible with diversion factors and marginal external costs (WebTAG A5.4) used to understand benefits to wider network and users. The approach to be adopted here will be further developed and explained as the appraisal progresses.

- **Park and ride schemes**
  The approach would be to make use of existing analysis or, where none is available, patronage data from similar sites to assess potential scheme usage, going on to value the benefits to users through making assessments of potential journey times, fares, vehicle costs, parking charges etc. We would consider labour market and population data (both baseline and future) to understand the potential market for schemes serving development areas. The precise methodology used will be explained in appraisal documentation.

As noted above and based on experience gained during the appraisal of Tranche 1 of the programme, the availability and quality of baseline usage information, together with information that can be used for the forecasting of demand will be of key important in assessing the supporting schemes. This potential deficiency has been noted and we are actively working with scheme promoters to address this issue.

It is not proposed to undertake any detailed new environmental or social appraisal at this stage. This will be reported where already undertaken for existing business cases or where appraisal of these is automatically incorporated into another appraisal method (e.g. AMAT). Where benefits are not captured within the methodology outlined above, valuations will be undertaken, where feasible, through using the TAG Marginal External Cost values. Further consideration will be given to appraising these elements for the November submission as the appraisal develops.

Given the above appraisal methodologies, Table 1 outlines the appraisal approach for each scheme. Full details of the methodology adopted will be provided in the Economic Case.

Table 1: Appraisal approach for each scheme

ID	Description	AMAT	Bus Journey Times	Other appraisal approach
DU01	Durham Walking & Cycling Improvements	✓		
DU02	Durham P&R Expansion			Appraisal work undertaken by promoter
DU03	Durham Bus Priority		✓	
DU04	Durham Rail Station Access	✓		Potential for journey time savings
DU07	Durham Bus Station			Appraisal work undertaken by promoter
GA01	West Tyneside Cycle Routes (upgrades)	✓		
GA05	Metro Green Sustainable Access	✓	✓	Potential for soft factor improvements to bus stops
GA07	Askew Road Pedestrian & Cycle Improvements	✓		
GA08	Hills Street & Gateshead Quays Sustainable Access	✓	✓	
GA09	A167 Birtley to Eighton Lodge Cycle Link	✓		
GA10	A184 Cycle Route	✓		
GA11	A195 Bus Lane		✓	
GA13	Keelmans Way Cycling Improvements	✓		
GA16	Gateshead Interchange Bus Lane		✓	
IN01	Intu Cycle Storage	✓		
ITS01	ITS scheme (still to be fully defined)			No appraisal carried out at this stage.
NE01	Transforming Newcastle City Centre			Appraisal work undertaken by promoter
NE02	Newcastle Central Station Gateway			Appraisal work undertaken by promoter
NE03	Newcastle - North Tyneside Strategic Cycling Infrastructure	✓		
NE04	Newcastle Outer West			Appraisal work undertaken by promoter
NE07/ NO02	Airport - Ponteland Cycle Route (including NO02)	✓		Appraisal work undertaken by promoter

NE08	Newcastle Streets for People	✓		
NO01	Northumberland Line			Appraisal work undertaken by promoter
NT02	North Shields Transport Hub		✓	Potential for soft factor improvements to bus/interchange facilities
NT08	A188/A189 Bus Priority		✓	
NT10	Metro Cycling & Walking Links	✓		
NX02	Metro P&R Enhancements			Appraisal work undertaken by promoter
NX03	Metro Flow			Appraisal work undertaken by promoter
NX04	Follingsby & Callerton P&R Sites			P&R appraisal
ST04	Smart / Healthier Metro Stations	✓		
ST08a	South Shields - Newcastle Bus Improvements		✓	Appraisal work undertaken by promoter (level crossings)
ST08b	South Shields - Sunderland Bus Improvements		✓	
SU03	Sunderland Central Station	✓		Appraisal work undertaken by promoter
SU04	Holmeside Bus Rationalisation		✓	
SU05	Sunderland Inner Ring Road Bus Priority		✓	
SU07	Sunderland Station Car Park			Bespoke appraisal
SU09	Chester Road Bus Corridor		✓	
SU10	A690 Bus Route Action Plan		✓	
SU15	A690 Strategic Cycling Corridor	✓		

Clean Air Zone

The potential impact of the North-East Clean Air Zone (CAZ) interventions also need to be considered. The scheme to be taken forward is not known at present but initial modelling, potentially providing an understanding of the mode shift associated with the scheme, is available. This will be reviewed and alterations made to existing and forecast demand levels where appropriate considering the expected scale and scope of the impact of the CAZ proposals. It is envisaged that this will be undertaken as a sensitivity test.

It is expected that the consultation process on the areas CAZ will be completed and decision made on the proposed scheme by late summer 2019, following which the appraisal will be updated, if required.

Interdependencies

As noted above, it will also be required to understand interdependencies between schemes. There are two broad types of interdependencies that could be considered.

- Cost changes on one mode leading to mode shift e.g. improved metro journey times because of dualling, 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.
- Wider policy changes e.g. Clean Air Zone, parking policy etc.

No suitable detailed transport model of the area 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 elsewhere, will be adopted.

The table below identifies some of the key interdependencies between modes and the proposed method of assessing interdependencies.

Schemes	Impacts on…				
	Rail/metro	**Bus**	**Highway**	**Cycle**	**Walking**
Rail/metro	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
	Addressed in scheme appraisal work supplied to NECA team by scheme promoter.	Addressed in scheme appraisal work supplied to NECA team by scheme promoter.	May be addressed in supplied scheme appraisal work. Alternatively, WebTAG diversion factors and MECs. Approach to be confirmed as BCs are reviewed in detail.	Qualitative	
Bus	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
	Addressed in supplied scheme appraisal work	Manual reassignment of trips between services based on routes / frequencies etc.	WebTAG diversion factors and MECs (based on bus patronage forecasts)	Qualitative	
Highway	Potential modal competition	Potential modal competition, impacts of PT priority.	-	-	-
	Schemes in programme not expected to increase private car use – assume to be capacity neutral so no appraisal of this impact proposed.		-	-	-
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
	Qualitative	WebTAG diversion factors and MECs.	WebTAG diversion factors and MECs.	Manual reassignment of trips between identified routes.	Qualitative
Walking	Potential interchange at stations/stops	Potential interchange at stations/stops	Potential modal competition	-	-
	Qualitative			-	-

The approach to be used is set out in more detail below.

Where business cases and/or modelling reports have been supplied, these will be used to understand the potential impacts and results (e.g. assessments of mode shift or abstracted traffic) incorporated into the programme wide case through alterations to scheme usage forecasts etc. as appropriate.

WebTAG diversion factors/MECs – The guidance in WebTAG Unit 5.4 will be used to understand the changes in overall demand, with these changes either reflected in demand forecasts for appraisal of other scheme elements (where schemes are clearly in competition) or using Marginal External Costs in other cases. Note that schemes assessed using the AMAT tool have the diversion factors built in as standard.

Manual reassignment – potential reassignment between different services/routes etc. will be built into the main appraisal for individual scheme elements using local and wider evidence/data where appropriate. Geographical locations, nature of schemes and potential abstraction of demand etc. would all be considered in conducting the analysis. Further detail on assumptions used will be supplied as the appraisal progresses.

As noted above, the cumulative impact of the schemes may also be expected to impact on the overall level of trip making, through improving the attractiveness of the transport system. Without an appropriate model this is a challenging aspect of the analysis. Our approach to this is still being developed fully but we note that the current version of WebTAG currently contains several diversion factors for various modes. These are based on a research report “Bus fare and journey time elasticities and diversion factors for all modes” (Dunkerley et al (2018)) and provide an estimate of how increases/decreases in travel on one mode affect usage of other modes, including and allowance for “no travel”. It is proposed to draw on this research to assess overall demand changes. It is suggested that sensitivity tests about this range are produced. The above would be supported by a detailed qualitative commentary, linking with the Economic Narrative produced for the Strategic Case, outlining other longer term and wider impacts that might be expected although not valued at this stage. This will be built on further following the submission of the Draft SOBC.

APPENDIX M: SUMMARY APPRAISALS FOR EACH SCHEME

Appraisal methodology and results Appendix

Transforming Cities Fund: Tranche 2

Scheme Information	
Scheme ID	DU01
Scheme Name	Durham Walking & Cycling Improvements

Appraisal ongoing

Scheme Information	
Scheme ID	DU02
Scheme Name	Durham P&R Expansion

Economics Summary				
Element	**PVB**	**PVC**	**NPV**	**BCR**
Scheme element	£8,425,482.00			
Total	**£8,425,482.00**	**£3,206,965.60**	**£5,218,516.40**	**2.63**

Scheme Information	
Scheme ID	DU02
Scheme Name	Durham P&R Expansion

Cost Details		
Total Scheme Cost		£4,500,000.00
TCF Ask		£2,700,000.00
Public match funding		£1,800,000.00
Private Funding		£0.00
Optimism Bias		15%
Profile	2019	£0.00
	2020	£4,485,000.00
	2021	£15,000.00
	2022	£0.00
	2023	£0.00

Total PVC (discounted to 2010 prices)	**£3,206,965.60**

Scheme Information	
Scheme ID	DU02
Scheme Name	Durham P&R Expansion
Location	*Stonebridge (new site) & Sniperley (expansion)*

Appraisal methodology
Appraisal undertaken by Jacobs for Durham County Council. Outputs from the Durham Transport Model were used in conjunction with a bespoke P&R logit demand model that was developed in accordance with WebTAG and best practice principles.

Appraisal Period	
Years	**60**

Appraisal Results (all in 2010 prices)	
Total PVB	**£8,425,482.00**

Scheme Information	
Scheme ID	DU03
Scheme Name	Durham Bus Priority

Economics Summary				
Element	**PVB**	**PVC**	**NPV**	**BCR**
Gilesgate	£983,117.09			
Shincliffe	£247,989.43			
Total	**£1,231,106.52**	**£238,583.61**	**£992,522.91**	**5.16**

Scheme Information	
Scheme ID	DU03
Scheme Name	Durham Bus Priority

Cost Details		
Total Scheme Cost		£349,080.00
TCF Ask		£232,720.00
Public match funding		£116,360.00
Private Funding		£0.00
Optimism Bias		15%
Profile	2019	£0.00
	2020	£74,080.00
	2021	£275,000.00
	2022	£0.00
	2023	£0.00

Total PVC (discounted to 2010 prices)	**£238,583.61**

Scheme Information	
Scheme ID	DU03
Scheme Name	Durham Bus Priority
Location	*Gilesgate Bus Priority*

Appraisal methodology

Bus time savings have been calculated by comparing average journey times during the relevant peak period with the average journey times during the interpeak. The difference between the two has been used as the journey time saving. These values have then been multiplied against the values of time for commuting and other purposes in WebTAG databook.

The proportion of commuters and other users has been taken from WebTAG databook

Appraisal Inputs			
Direction	Southwest Bound		
Start stop	5302F - Sunderland Road, Gilesgate		
End Stop	5301F - Magdalene Street, Gilesgate		
Time period	**Before users**	**After users**	**Current average Journey time**
Pre 0700	18	18	8 Seconds
0700-1000	1710	1710	68 Seconds
1000-1600	2670	2670	8 Seconds
1600-1900	384	384	68 Seconds
After 1900	51	51	8 Seconds

Appraisal Period	
Years	**60**

WebTAG Values of Time per hour, Market price (Nov 18 Databook, Table A1.3.1)	
Value of Time: Commuter	**£9.95**
Value of Time: Other	**£4.50**

Appraisal Results (all in 2010 prices)	
Total PVB	**£983,117.09**

Scheme Information	
Scheme ID	DU03
Scheme Name	Durham Bus Priority
Location	*Shincliffe Bus Priority*

Appraisal methodology

Bus time savings have been calculated by comparing average journey times during the relevant peak period with the average journey times during the interpeak. The difference between the two has been used as the journey time saving. These values have then been multiplied against the values of time for commuting and other purposes in WebTAG databook.

The proportion of commuters and other users has been taken from WebTAG databook

Appraisal Inputs			
Direction	Northwest		
Start stop	5116H - Seven Stars PH, Shincliffe		
End Stop	5115H - Rose Tree PH, Shincliffe		
Time period	**Before users**	**After users**	**Current average Journey time**
Pre 0700	0	0	14 Seconds
0700-1000	640	640	64 Seconds
1000-1600	600	600	14 Seconds
1600-1900	110	110	14 Seconds
After 1900	28	28	14 Seconds

Appraisal Period	
Years	**£60.00**

WebTAG Values of Time per hour, Market price (Nov 18 Databook, Table A1.3.1)	
Value of Time: Commuter	**£9.95**
Value of Time: Other	**£4.50**

Appraisal Results (all in 2010 prices)	
Total PVB	**£247,989.43**

Scheme Information	
Scheme ID	DU04
Scheme Name	Durham Rail Station Access

Economics Summary				
Element	**PVB**	**PVC**	**NPV**	**BCR**
AMAT	£805,294.47			
Total	**£805,294.47**	**£100,712.04**	**£704,582.44**	**8.00**

Scheme Information	
Scheme ID	DU04
Scheme Name	Durham Rail Station Access

Cost Details		
Total Scheme Cost		£200,000.00
TCF Ask		£133,333.00
Public match funding		£66,667.00
Private Funding		£0.00
Optimism Bias		15%
Profile	2019	£0.00
	2020	£46,667.00
	2021	£100,000.00
	2022	£0.00
	2023	£0.00

Total PVC (discounted to 2010 prices)	**£100,712.04**

Scheme Information	
Scheme ID	DU04
Scheme Name	Durham Rail Station Access
Location ref & location	

Appraisal methodology
This scheme was appraised using the Department for Transport's (DfT) Active Mode Appraisal Toolkit (AMAT)

Appraisal Inputs				
	Input Category	**Input Value**		**Assumptions and evidence**
	Appraisal Period	20		
Info	Scheme open year	2021		
Info	Last year of funding	2021		
Info	Area located	Other Urban		
Info	Scheme length	0		
	Input Category	**Current**	**Proposed**	**Assumptions and evidence**
Cycling	Number of Cyclists	0	11	
Cycling	Cycle Infrastructure	No provision	No provision	
Cycling	Shower facilities		No	
Cycling	Secure Storage		No	
Walking	Current Pedestrians	0	203	
Walking	Street Lighting	No	Yes	
Walking	Kerb level	No	No	
Walking	Crowding	No	No	
Walking	Pavement evenness	No	Yes	
Walking	Information Pannels	No	No	
Walking	Benches	No	No	
Walking	Directional Signage	No	No	

Scheme Information	
Scheme ID	DU04
Scheme Name	Durham Rail Station Access
Location ref & location	

Appraisal Results (all in 2010 prices)	
Congestion benefit	£11,453.27
Infrastructure	£108.00
Accident	£3,240.14
Local air quality	£13.61
Noise	£216.01
Greenhouse gases	£574.52
Reduced risk of premature death	£575,348.27
Absenteeism	£196,877.25
Journey ambiance	£19,761.19
Indirect Taxation	-£2,189.79
Total PVB	**£805,294.47**

Scheme Information	
Scheme ID	DU07
Scheme Name	Durham Bus Station

Economics Summary				
Element	**PVB**	**PVC**	**NPV**	**BCR**
Bus Station	£18,850,221.24			
Total	**£18,850,221.24**	**£5,974,917.65**	**£12,875,303.59**	**3.15**

Scheme Information	
Scheme ID	DU07
Scheme Name	Durham Bus Station

Cost Details		
Total Scheme Cost		£8,500,000.00
TCF Ask		£4,250,000.00
Public match funding		£4,250,000.00
Private Funding		£0.00
Optimism Bias		15%
Profile	2019	£0.00
	2020	£6,250,000.00
	2021	£2,250,000.00
	2022	£0.00
	2023	£0.00

Total PVC (discounted to 2010 prices)	**£5,974,917.65**

Scheme Information	
Scheme ID	DU07
Scheme Name	Durham Bus Station
Location	

Appraisal methodology

Journey time benefits have been appraised, based on 50% of users arriving at the bus station and saving 15 secs as a result of the new layout. These time savings have then been applied to users, using the WebTAG splt between commuters and other users.

Soft Factors were calculated for CCTV abd RTPI improvements (25% of generalised minute value) and full benets for climate control and audio announcements. These were then multiplied by the values of times for commuters and users.

Other benefits are the cost savings associated with accidents and maintenance. There is also the one-off expenditure on replacing parts of the facility.

Appraisal Period	
Years	**60**

Appraisal Results (all in 2010 prices)	
Journey Time Savings	£1,069,741.85
Journey Quality	£16,056,825.12
Accidents	£771,638.30
Operational Costs	£952,285.98
Total PVB	**£18,850,221.24**

Scheme Information	
Scheme ID	GA01
Scheme Name	West Tyneside Cycle Routes (upgrades)

Economics Summary				
Element	**PVB**	**PVC**	**NPV**	**BCR**
A - Coalhouse Rbt Lobley Hill Rd	£2,677,836.65			
B - Lobley Hill Road	£365,099.57			
C - Eslington Park	£62,083.13			
D - Eslington Pk Mandela Way	£111,997.66			
E - Mandela Way River Derwent	£5,303.16			
F - River Derwent Patterson St	£269,825.85			
Private Funding	£28,511.32			
Total	**£3,463,634.70**	**£1,297,705.07**	**£2,165,929.63**	**2.67**

Scheme Information	
Scheme ID	GA01
Scheme Name	West Tyneside Cycle Routes (upgrades)

Cost Details		
Total Scheme Cost		£2,000,000.00
TCF Ask		£1,800,000.00
Public match funding		£160,000.00
Private Funding		£40,000.00
Optimism Bias		0%
Profile	2019	£0.00
	2020	£720,000.00
	2021	£620,000.00
	2022	£660,000.00
	2023	£0.00

Total PVC (discounted to 2010 prices)	**£1,297,705.07**

Scheme Information	
Scheme ID	GA01
Scheme Name	West Tyneside Cycle Routes (upgrades)
Location ref & location	*Coalhouse Roundabout to Lobley Hill Road, GA01-A*

Appraisal methodology
This scheme was appraised using the Department for Transport's (DfT) Active Mode Appraisal Toolkit (AMAT)

Appraisal Inputs				
	Input Category	**Input Value**		**Assumptions and evidence**
	Appraisal Period	20		
Info	Scheme open year	2022		
Info	Last year of funding	2022		
Info	Area located	Inner and Outer Conurbations		
Info	Scheme length	5 km		
	Input Category	**Current**	**Proposed**	**Assumptions and evidence**
Cycling	Number of Cyclists	361	567	TADU count and 57% growth.
Cycling	Cycle Infrastructure	No provision	On-road segregate	
Cycling	Shower facilities		No	
Cycling	Secure Storage		No	
Walking	Current Pedestrians	753	753	Based on OA populations
Walking	Street Lighting	Yes	Yes	Desktop Analysis and scheme info
Walking	Kerb level	No	Yes	Desktop Analysis and scheme info
Walking	Crowding	No	Yes	Desktop Analysis and scheme info
Walking	Pavement evenness	Yes	Yes	Desktop Analysis and scheme info
Walking	Information Pannels	No	No	Desktop Analysis and scheme info
Walking	Benches	No	No	Desktop Analysis and scheme info
Walking	Directional Signage	No	Yes	Desktop Analysis and scheme info

Scheme Information	
Scheme ID	GA01
Scheme Name	West Tyneside Cycle Routes (upgrades)
Location ref & location	*Coalhouse Roundabout to Lobley Hill Road, GA01-A*

Appraisal Results (all in 2010 prices)	
Congestion benefit	£122,358.72
Infrastructure	£405.25
Accident	£12,157.43
Local air quality	£59.94
Noise	£810.50
Greenhouse gases	£2,276.40
Reduced risk of premature death	£1,254,474.88
Absenteeism	£280,936.51
Journey ambiance	£1,013,259.88
Indirect Taxation	-£8,497.61
Total PVB	**£2,677,836.65**

Scheme Information	
Scheme ID	GA01
Scheme Name	West Tyneside Cycle Routes (upgrades)
Location ref & location	*Lobley Hill Road, GA01-B*

Appraisal methodology

This scheme was appraised using the Department for Transport's (DfT) Active Mode Appraisal Toolkit (AMAT)

Appraisal Inputs

	Input Category	Input Value		Assumptions and evidence
	Appraisal Period	20		
Info	Scheme open year	2022		
Info	Last year of funding	2022		
Info	Area located	Inner and Outer Conurbations		
Info	Scheme length	156m		
Cycling	**Input Category**	**Current**	**Proposed**	**Assumptions and evidence**
Cycling	Number of Cyclists	76	119	TADU count and 57% growth.
Cycling	Cycle Infrastructure	No provision	On-road segregate	
Cycling	Shower facilities		No	
Cycling	Secure Storage		No	
Walking	Current Pedestrians	88	88	Based on OA populations
Walking	Street Lighting	Yes	Yes	Desktop Analysis and scheme info
Walking	Kerb level	Yes	Yes	Desktop Analysis and scheme info
Walking	Crowding	No	Yes	Desktop Analysis and scheme info
Walking	Pavement evenness	No	Yes	Desktop Analysis and scheme info
Walking	Information Pannels	No	No	Desktop Analysis and scheme info
Walking	Benches	No	No	Desktop Analysis and scheme info
Walking	Directional Signage	No	No	Desktop Analysis and scheme info

Scheme Information	
Scheme ID	GA01
Scheme Name	West Tyneside Cycle Routes (upgrades)
Location ref & location	*Lobley Hill Road, GA01-B*

Appraisal Results (all in 2010 prices)	
Congestion benefit	£25,759.73
Infrastructure	£85.32
Accident	£2,559.46
Local air quality	£12.62
Noise	£170.63
Greenhouse gases	£479.24
Reduced risk of premature death	£264,099.97
Absenteeism	£59,144.53
Journey ambiance	£14,662.35
Indirect Taxation	-£1,788.97
Total PVB	**£365,099.57**

Scheme Information	
Scheme ID	GA01
Scheme Name	West Tyneside Cycle Routes (upgrades)
Location ref & location	*Eslington Park, GA01-C*

Appraisal methodology
This scheme was appraised using the Department for Transport's (DfT) Active Mode Appraisal Toolkit (AMAT)

Appraisal Inputs				
	Input Category	**Input Value**		**Assumptions and evidence**
	Appraisal Period	20		
Info	Scheme open year	2022		
Info	Last year of funding	2022		
Info	Area located	Inner and Outer Conurbations		
Info	Scheme length	634m		
Cycling	**Input Category**	**Current**	**Proposed**	**Assumptions and evidence**
Cycling	Number of Cyclists	10	15	PCT tool census count growthed appropriately and 57% growth.
Cycling	Cycle Infrastructure	Off-road segregated cycle track	Off-road segregate	
Cycling	Shower facilities		No	
Cycling	Secure Storage		No	
Walking	Current Pedestrians	828	828	Based on OA population
Walking	Street Lighting	Yes	Yes	Desktop Analysis and scheme info
Walking	Kerb level	Yes	Yes	Desktop Analysis and scheme info
Walking	Crowding	Yes	Yes	Desktop Analysis and scheme info
Walking	Pavement evenness	No	No	Desktop Analysis and scheme info
Walking	Information Pannels	No	No	Desktop Analysis and scheme info
Walking	Benches	No	No	Desktop Analysis and scheme info
Walking	Directional Signage	No	Yes	Desktop Analysis and scheme info

Scheme Information	
Scheme ID	GA01
Scheme Name	West Tyneside Cycle Routes (upgrades)
Location ref & location	*Eslington Park, GA01-C*

Appraisal Results (all in 2010 prices)	
Congestion benefit	£3,325.04
Infrastructure	£11.01
Accident	£330.37
Local air quality	£1.63
Noise	£22.02
Greenhouse gases	£61.86
Reduced risk of premature death	£34,089.75
Absenteeism	£7,634.31
Journey ambiance	£16,849.07
Indirect Taxation	-£230.92
Total PVB	**£62,083.13**

Scheme Information	
Scheme ID	GA01
Scheme Name	West Tyneside Cycle Routes (upgrades)
Location ref & location	*Eslington Park to Mandela Way, GA01-D*

Appraisal methodology
This scheme was appraised using the Department for Transport's (DfT) Active Mode Appraisal Toolkit (AMAT)

Appraisal Inputs				
	Input Category	**Input Value**		**Assumptions and evidence**
	Appraisal Period	20		
Info	Scheme open year	2022		
Info	Last year of funding	2022		
Info	Area located	Inner and Outer Conurbations		
Info	Scheme length	1220m		
	Input Category	**Current**	**Proposed**	**Assumptions and evidence**
Cycling	Number of Cyclists	7	10	PCT tool census count growthed appropriately and 57% growth.
Cycling	Cycle Infrastructure	No provision	On-road non-segre	
Cycling	Shower facilities		No	
Cycling	Secure Storage		No	
Walking	Current Pedestrians	391	391	Based on OA populations
Walking	Street Lighting	Yes	Yes	Desktop Analysis and scheme info
Walking	Kerb level	No	Yes	Desktop Analysis and scheme info
Walking	Crowding	No	Yes	Desktop Analysis and scheme info
Walking	Pavement evenness	No	Yes	Desktop Analysis and scheme info
Walking	Information Pannels	No	No	Desktop Analysis and scheme info
Walking	Benches	No	No	Desktop Analysis and scheme info
Walking	Directional Signage	No	No	Desktop Analysis and scheme info

Scheme Information	
Scheme ID	GA01
Scheme Name	West Tyneside Cycle Routes (upgrades)
Location ref & location	*Eslington Park to Mandela Way, GA01-D*

Appraisal Results (all in 2010 prices)	
Congestion benefit	£2,216.69
Infrastructure	£7.34
Accident	£220.25
Local air quality	£1.09
Noise	£14.68
Greenhouse gases	£41.24
Reduced risk of premature death	£22,726.50
Absenteeism	£5,089.54
Journey ambiance	£81,841.62
Indirect Taxation	-£153.95
Total PVB	**£111,997.66**

Scheme Information	
Scheme ID	GA01
Scheme Name	West Tyneside Cycle Routes (upgrades)
Location ref & location	*Mandela Way to River Derwent, GA01-E*

Appraisal methodology
This scheme was appraised using the Department for Transport's (DfT) Active Mode Appraisal Toolkit (AMAT)

Appraisal Inputs				
	Input Category	**Input Value**		**Assumptions and evidence**
	Appraisal Period	20		
Info	Scheme open year	2022		
Info	Last year of funding	2022		
Info	Area located	Inner and Outer Conurbations		
Info	Scheme length	1580m		
Cycling	**Input Category**	**Current**	**Proposed**	**Assumptions and evidence**
Cycling	Number of Cyclists	1	2	PCT tool census count growthed appropriately and 57% growth.
Cycling	Cycle Infrastructure	On-road segregated cycle lane	On-road segregate	
Cycling	Shower facilities		No	
Cycling	Secure Storage		No	
Walking	Current Pedestrians	10	10	Assumed minimal use based on area
Walking	Street Lighting	Yes	Yes	Desktop Analysis and scheme info
Walking	Kerb level	Yes	Yes	Desktop Analysis and scheme info
Walking	Crowding	No	Yes	Desktop Analysis and scheme info
Walking	Pavement evenness	Yes	Yes	Desktop Analysis and scheme info
Walking	Information Pannels	No	No	Desktop Analysis and scheme info
Walking	Benches	No	No	Desktop Analysis and scheme info
Walking	Directional Signage	No	No	Desktop Analysis and scheme info

Scheme Information	
Scheme ID	GA01
Scheme Name	West Tyneside Cycle Routes (upgrades)
Location ref & location	*Mandela Way to River Derwent, GA01-E*

Appraisal Results (all in 2010 prices)	
Congestion benefit	£338.94
Infrastructure	£1.12
Accident	£33.68
Local air quality	£0.17
Noise	£2.25
Greenhouse gases	£6.31
Reduced risk of premature death	£3,475.00
Absenteeism	£778.22
Journey ambiance	£692.14
Indirect Taxation	-£23.54
Total PVB	**£5,303.16**

Scheme Information	
Scheme ID	GA01
Scheme Name	West Tyneside Cycle Routes (upgrades)
Location ref & location	*River Derwent to Patterson Street, GA01-F*

Appraisal methodology
This scheme was appraised using the Department for Transport's (DfT) Active Mode Appraisal Toolkit (AMAT)

Appraisal Inputs				
	Input Category	**Input Value**		**Assumptions and evidence**
	Appraisal Period	20		
Info	Scheme open year	2022		
Info	Last year of funding	2022		
Info	Area located	Inner and Outer Conurbations		
Info	Scheme length	1580m		Google maps based on descriptions
Cycling	**Input Category**	**Current**	**Proposed**	**Assumptions and evidence**
Cycling	Number of Cyclists	50	79	ool census count growthed appropriately and 57% gr
Cycling	Cycle Infrastructure	Off-road segregated cycle track	Off-road segregate	
Cycling	Shower facilities		No	
Cycling	Secure Storage		No	
Walking	Current Pedestrians	114	114	Based on OA population
Walking	Street Lighting	No	Yes	Desktop Analysis and scheme info
Walking	Kerb level	No	Yes	Desktop Analysis and scheme info
Walking	Crowding	No	Yes	Desktop Analysis and scheme info
Walking	Pavement evenness	No	Yes	Desktop Analysis and scheme info
Walking	Information Pannels	No	No	Desktop Analysis and scheme info
Walking	Benches	No	No	Desktop Analysis and scheme info
Walking	Directional Signage	Yes	Yes	Desktop Analysis and scheme info

Scheme Information	
Scheme ID	GA01
Scheme Name	West Tyneside Cycle Routes (upgrades)
Location ref & location	*River Derwent to Patterson Street, GA01-F*

Appraisal Results (all in 2010 prices)	
Congestion benefit	£16,994.64
Infrastructure	£56.29
Accident	£1,688.57
Local air quality	£8.33
Noise	£112.57
Greenhouse gases	£316.17
Reduced risk of premature death	£174,236.48
Absenteeism	£39,019.82
Journey ambiance	£38,629.51
Indirect Taxation	-£1,180.25
Total PVB	**£269,825.85**

Scheme Information	
Scheme ID	GA05
Scheme Name	Metro Green Sustainable Access

Appraisal ongoing

Scheme Information	
Scheme ID	GA07
Scheme Name	Askew Road Pedestrian & Cycle Improvements

Appraisal ongoing

Scheme Information	
Scheme ID	GA08
Scheme Name	Hills Street & Gateshead Quays Sustainable Access

Economics Summary				
Element	**PVB**	**PVC**	**NPV**	**BCR**
A - New Road	£356,316.58			
B - Askew Rd/Hills Street	£271,121.39			
C - Tyne Bridge Crossing	£232,008.75			
D - High Street Subway	£281,975.85			
E - Hawks Road	£45,540.92			
Bus	£1,690,612.07			
Private contributions	£55,906.13			
Total	**£2,821,669.41**	**£907,945.16**	**£1,913,724.25**	**3.11**

Scheme Information	
Scheme ID	GA08
Scheme Name	Hills Street & Gateshead Quays Sustainable Access

Cost Details		
Total Scheme Cost		£1,500,000.00
TCF Ask		£800,000.00
Public match funding		£620,000.00
Private Funding		£80,000.00
Optimism Bias		0%
Profile	2019	£0.00
	2020	£550,000.00
	2021	£550,000.00
	2022	£400,000.00
	2023	£0.00

Total PVC (discounted to 2010 prices)	**£907,945.16**

Scheme Information	
Scheme ID	GA08
Scheme Name	Hills Street & Gateshead Quays Sustainable Access
Location ref & location	*New Road, GA05-A*

Appraisal methodology
This scheme was appraised using the Department for Transport's (DfT) Active Mode Appraisal Toolkit (AMAT)

Appraisal Inputs				
	Input Category	**Input Value**		**Assumptions and evidence**
	Appraisal Period	20		
Info	Scheme open year	2022		
Info	Last year of funding	2022		
Info	Area located	Other Urban		
Info	Scheme length	411m		
Cycling	**Input Category**	**Current**	**Proposed**	**Assumptions and evidence**
Cycling	Number of Cyclists	0	46	PCT - half of 2011 Census users from Quarryfield Road, growthed based on DfT information
Cycling	Cycle Infrastructure	No provision	On-road non-segregated cycle lane	
Cycling	Shower facilities		No	
Cycling	Secure Storage		No	
Walking	Current Pedestrians	0	0	
Walking	Street Lighting	0	0	
Walking	Kerb level	0	0	
Walking	Crowding	0	0	
Walking	Pavement evenness	0	0	
Walking	Information Pannels	0	0	
Walking	Benches	0	0	
Walking	Directional Signage	0	0	

Scheme Information	
Scheme ID	GA08
Scheme Name	Hills Street & Gateshead Quays Sustainable Access
Location ref & location	*New Road, GA05-A*

Appraisal Results (all in 2010 prices)	
Congestion benefit	£9,598.49
Infrastructure	£90.16
Accident	£2,704.80
Local air quality	£10.84
Noise	£180.32
Greenhouse gases	£475.23
Reduced risk of premature death	£279,097.34
Absenteeism	£62,503.15
Journey ambiance	£3,514.17
Indirect Taxation	-£1,767.77
Total PVB	**£356,316.58**

Scheme Information	
Scheme ID	GA08
Scheme Name	Hills Street & Gateshead Quays Sustainable Access
Location ref & location	*Askew Rd/Hills Street, GA08-B*

Appraisal methodology
This scheme was appraised using the Department for Transport's (DfT) Active Mode Appraisal Toolkit (AMAT)

Appraisal Inputs				
	Input Category	**Input Value**		**Assumptions and evidence**
	Appraisal Period	20		
Info	Scheme open year	2022		
Info	Last year of funding	2022		
Info	Area located	Other Urban		
Info	Scheme length	133m		
	Input Category	**Current**	**Proposed**	**Assumptions and evidence**
Cycling	Number of Cyclists	82	115	PCT info growthed
Cycling	Cycle Infrastructure	No provision	No provision	Assumed
Cycling	Shower facilities		No	
Cycling	Secure Storage		No	
Walking	Current Pedestrians	215	215	Count provided by promoter, then estimated route useage
Walking	Street Lighting	Yes	Yes	
Walking	Kerb level	Yes	Yes	
Walking	Crowding	No	Yes	
Walking	Pavement evenness	Yes	Yes	
Walking	Information Pannels	No	No	
Walking	Benches	No	No	
Walking	Directional Signage	No	No	

Scheme Information	
Scheme ID	GA08
Scheme Name	Hills Street & Gateshead Quays Sustainable Access
Location ref & location	*Askew Rd/Hills Street, GA08-B*

Appraisal Results (all in 2010 prices)	
Congestion benefit	£6,971.38
Infrastructure	£65.48
Accident	£1,964.50
Local air quality	£7.87
Noise	£130.97
Greenhouse gases	£345.16
Reduced risk of premature death	£202,708.31
Absenteeism	£45,396.02
Journey ambiance	£14,881.11
Indirect Taxation	-£1,283.93
Total PVB	**£271,121.39**

Scheme Information	
Scheme ID	GA08
Scheme Name	Hills Street & Gateshead Quays Sustainable Access
Location ref & location	*Tyne Bridge Crossing, GA05-C*

Appraisal methodology
This scheme was appraised using the Department for Transport's (DfT) Active Mode Appraisal Toolkit (AMAT)

Appraisal Inputs				
	Input Category	**Input Value**		**Assumptions and evidence**
	Appraisal Period	20		
Info	Scheme open year	2022		
Info	Last year of funding	2022		
Info	Area located	Other Urban		
Info	Scheme length	30m		
Cycling	**Input Category**	**Current**	**Proposed**	**Assumptions and evidence**
Cycling	Number of Cyclists	38	57	Count provided by promoter and increase based on PCT tool gov target
Cycling	Cycle Infrastructure	Off-road segregated cycle track	Off-road segregate	
Cycling	Shower facilities		No	
Cycling	Secure Storage		No	
Walking	Current Pedestrians	429	429	Count provided by promoter, then estimated route useage
Walking	Street Lighting	No	No	
Walking	Kerb level	No	Yes	
Walking	Crowding	No	Yes	
Walking	Pavement evenness	No	Yes	
Walking	Information Pannels	No	No	
Walking	Benches	No	No	
Walking	Directional Signage	No	No	

Scheme Information	
Scheme ID	GA08
Scheme Name	Hills Street & Gateshead Quays Sustainable Access
Location ref & location	*Tyne Bridge Crossing, GA05-C*

Appraisal Results (all in 2010 prices)	
Congestion benefit	£3,983.65
Infrastructure	£37.42
Accident	£1,122.57
Local air quality	£4.50
Noise	£74.84
Greenhouse gases	£197.23
Reduced risk of premature death	£115,833.32
Absenteeism	£25,940.58
Journey ambiance	£85,585.73
Indirect Taxation	-£733.68
Total PVB	**£232,008.75**

Scheme Information	
Scheme ID	GA08
Scheme Name	Hills Street & Gateshead Quays Sustainable Access
Location ref & location	*High Street Subway, GA05-D*

Appraisal methodology
This scheme was appraised using the Department for Transport's (DfT) Active Mode Appraisal Toolkit (AMAT)

Appraisal Inputs				
	Input Category	**Input Value**		**Assumptions and evidence**
	Appraisal Period	20		
Info	Scheme open year	2022		
Info	Last year of funding	2022		
Info	Area located	Other Urban		
Info	Scheme length	25m		
	Input Category	**Current**	**Proposed**	**Assumptions and evidence**
Cycling	Number of Cyclists	82	115	PCT info growthed
Cycling	Cycle Infrastructure	Off-road segregated cycle track	Off-road segregate	
Cycling	Shower facilities		No	
Cycling	Secure Storage		No	
Walking	Current Pedestrians	129	129	Count provided by promoter, then estimated route useage
Walking	Street Lighting	No	No	
Walking	Kerb level	No	Yes	
Walking	Crowding	No	Yes	
Walking	Pavement evenness	No	Yes	
Walking	Information Pannels	No	No	
Walking	Benches	No	No	
Walking	Directional Signage	No	No	

Scheme Information	
Scheme ID	GA08
Scheme Name	Hills Street & Gateshead Quays Sustainable Access
Location ref & location	*High Street Subway, GA05-D*

Appraisal Results (all in 2010 prices)	
Congestion benefit	£6,971.38
Infrastructure	£65.48
Accident	£1,964.50
Local air quality	£7.87
Noise	£130.97
Greenhouse gases	£345.16
Reduced risk of premature death	£202,708.31
Absenteeism	£45,396.02
Journey ambiance	£25,735.57
Indirect Taxation	-£1,283.93
Total PVB	**£281,975.85**

Scheme Information	
Scheme ID	GA08
Scheme Name	Hills Street & Gateshead Quays Sustainable Access
Location ref & location	*Hawks Road, GA05-E*

Appraisal methodology
This scheme was appraised using the Department for Transport's (DfT) Active Mode Appraisal Toolkit (AMAT)

Appraisal Inputs				
	Input Category	**Input Value**		**Assumptions and evidence**
	Appraisal Period	20		
Info	Scheme open year	2022		
Info	Last year of funding	2022		
Info	Area located	Other Urban		
Info	Scheme length	150m		
	Input Category	**Current**	**Proposed**	**Assumptions and evidence**
Cycling	Number of Cyclists	100	100	Assumptions based on the presence of college
Cycling	Cycle Infrastructure	No provision	On-road segregate	
Cycling	Shower facilities		No	
Cycling	Secure Storage		No	
Walking	Current Pedestrians	200	200	Assumptions based on the presence of college
Walking	Street Lighting	Yes	Yes	
Walking	Kerb level	No	Yes	
Walking	Crowding	No	Yes	
Walking	Pavement evenness	No	Yes	
Walking	Information Pannels	No	No	
Walking	Benches	No	No	
Walking	Directional Signage	No	No	

Scheme Information	
Scheme ID	GA08
Scheme Name	Hills Street & Gateshead Quays Sustainable Access
Location ref & location	*Hawks Road, GA05-E*

Appraisal Results (all in 2010 prices)	
Congestion benefit	£0.00
Infrastructure	£0.00
Accident	£0.00
Local air quality	£0.00
Noise	£0.00
Greenhouse gases	£0.00
Reduced risk of premature death	£0.00
Absenteeism	£0.00
Journey ambiance	£45,540.92
Indirect Taxation	£0.00
Total PVB	**£45,540.92**

Scheme Information	
Scheme ID	GA08
Scheme Name	Hills Street & Gateshead Quays Sustainable Access
Location	*Insert location of relevant bus priority measures*

Appraisal methodology

Bus time savings have been calculated by comparing average journey times during the relevant peak period with the average journey times during the offpeak (after 7pm). The difference between the two has been used as the journey time saving. These values have then been multiplied against the values of time for commuting and other purposes in WebTAG databook.

The proportion of commuters and other users has been taken from WebTAG databook

Appraisal Inputs			
Direction	Eastbound		
Start stop	Hills Street (15g04)		
End Stop	Tyne Bridge North End (08nc65)		
Time period	**Before users**	**After users**	**Current average Journey time**
Pre 0700	322	0	1.08
0700-1000	1681	0	1.23
1000-1600	3554	0	1.16
1600-1900	1236	0	1.21
After 1900	550	0	0.57

Appraisal Period	
Years	

WebTAG Values of Time per hour, Market price (Nov 18 Databook, Table A1.3.1)	
Value of Time: Commuter	**£9.95**
Value of Time: Other	**£4.50**

Appraisal Results (all in 2010 prices)	
Total PVB	**£1,690,612.07**

Scheme Information	
Scheme ID	GA09
Scheme Name	A167 Birtley to Eighton Lodge Cycle Link

Economics Summary				
Element	**PVB**	**PVC**	**NPV**	**BCR**
AMAT-A	£112,857.68			
AMAT-B	£1,571,365.81			
AMAT-C	£156,363.20			
AMAT-D	£1,180,671.44			
AMAT-E	£118,543.61			
AMAT-F	£186,623.81			
Private contributions	£47,289.62			
Total	**£3,279,135.92**	**£3,130,379.04**	**£148,756.89**	**1.05**

Scheme Information	
Scheme ID	GA09
Scheme Name	A167 Birtley to Eighton Lodge Cycle Link

Cost Details		
Total Scheme Cost		£5,000,000.00
TCF Ask		£4,500,000.00
Public match funding		£430,000.00
Private Funding		£70,000.00
Optimism Bias		20%
Profile	2019	£0.00
	2020	£300,000.00
	2021	£1,550,000.00
	2022	£1,550,000.00
	2023	£1,600,000.00

Total PVC (discounted to 2010 prices)	**£3,130,379.04**

Scheme Information	
Scheme ID	GA09
Scheme Name	A167 Birtley to Eighton Lodge Cycle Link
Location ref & location	*Phase 4: Eighton Lodge, GA09-A*

Appraisal methodology
This scheme was appraised using the Department for Transport's (DfT) Active Mode Appraisal Toolkit (AMAT)

Appraisal Inputs				
	Input Category	**Input Value**		**Assumptions and evidence**
	Appraisal Period	20		
Info	Scheme open year	2021		
Info	Last year of funding	2021		
Info	Area located	Inner and Outer Conurbations		
Info	Scheme length	604m		
Cycling	**Input Category**	**Current**	**Proposed**	**Assumptions and evidence**
Cycling	Number of Cyclists	20	31	PCT growthed and CCAG target growth
Cycling	Cycle Infrastructure	Shared bus lane	Off-road segregate	
Cycling	Shower facilities		No	
Cycling	Secure Storage		No	
Walking	Current Pedestrians	83	83	Based on OA populations
Walking	Street Lighting	Yes	Yes	Desktop assessment and scheme info
Walking	Kerb level	Yes	Yes	Desktop assessment and scheme info
Walking	Crowding	No	Yes	Desktop assessment and scheme info
Walking	Pavement evenness	Yes	Yes	Desktop assessment and scheme info
Walking	Information Pannels	No	Yes	Desktop assessment and scheme info
Walking	Benches	No	No	Desktop assessment and scheme info
Walking	Directional Signage	Yes	Yes	Desktop assessment and scheme info

Scheme Information	
Scheme ID	GA09
Scheme Name	A167 Birtley to Eighton Lodge Cycle Link
Location ref & location	*Phase 4: Eighton Lodge, GA09-A*

Appraisal Results (all in 2010 prices)	
Congestion benefit	£6,695.83
Infrastructure	£22.46
Accident	£673.84
Local air quality	£3.49
Noise	£44.92
Greenhouse gases	£127.22
Reduced risk of premature death	£69,202.19
Absenteeism	£15,803.03
Journey ambiance	£20,793.56
Indirect Taxation	-£486.40
Total PVB	**£112,857.68**

Scheme Information	
Scheme ID	GA09
Scheme Name	A167 Birtley to Eighton Lodge Cycle Link
Location ref & location	*Phase 5: Newcastle Bank to Birtley Lane, GA09-B*

Appraisal methodology
This scheme was appraised using the Department for Transport's (DfT) Active Mode Appraisal Toolkit (AMAT)

Appraisal Inputs				
	Input Category	**Input Value**		**Assumptions and evidence**
	Appraisal Period	20		
Info	Scheme open year	2021		
Info	Last year of funding	2021		
Info	Area located	Inner and Outer Conurbations		
Info	Scheme length	1.34km		
	Input Category	**Current**	**Proposed**	**Assumptions and evidence**
Cycling	Number of Cyclists	318	499	TADU counts and CCAG target growth
Cycling	Cycle Infrastructure	On-road non-segregated cycle lane	On-road segregate	
Cycling	Shower facilities		No	
Cycling	Secure Storage		No	
Walking	Current Pedestrians	626	626	Based on OA populations
Walking	Street Lighting	Yes	Yes	Desktop assessment and scheme info
Walking	Kerb level	Yes	Yes	Desktop assessment and scheme info
Walking	Crowding	No	Yes	Desktop assessment and scheme info
Walking	Pavement evenness	No	Yes	Desktop assessment and scheme info
Walking	Information Pannels	No	No	Desktop assessment and scheme info
Walking	Benches	No	No	Desktop assessment and scheme info
Walking	Directional Signage	No	Yes	Desktop assessment and scheme info

Scheme Information	
Scheme ID	GA09
Scheme Name	A167 Birtley to Eighton Lodge Cycle Link
Location ref & location	*Phase 5: Newcastle Bank to Birtley Lane, GA09-B*

Appraisal Results (all in 2010 prices)	
Congestion benefit	£108,525.70
Infrastructure	£364.05
Accident	£10,921.58
Local air quality	£56.52
Noise	£728.11
Greenhouse gases	£2,062.03
Reduced risk of premature death	£1,121,625.64
Absenteeism	£256,134.72
Journey ambiance	£79,195.11
Indirect Taxation	-£7,883.59
Total PVB	**£1,571,365.81**

Scheme Information	
Scheme ID	GA09
Scheme Name	A167 Birtley to Eighton Lodge Cycle Link
Location ref & location	*Phase 6: Birtley Town Centre, GA09-C*

Appraisal methodology
This scheme was appraised using the Department for Transport's (DfT) Active Mode Appraisal Toolkit (AMAT)

Appraisal Inputs				
	Input Category	**Input Value**		**Assumptions and evidence**
	Appraisal Period	20		
Info	Scheme open year	2021		
Info	Last year of funding	2021		
Info	Area located	Inner and Outer Conurbations		
Info	Scheme length	670m		
	Input Category	**Current**	**Proposed**	**Assumptions and evidence**
Cycling	Number of Cyclists	24	38	PCT growthed and CCAG target growth
Cycling	Cycle Infrastructure	No provision	On-road segregate	
Cycling	Shower facilities		No	
Cycling	Secure Storage		No	
Walking	Current Pedestrians	289	289	Based on OA populations
Walking	Street Lighting	Yes	Yes	Desktop assessment and scheme info
Walking	Kerb level	Yes	Yes	Desktop assessment and scheme info
Walking	Crowding	No	Yes	Desktop assessment and scheme info
Walking	Pavement evenness	No	Yes	Desktop assessment and scheme info
Walking	Information Pannels	No	No	Desktop assessment and scheme info
Walking	Benches	No	No	Desktop assessment and scheme info
Walking	Directional Signage	No	Yes	Desktop assessment and scheme info

Scheme Information	
Scheme ID	GA09
Scheme Name	A167 Birtley to Eighton Lodge Cycle Link
Location ref & location	*Phase 6: Birtley Town Centre, GA09-C*

Appraisal Results (all in 2010 prices)	
Congestion benefit	£8,183.79
Infrastructure	£27.45
Accident	£823.58
Local air quality	£4.26
Noise	£54.91
Greenhouse gases	£155.49
Reduced risk of premature death	£84,580.45
Absenteeism	£19,314.81
Journey ambiance	£43,840.39
Indirect Taxation	-£594.49
Total PVB	**£156,363.20**

Scheme Information	
Scheme ID	GA09
Scheme Name	A167 Birtley to Eighton Lodge Cycle Link
Location ref & location	*Phase 7: Birtley Town Centre to Durham (Vigo Lane), GA09-D*

Appraisal methodology
This scheme was appraised using the Department for Transport's (DfT) Active Mode Appraisal Toolkit (AMAT)

Appraisal Inputs				
	Input Category	**Input Value**		**Assumptions and evidence**
	Appraisal Period	20		
Info	Scheme open year	2021		
Info	Last year of funding	2021		
Info	Area located	Inner and Outer Conurbations		
Info	Scheme length	1.47km		
	Input Category	**Current**	**Proposed**	**Assumptions and evidence**
Cycling	Number of Cyclists	246	386	TADU counts and CCAG target
Cycling	Cycle Infrastructure	On-road non-segregated cycle lane	On-road segregate	
Cycling	Shower facilities		No	
Cycling	Secure Storage		No	
Walking	Current Pedestrians	276	276	Based on OA populations
Walking	Street Lighting	Yes	Yes	Desktop assessment and scheme info
Walking	Kerb level	Yes	Yes	Desktop assessment and scheme info
Walking	Crowding	No	Yes	Desktop assessment and scheme info
Walking	Pavement evenness	Yes	Yes	Desktop assessment and scheme info
Walking	Information Pannels	No	No	Desktop assessment and scheme info
Walking	Benches	No	No	Desktop assessment and scheme info
Walking	Directional Signage	No	Yes	Desktop assessment and scheme info

Scheme Information	
Scheme ID	GA09
Scheme Name	A167 Birtley to Eighton Lodge Cycle Link
Location ref & location	*Phase 7: Birtley Town Centre to Durham (Vigo Lane), GA09-D*

Appraisal Results (all in 2010 prices)	
Congestion benefit	£83,953.84
Infrastructure	£281.63
Accident	£8,448.77
Local air quality	£43.72
Noise	£563.25
Greenhouse gases	£1,595.15
Reduced risk of premature death	£867,672.67
Absenteeism	£198,141.95
Journey ambiance	£26,350.71
Indirect Taxation	-£6,098.63
Total PVB	**£1,180,671.44**

Scheme Information	
Scheme ID	GA09
Scheme Name	A167 Birtley to Eighton Lodge Cycle Link
Location ref & location	*Phase 8: Eighton Lodge to Harlow Green Lane, GA09-E*

Appraisal methodology
This scheme was appraised using the Department for Transport's (DfT) Active Mode Appraisal Toolkit (AMAT)

Appraisal Inputs				
	Input Category	**Input Value**		**Assumptions and evidence**
	Appraisal Period	20		
Info	Scheme open year	2021		
Info	Last year of funding	2021		
Info	Area located	Inner and Outer Conurbations		
Info	Scheme length	1.2km		
	Input Category	**Current**	**Proposed**	**Assumptions and evidence**
Cycling	Number of Cyclists	19	29	PCT tool and CCAG target
Cycling	Cycle Infrastructure	On-road segregated cycle lane	On-road segregate	
Cycling	Shower facilities		No	
Cycling	Secure Storage		No	
Walking	Current Pedestrians	254	254	Based on OA populations
Walking	Street Lighting	Yes	Yes	Desktop assessment and scheme info
Walking	Kerb level	Yes	Yes	Desktop assessment and scheme info
Walking	Crowding	No	Yes	Desktop assessment and scheme info
Walking	Pavement evenness	No	Yes	Desktop assessment and scheme info
Walking	Information Pannels	No	No	Desktop assessment and scheme info
Walking	Benches	No	No	Desktop assessment and scheme info
Walking	Directional Signage	No	Yes	Desktop assessment and scheme info

Scheme Information	
Scheme ID	GA09
Scheme Name	A167 Birtley to Eighton Lodge Cycle Link
Location ref & location	*Phase 8: Eighton Lodge to Harlow Green Lane, GA09-E*

Appraisal Results (all in 2010 prices)	
Congestion benefit	£6,323.84
Infrastructure	£21.21
Accident	£636.41
Local air quality	£3.29
Noise	£42.43
Greenhouse gases	£120.16
Reduced risk of premature death	£65,357.62
Absenteeism	£14,925.08
Journey ambiance	£31,594.16
Indirect Taxation	-£459.38
Total PVB	**£118,543.61**

Scheme Information	
Scheme ID	GA09
Scheme Name	A167 Birtley to Eighton Lodge Cycle Link
Location ref & location	*Phase 9: Harlow Green Lane to Low Fell, GA09-F*

Appraisal methodology
This scheme was appraised using the Department for Transport's (DfT) Active Mode Appraisal Toolkit (AMAT)

Appraisal Inputs				
	Input Category	**Input Value**		**Assumptions and evidence**
	Appraisal Period	20		
Info	Scheme open year	2021		
Info	Last year of funding	2021		
Info	Area located	Inner and Outer Conurbations		
Info	Scheme length	1.14km		
Cycling	**Input Category**	**Current**	**Proposed**	**Assumptions and evidence**
Cycling	Number of Cyclists	27	43	PCT tool and CCAG target
Cycling	Cycle Infrastructure	Shared bus lane	On-road segregate	
Cycling	Shower facilities		No	
Cycling	Secure Storage		No	
Walking	Current Pedestrians	458	458	Based on OA populations
Walking	Street Lighting	Yes	Yes	Desktop assessment and scheme info
Walking	Kerb level	Yes	Yes	Desktop assessment and scheme info
Walking	Crowding	No	Yes	Desktop assessment and scheme info
Walking	Pavement evenness	No	Yes	Desktop assessment and scheme info
Walking	Information Pannels	No	No	Desktop assessment and scheme info
Walking	Benches	No	No	Desktop assessment and scheme info
Walking	Directional Signage	No	No	Desktop assessment and scheme info

Scheme Information	
Scheme ID	GA09
Scheme Name	A167 Birtley to Eighton Lodge Cycle Link
Location ref & location	*Phase 9: Harlow Green Lane to Low Fell, GA09-F*

Appraisal Results (all in 2010 prices)	
Congestion benefit	£9,299.77
Infrastructure	£31.20
Accident	£935.89
Local air quality	£4.84
Noise	£62.39
Greenhouse gases	£176.70
Reduced risk of premature death	£96,114.15
Absenteeism	£21,948.65
Journey ambiance	£58,756.98
Indirect Taxation	-£675.56
Total PVB	**£186,623.81**

Scheme Information	
Scheme ID	GA10
Scheme Name	A184 Cycle Route

Appraisal ongoing

Scheme Information	
Scheme ID	GA11
Scheme Name	A195 Bus Lane

Appraisal ongoing

Scheme Information	
Scheme ID	GA13
Scheme Name	Keelmans Way Cycling Improvements

Appraisal ongoing

Scheme Information	
Scheme ID	GA16
Scheme Name	Gateshead Interchange Bus Lane

Economics Summary				
Element	**PVB**	**PVC**	**NPV**	**BCR**
Bus	£3,102,977.15			
Total	**£3,102,977.15**	**£356,391.54**	**£2,746,585.61**	**8.71**

Scheme Information	
Scheme ID	GA16
Scheme Name	Gateshead Interchange Bus Lane

Cost Details		
Total Scheme Cost		£500,000.00
TCF Ask		£450,000.00
Public match funding		£50,000.00
Private Funding		£0.00
Optimism Bias		20%
Profile	2019	£0.00
	2020	£500,000.00
	2021	£0.00
	2022	£0.00
	2023	£0.00

Total PVC (discounted to 2010 prices)	**£356,391.54**

Scheme Information	
Scheme ID	GA16
Scheme Name	Gateshead Interchange Bus Lane
Location	

Appraisal methodology

Bus time savings have been calculated by comparing average journey times during the relevant peak period with the average journey times during the interpeak. The difference between the two has been used as the journey time saving. These values have then been multiplied against the values of time for commuting and other purposes in WebTAG databook.

The proportion of commuters and other users has been taken from WebTAG databook

Appraisal Inputs			
Direction	Northbound		
Start stop	Gateshead Interchange		
End Stop	Hills Street (15g04)		
Time period	**Before users**	**After users**	**Current average Journey time**
Pre 0700	322	0	1.77
0700-1000	1681	0	3.61
1000-1600	3554	0	2.61
1600-1900	1236	0	2.72
After 1900	550	0	1.85

Appraisal Period	
Years	**£60.00**

WebTAG Values of Time per hour, Market price (Nov 18 Databook, Table A1.3.1)	
Value of Time: Commuter	**£9.95**
Value of Time: Other	**£4.50**

Appraisal Results (all in 2010 prices)	
Total PVB	**£3,102,977.15**

Scheme Information	
Scheme ID	IN01
Scheme Name	Intu Cycle Storage

Economics Summary				
Element	**PVB**	**PVC**	**NPV**	**BCR**
AMAT	£986,672.69			
Total	**£986,672.69**	**£8,646.29**	**£978,026.40**	**114.12**

Scheme Information	
Scheme ID	IN01
Scheme Name	Intu Cycle Storage

Cost Details		
Total Scheme Cost		£602,300.00
TCF Ask		£300,000.00
Public match funding		£0.00
Private Funding		£302,300.00
Optimism Bias		44%
Profile	2019	£0.00
	2020	£410,100.00
	2021	£96,100.00
	2022	£96,100.00
	2023	£0.00

Total PVC (discounted to 2010 prices)	**£8,646.29**

Scheme Information	
Scheme ID	IN01
Scheme Name	Intu Cycle Storage
Location ref & location	

Appraisal methodology
This scheme was appraised using the Department for Transport's (DfT) Active Mode Appraisal Toolkit (AMAT)

Appraisal Inputs				
	Input Category	**Input Value**		**Assumptions and evidence**
	Appraisal Period	20		
Info	Scheme open year	2020		
Info	Last year of funding	2020		
Info	Area located	Other Urban		
Info	Scheme length	0		
Cycling	**Input Category**	**Current**	**Proposed**	**Assumptions and evidence**
Cycling	Number of Cyclists	0	120	New facilities. Expecting max. capacity used
Cycling	Cycle Infrastructure	No provision	No provision	
Cycling	Shower facilities		Yes	
Cycling	Secure Storage		Yes	
Walking	Current Pedestrians			
Walking	Street Lighting			
Walking	Kerb level			
Walking	Crowding			
Walking	Pavement evenness			
Walking	Information Pannels			
Walking	Benches			
Walking	Directional Signage			

Scheme Information	
Scheme ID	IN01
Scheme Name	Intu Cycle Storage
Location ref & location	

Appraisal Results (all in 2010 prices)	
Congestion benefit	£25,930.93
Infrastructure	£245.58
Accident	£7,367.43
Local air quality	£32.69
Noise	£491.16
Greenhouse gases	£1,320.77
Reduced risk of premature death	£753,690.85
Absenteeism	£175,504.43
Journey ambiance	£232,435.82
Indirect Taxation	-£5,158.33
Total PVB	**£986,672.69**

Scheme Information	
Scheme ID	NE01
Scheme Name	Transforming Newcastle City Centre

Economics Summary				
Element	**PVB**	**PVC**	**NPV**	**BCR**
Scheme element (e.g. AMATs)	£24,606,704.19			
Total	**£24,606,704.19**	**£6,875,329.31**	**£17,731,374.88**	**3.58**

Scheme Information	
Scheme ID	NE01
Scheme Name	Transforming Newcastle City Centre

Cost Details		
Total Scheme Cost		£15,000,000.00
TCF Ask		£12,250,000.00
Public match funding		£2,750,000.00
Private Funding		£0.00
Optimism Bias		13%
Profile	2019	£900,000.00
	2020	£5,000,000.00
	2021	£3,900,000.00
	2022	£0.00
	2023	£0.00

Total PVC (discounted to 2010 prices)	**£6,875,329.31**

Scheme Information	
Scheme ID	NE01
Scheme Name	Transforming Newcastle City Centre
Location	

Appraisal methodology
A detailed appraisal of this scheme has been undertaken by SYSTRA for Newcastle City Council. *The appraisal seeks to monetise a range of impacts covering economic, environmental , social and public accounts impacts. Economic impacts were identified and valued usign TUBA, with the other monetised benefits being calculated using WebTAG compliant methodology.*

Appraisal Period	
Years	**60**

Appraisal Results (all in 2010 prices)	
Noise	£5,219.29
Local Air Quality	£393.81
Greenhouse Gases	£5,178.00
Journey Quality	£3,300,000.00
Physical Activity	£15,488,572.03
Accidents	£2,709,000.00
Economic Efficiency: Consumer Users (Commuting)	£349,000.00
Economic Efficiency: Consumer Users (Others)	£1,808,000.00
Economic Efficiency: Business Users and Providers	£953,000.00
Wider Public Finances (Indirect Taxation Revenues)	-£11,658.95
Private Contribution	£0.00
Total PVB	**£24,606,704.19**

Scheme Information	
Scheme ID	NE02
Scheme Name	Newcastle Central Station Gateway

Appraisal ongoing

Scheme Information	
Scheme ID	NE03
Scheme Name	Newcastle - North Tyneside Strategic Cycling Infrastructure

Economics Summary				
Element	**PVB**	**PVC**	**NPV**	**BCR**
Phase 1 - Civic Centre to Jesmond R	£1,715,196.06			
Phase 2 - Jesmond Road to Armstro	£2,267,086.05			
Phase 2 - Jesmond Road to Armstro	£733,025.01			
Phase 2 - Armstrong bridge, NE03-2	£1,442,963.58			
Phase 2 - Armstrong bridge to corn	£1,131,762.82			
Phase 3 - Corner House to North Ty	£772,460.06			
Total	**£8,062,493.56**	**£3,890,354.67**	**£4,172,138.89**	**2.07**

Scheme Information	
Scheme ID	NE03
Scheme Name	Newcastle - North Tyneside Strategic Cycling Infrastructure

Cost Details		
Total Scheme Cost		£5,600,000.00
TCF Ask		£5,000,000.00
Public match funding		£600,000.00
Private Funding		£0.00
Optimism Bias		43%
Profile	2019	£0.00
	2020	£2,880,000.00
	2021	£2,720,000.00
	2022	£0.00
	2023	£0.00

Total PVC (discounted to 2010 prices)	**£3,890,354.67**

Scheme Information	
Scheme ID	NE03
Scheme Name	Newcastle - North Tyneside Strategic Cycling Infrastructure
Location ref & location	*Phase 1 - Civic Centre to Sandyford road, NE03-1A*

Appraisal methodology
This scheme was appraised using the Department for Transport's (DfT) Active Mode Appraisal Toolkit (AMAT)

Appraisal Inputs

	Input Category	Input Value		Assumptions and evidence
	Appraisal Period	20		
Info	Scheme open year	2022		
Info	Last year of funding	2022		
Info	Area located	Other Urban		
Info	Scheme length	730m		Data provided
	Input Category	**Current**	**Proposed**	**Assumptions and evidence**
Cycling	Number of Cyclists	395	604	TADU and 53% growth
Cycling	Cycle Infrastructure	Shared bus lane	On-road segregated cycle lane	Desktop assessment and scheme information
Cycling	Shower facilities		No	
Cycling	Secure Storage		No	
Walking	Current Pedestrians	0	0	
Walking	Street Lighting	0	0	
Walking	Kerb level	0	0	
Walking	Crowding	0	0	
Walking	Pavement evenness	0	0	
Walking	Information Pannels	0	0	
Walking	Benches	0	0	
Walking	Directional Signage	0	0	

Scheme Information	
Scheme ID	NE03
Scheme Name	Newcastle - North Tyneside Strategic Cycling Infrastructure
Location ref & location	*Phase 1 - Civic Centre to Sandyford road, NE03-1A*

Appraisal Results (all in 2010 prices)	
Congestion benefit	£43,893.48
Infrastructure	£412.30
Accident	£12,368.95
Local air quality	£49.57
Noise	£824.60
Greenhouse gases	£2,173.21
Reduced risk of premature death	£1,276,300.31
Absenteeism	£285,824.26
Journey ambiance	£101,845.61
Indirect Taxation	-£8,083.95
Total PVB	**£1,715,196.06**

Scheme Information	
Scheme ID	NE03
Scheme Name	Newcastle - North Tyneside Strategic Cycling Infrastructure
Location ref & location	*Phase 1 - Civic Centre to Jesmond Road, NE03-1B*

Appraisal methodology
This scheme was appraised using the Department for Transport's (DfT) Active Mode Appraisal Toolkit (AMAT)

Appraisal Inputs				
	Input Category	**Input Value**		**Assumptions and evidence**
	Appraisal Period	20		
Info	Scheme open year	2022		
Info	Last year of funding	2022		
Info	Area located	Other Urban		
Info	Scheme length	600m		Data provided
	Input Category	**Current**	**Proposed**	**Assumptions and evidence**
Cycling	Number of Cyclists	0	290	PCT and 53% growth
Cycling	Cycle Infrastructure	No provision	On-road segregate	Desktop assessment and scheme information
Cycling	Shower facilities		No	
Cycling	Secure Storage		No	
Walking	Current Pedestrians	0	0	
Walking	Street Lighting	0	0	
Walking	Kerb level	0	0	
Walking	Crowding	0	0	
Walking	Pavement evenness	0	0	
Walking	Information Pannels	0	0	
Walking	Benches	0	0	
Walking	Directional Signage	0	0	

Scheme Information	
Scheme ID	NE03
Scheme Name	Newcastle - North Tyneside Strategic Cycling Infrastructure
Location ref & location	*Phase 1 - Civic Centre to Jesmond Road, NE03-1B*

Appraisal Results (all in 2010 prices)	
Congestion benefit	£60,789.38
Infrastructure	£571.00
Accident	£17,130.12
Local air quality	£68.65
Noise	£1,142.01
Greenhouse gases	£3,009.74
Reduced risk of premature death	£1,767,586.01
Absenteeism	£395,846.47
Journey ambiance	£32,709.35
Indirect Taxation	-£11,195.69
Total PVB	**£2,267,086.05**

Scheme Information	
Scheme ID	NE03
Scheme Name	Newcastle - North Tyneside Strategic Cycling Infrastructure
Location ref & location	*Phase 2 - Jesmond Road to Armstrong bridge, NE03-2A*

Appraisal methodology
This scheme was appraised using the Department for Transport's (DfT) Active Mode Appraisal Toolkit (AMAT)

Appraisal Inputs				
	Input Category	**Input Value**		**Assumptions and evidence**
	Appraisal Period	20		
Info	Scheme open year	2022		
Info	Last year of funding	2022		
Info	Area located	Inner and Outer Conurbations		
Info	Scheme length	450m		Data provided
	Input Category	**Current**	**Proposed**	**Assumptions and evidence**
Cycling	Number of Cyclists	163	249	PCT census growthed and 53% growth
Cycling	Cycle Infrastructure	No provision	On-road segregate	Desktop assessment and scheme information
Cycling	Shower facilities		No	
Cycling	Secure Storage		No	
Walking	Current Pedestrians	0	0	
Walking	Street Lighting	0	0	
Walking	Kerb level	0	0	
Walking	Crowding	0	0	
Walking	Pavement evenness	0	0	
Walking	Information Pannels	0	0	
Walking	Benches	0	0	
Walking	Directional Signage	0	0	

Scheme Information	
Scheme ID	NE03
Scheme Name	Newcastle - North Tyneside Strategic Cycling Infrastructure
Location ref & location	*Phase 2 - Jesmond Road to Armstrong bridge, NE03-2A*

Appraisal Results (all in 2010 prices)	
Congestion benefit	£51,320.38
Infrastructure	£169.97
Accident	£5,099.14
Local air quality	£25.14
Noise	£339.94
Greenhouse gases	£954.78
Reduced risk of premature death	£526,158.84
Absenteeism	£117,831.96
Journey ambiance	£34,858.94
Indirect Taxation	-£3,564.12
Total PVB	**£733,025.01**

Scheme Information	
Scheme ID	NE03
Scheme Name	Newcastle - North Tyneside Strategic Cycling Infrastructure
Location ref & location	*Phase 2 - Armstrong bridge, NE03-2B*

Appraisal methodology
This scheme was appraised using the Department for Transport's (DfT) Active Mode Appraisal Toolkit (AMAT)

Appraisal Inputs				
	Input Category	**Input Value**		**Assumptions and evidence**
	Appraisal Period	20		
Info	Scheme open year	2022		
Info	Last year of funding	2022		
Info	Area located	Inner and Outer Conurbations		
Info	Scheme length	315m		Data provided
	Input Category	**Current**	**Proposed**	**Assumptions and evidence**
Cycling	Number of Cyclists	311	476	TADU and 53% growth
Cycling	Cycle Infrastructure	No provision	Off-road segregate	Street view & majority infrastructure
Cycling	Shower facilities		No	
Cycling	Secure Storage		No	
Walking	Current Pedestrians	0	0	TBC
Walking	Street Lighting	Yes	Yes	Desktop assessment and scheme info
Walking	Kerb level	Yes	Yes	Desktop assessment and scheme info
Walking	Crowding	Yes	Yes	Desktop assessment and scheme info
Walking	Pavement evenness	No	No	Desktop assessment and scheme info
Walking	Information Pannels	No	No	Desktop assessment and scheme info
Walking	Benches	No	No	Desktop assessment and scheme info
Walking	Directional Signage	No	No	Desktop assessment and scheme info

Scheme Information	
Scheme ID	NE03
Scheme Name	Newcastle - North Tyneside Strategic Cycling Infrastructure
Location ref & location	

Appraisal Results (all in 2010 prices)	
Congestion benefit	£98,014.23
Infrastructure	£324.62
Accident	£9,738.59
Local air quality	£48.01
Noise	£649.24
Greenhouse gases	£1,823.49
Reduced risk of premature death	£1,004,884.55
Absenteeism	£225,041.38
Journey ambiance	£109,571.01
Indirect Taxation	-£6,806.93
Total PVB	**£1,442,963.58**

Scheme Information	
Scheme ID	NE03
Scheme Name	Newcastle - North Tyneside Strategic Cycling Infrastructure
Location ref & location	*Phase 2 - Armstrong bridge to corner house, NE03-2C*

Appraisal methodology
This scheme was appraised using the Department for Transport's (DfT) Active Mode Appraisal Toolkit (AMAT)

Appraisal Inputs				
	Input Category	**Input Value**		**Assumptions and evidence**
	Appraisal Period	20		
Info	Scheme open year	2022		
Info	Last year of funding	2022		
Info	Area located	Inner and Outer Conurbations		
Info	Scheme length	565m		Data provided
Cycling	**Input Category**	**Current**	**Proposed**	**Assumptions and evidence**
Cycling	Number of Cyclists	248	380	PCT census growthed and 53% growth
Cycling	Cycle Infrastructure	No provision	On-road segregated cycle lane	Desktop assessment and scheme information
Cycling	Shower facilities		No	
Cycling	Secure Storage		No	
Walking	Current Pedestrians	0	0	
Walking	Street Lighting	0	0	
Walking	Kerb level	0	0	
Walking	Crowding	0	0	
Walking	Pavement evenness	0	0	
Walking	Information Pannels	0	0	
Walking	Benches	0	0	
Walking	Directional Signage	0	0	

Scheme Information	
Scheme ID	NE03
Scheme Name	Newcastle - North Tyneside Strategic Cycling Infrastructure
Location ref & location	*Phase 2 - Armstrong bridge to corner house, NE03-2C*

Appraisal Results (all in 2010 prices)	
Congestion benefit	£78,285.32
Infrastructure	£259.28
Accident	£7,778.35
Local air quality	£38.35
Noise	£518.56
Greenhouse gases	£1,456.45
Reduced risk of premature death	£802,615.19
Absenteeism	£179,743.66
Journey ambiance	£66,763.73
Indirect Taxation	-£5,436.79
Total PVB	**£1,131,762.82**

Scheme Information	
Scheme ID	NE03
Scheme Name	Newcastle - North Tyneside Strategic Cycling Infrastructure
Location ref & location	*Phase 3 - Corner House to North Tyneside, NE0-3*

Appraisal methodology
This scheme was appraised using the Department for Transport's (DfT) Active Mode Appraisal Toolkit (AMAT)

Appraisal Inputs				
	Input Category	**Input Value**		**Assumptions and evidence**
	Appraisal Period	20		
Info	Scheme open year	2022		
Info	Last year of funding	2022		
Info	Area located	Inner and Outer Conurbations		
Info	Scheme length	1.33km		Data provided
Cycling	**Input Category**	**Current**	**Proposed**	**Assumptions and evidence**
Cycling	Number of Cyclists	157	240	TADU and 53% growth
Cycling	Cycle Infrastructure	No provision	On-road segregated cycle lane	Desktop assessment and scheme information
Cycling	Shower facilities		No	
Cycling	Secure Storage		No	
Walking	Current Pedestrians	0	0	
Walking	Street Lighting	0	0	
Walking	Kerb level	0	0	
Walking	Crowding	0	0	
Walking	Pavement evenness	0	0	
Walking	Information Pannels	0	0	
Walking	Benches	0	0	
Walking	Directional Signage	0	0	

Scheme Information	
Scheme ID	NE03
Scheme Name	Newcastle - North Tyneside Strategic Cycling Infrastructure
Location ref & location	*Phase 3 - Corner House to North Tyneside, NE0-3*

Appraisal Results (all in 2010 prices)	
Congestion benefit	£49,479.85
Infrastructure	£163.88
Accident	£4,916.27
Local air quality	£24.24
Noise	£327.75
Greenhouse gases	£920.54
Reduced risk of premature death	£507,288.99
Absenteeism	£113,606.10
Journey ambiance	£99,332.62
Indirect Taxation	-£3,436.29
Total PVB	**£772,460.06**

Scheme Information	
Scheme ID	NE04
Scheme Name	Newcastle Outer West

Economics Summary				
Element	**PVB**	**PVC**	**NPV**	**BCR**
Other	£49,337,349.43			
Private Funding	£916,391.34			
Total	**£48,420,958.09**	**£6,428,018.17**	**£41,992,939.93**	**7.53**

Scheme Information	
Scheme ID	NE04
Scheme Name	Newcastle Outer West

Cost Details		
Total Scheme Cost		£12,000,000.00
TCF Ask		£4,100,000.00
Public match funding		£6,592,000.00
Private Funding		£1,308,000.00
Optimism Bias		25%
Profile	2019	£0.00
	2020	£6,660,000.00
	2021	£2,670,000.00
	2022	£2,670,000.00
	2023	£0.00

Total PVC (discounted to 2010 prices)	**£6,428,018.17**

Scheme Information	
Scheme ID	NE04
Scheme Name	Newcastle Outer West
Location	

Appraisal methodology
The scheme has been appraised by the promoter using an excel spreadsheet that "This sheet has been set up in order to echo the calculations made within TUBA to understand the implications of improvements to stand alone junctions. This does not calculate greenhouse gases nor air and noise calculations, so a separate assessment should be carried out in detail for these schemes if required".

Appraisal Period	
Years	**60**

Appraisal Results (all in 2010 prices)	
Benefits	£49,337,349.43
Private funding	£916,391.34
Total PVB	**£48,420,958.09**

Scheme Information	
Scheme ID	NE07
Scheme Name	Airport - Ponteland Cycle Route (including NO02)

Economics Summary				
Element	**PVB**	**PVC**	**NPV**	**BCR**
AMAT	£2,264,094.04			
Total	**£2,264,094.04**	**£581,261.13**	**£1,682,832.91**	**3.90**

Scheme Information	
Scheme ID	NE07
Scheme Name	Airport - Ponteland Cycle Route (including NO02)

Cost Details		
Total Scheme Cost		£850,000.00
TCF Ask		£800,000.00
Public match funding		£50,000.00
Private Funding		£0.00
Optimism Bias		0%
Profile	2019	£0.00
	2020	£200,000.00
	2021	£650,000.00
	2022	£0.00
	2023	£0.00

Total PVC (discounted to 2010 prices)	**£581,261.13**

Scheme Information	
Scheme ID	NE07
Scheme Name	Airport - Ponteland Cycle Route (including NO02)
Location ref & location	

Appraisal methodology
This scheme was appraised using the Department for Transport's (DfT) Active Mode Appraisal Toolkit (AMAT)

Appraisal Inputs				
	Input Category	**Input Value**		**Assumptions and evidence**
	Appraisal Period	20		
Info	Scheme open year	2021		
Info	Last year of funding	2021		
Info	Area located	Inner and Outer Conurbations		
Info	Scheme length	4.19km		
	Input Category	**Current**	**Proposed**	**Assumptions and evidence**
Cycling	Number of Cyclists	6	188	Promoter calculations, minus growth from future developments
Cycling	Cycle Infrastructure	No provision	Off-road segregate	
Cycling	Shower facilities		No	
Cycling	Secure Storage		No	
Walking	Current Pedestrians	0	113	Promoter calculations, minus growth from future developments
Walking	Street Lighting	no	no	
Walking	Kerb level	no	no	
Walking	Crowding	no	no	
Walking	Pavement evenness	No	Yes	
Walking	Information Pannels	no	no	
Walking	Benches	no	no	
Walking	Directional Signage	no	no	

Scheme Information	
Scheme ID	NE07
Scheme Name	Airport - Ponteland Cycle Route (including NO02)
Location ref & location	*0*

Appraisal Results (all in 2010 prices)	
Congestion benefit	£123,224.94
Infrastructure	£413.36
Accident	£12,400.85
Local air quality	£64.18
Noise	£826.72
Greenhouse gases	£2,341.32
Reduced risk of premature death	£1,408,582.78
Absenteeism	£358,119.67
Journey ambiance	£367,484.97
Indirect Taxation	-£8,951.38
Total PVB	**£2,264,094.04**

Scheme Information	
Scheme ID	NE08
Scheme Name	Newcastle Streets for People

Economics Summary				
Element	**PVB**	**PVC**	**NPV**	**BCR**
All elements	£3,723,275.62			
Total	**£3,723,275.62**	**£1,861,637.81**	**£1,861,637.81**	**2.00**

Scheme Information	
Scheme ID	NE08
Scheme Name	Newcastle Streets for People

Cost Details		
Total Scheme Cost		£3,000,000.00
TCF Ask		£2,800,000.00
Public match funding		£200,000.00
Private Funding		£0.00
Optimism Bias		0%
Profile	2019	£0.00
	2020	£0.00
	2021	£200,000.00
	2022	£800,000.00
	2023	£2,000,000.00

Total PVC (discounted to 2010 prices)	**£1,861,637.81**

Scheme Information	
Scheme ID	NE08
Scheme Name	Newcastle Streets for People
Location ref & location	*Byker, NE08A*

Appraisal methodology

Given the nature of this scheme in involving the community to identify a series of interventions to encourage more active mode travel in and around their communities and to access their local Metro Station, a detailed appraisal has not yet been undertaken as the precise outputs of the scheme are not yet defined.

Similar schemes delivered across the North East Region have returned BCRs of in excess of 2. Therefore, scheme benefits double the cost have been assumed.

Scheme Information	
Scheme ID	NE08
Scheme Name	Newcastle Streets for People
Location ref & location	*Byker, NE08A*

Appraisal Results (all in 2010 prices)	
Total PVB	**£3,723,275.62**

Scheme Information	
Scheme ID	NO01
Scheme Name	Northumberland Line

Economics Summary				
Element	**PVB**	**PVC**	**NPV**	**BCR**
Scheme element (e.g. AMATs)	£185,400,000.00			
Total	**£185,400,000.00**	**£78,149,299.93**	**£107,250,700.07**	**2.37**

Scheme Information	
Scheme ID	NO01
Scheme Name	Northumberland Line

Cost Details		
Total Scheme Cost		£117,216,520.00
TCF Ask		£99,546,520.00
Public match funding		£17,670,000.00
Private Funding		£0.00
Optimism Bias		64%
Profile	2018	£0.00
	2019	£0.00
	2020	£18,342,708.00
	2021	£49,919,609.00
	2022	£48,954,203.00
	2023	£0.00

Total PVC (discounted to 2010 prices)	**£78,149,299.93**

Scheme Information	
Scheme ID	NO01
Scheme Name	Northumberland Line
Location	

Appraisal methodology
This scheme has been subject to appraisal and involved the use of a mode-chocie model. *A number of elements have been fully or partailly quantified. Quantified elements include Business users and transport providers, noise, air quality, greenhouse gases, commuting and other users, accidents, cost to braod transport budget and indirect tax revenues*

Appraisal Period	
Years	**60**

Appraisal Results (all in 2010 prices)	
Total PVB	**£185,400,000.00**

Scheme Information	
Scheme ID	NT02
Scheme Name	North Shields Transport Hub

Appraisal ongoing

Scheme Information	
Scheme ID	NT08
Scheme Name	A188/A189 Bus Priority

Economics Summary				
Element	**PVB**	**PVC**	**NPV**	**BCR**
A189/A1056 Killingworth Way WB Approach	£1,522,870.37			
A189/A1056 A189 SB Approach	£127,744.25			
A189/A1056 A189 NB Approach	£917,447.36			
A189/A188 A189 SB Approach	£192,284.81			
A189/A188 A188 NB Approach	£137,617.10			
A189/A188 GLR WB Approach	£1,392,054.43			
A188 Quorum Rbt - A188 SB Approach	£235,347.85			
A188 Quorum Rbt - A188 NB Approach	£93,885.03			
A188 WFA / Goathland - A188 SB Approach	£287,679.74			
A188 WFA / Goathland - Goathland Approach	£21,424.40			
A188 WFA / Goathland - A188 NB Approach	£269,598.30			
A188 WFA / Goathland - West Farm Ave Approach	£21,424.40			
Four Lane Ends - A188 SB Approach	£3,160,001.16			
Four Lane Ends - Interchange Exit "Bus Gate"	£1,264,000.46			
Total	**£9,643,379.67**	**£4,339,755.16**	**£5,303,624.51**	**2.22**

Scheme Information	
Scheme ID	NT08
Scheme Name	A188/A189 Bus Priority

Cost Details		
Total Scheme Cost		£6,219,000.00
TCF Ask		£4,500,000.00
Public match funding		£1,719,000.00
Private Funding		£0.00
Optimism Bias		TBC
Profile	2019	£0.00
	2020	£3,719,000.00
	2021	£2,500,000.00
	2022	£0.00
	2023	£0.00

Total PVC (discounted to 2010 prices)	**£4,339,755.16**

Scheme Information	
Scheme ID	NT08
Scheme Name	A188/A189 Bus Priority
Location	*A189/A1056 Killingworth Way WB Approach*

Appraisal methodology
Time savings to buses have been identified, based on the elements being delivered. These savings are then multiplied by value of time savings for both commuters and other users (as found in WebTAG databook).

Appraisal Inputs			
Time period	**AM**	**PM**	
Time saved (s)	200	60	
Patronage	740	974	

Appraisal Period	
Years	**60**

WebTAG Values of Time per hour, Market price (Nov 18 Databook, Table A1.3.1)	
Value of Time: Commuter	**£9.95**
Value of Time: Other	**£4.50**

Appraisal Results (all in 2010 prices)	
Total PVB	**£1,522,870.37**

Scheme Information	
Scheme ID	NT08
Scheme Name	A188/A189 Bus Priority
Location	*A189/A1056 A189 SB Approach*

Appraisal methodology
Time savings to buses have been identified, based on the elements being delivered. These savings are then multiplied by value of time savings for both commuters and other users (as found in WebTAG databook).

Appraisal Inputs			
Time period	**AM**	**PM**	
Time saved (s)	120	0	
Patronage	147	0	

Appraisal Period	
Years	**60**

WebTAG Values of Time per hour, Market price (Nov 18 Databook, Table A1.3.1)	
Value of Time: Commuter	**£9.95**
Value of Time: Other	**£4.50**

Appraisal Results (all in 2010 prices)	
Total PVB	**£127,744.25**

Scheme Information	
Scheme ID	NT08
Scheme Name	A188/A189 Bus Priority
Location	*A189/A1056 A189 NB Approach*

Appraisal methodology
Time savings to buses have been identified, based on the elements being delivered. These savings are then multiplied by value of time savings for both commuters and other users (as found in WebTAG databook).

Appraisal Inputs		
Time period	**AM**	**PM**
Time saved (s)	0	100
Patronage	0	1181

Appraisal Period	
Years	**60**

WebTAG Values of Time per hour, Market price (Nov 18 Databook, Table A1.3.1)	
Value of Time: Commuter	**£9.95**
Value of Time: Other	**£4.50**

Appraisal Results (all in 2010 prices)	
Total PVB	**£917,447.36**

Scheme Information	
Scheme ID	NT08
Scheme Name	A188/A189 Bus Priority
Location	*A189/A188 A189 SB Approach*

Appraisal methodology
Time savings to buses have been identified, based on the elements being delivered. These savings are then multiplied by value of time savings for both commuters and other users (as found in WebTAG databook).

Appraisal Inputs		
Time period	**AM**	**PM**
Time saved (s)	30	0
Patronage	887	0

Appraisal Period	
Years	**60**

WebTAG Values of Time per hour, Market price (Nov 18 Databook, Table A1.3.1)	
Value of Time: Commuter	**£9.95**
Value of Time: Other	**£4.50**

Appraisal Results (all in 2010 prices)	
Total PVB	**£192,284.81**

Scheme Information	
Scheme ID	NT08
Scheme Name	A188/A189 Bus Priority
Location	*A189/A188 A188 NB Approach*

Appraisal methodology
Time savings to buses have been identified, based on the elements being delivered. These savings are then multiplied by value of time savings for both commuters and other users (as found in WebTAG databook).

Appraisal Inputs		
Time period	**AM**	**PM**
Time saved (s)	0	15
Patronage	0	1181

Appraisal Period	
Years	**60**

WebTAG Values of Time per hour, Market price (Nov 18 Databook, Table A1.3.1)	
Value of Time: Commuter	**£9.95**
Value of Time: Other	**£4.50**

Appraisal Results (all in 2010 prices)	
Total PVB	**£137,617.10**

Scheme Information	
Scheme ID	NT08
Scheme Name	A188/A189 Bus Priority
Location	*A189/A188 GLR WB Approach*

Appraisal methodology
Time savings to buses have been identified, based on the elements being delivered. These savings are then multiplied by value of time savings for both commuters and other users (as found in WebTAG databook).

Appraisal Inputs		
Time period	**AM**	**PM**
Time saved (s)	150	0
Patronage	1284	0

Appraisal Period	
Years	**60**

WebTAG Values of Time per hour, Market price (Nov 18 Databook, Table A1.3.1)	
Value of Time: Commuter	**£9.95**
Value of Time: Other	**£4.50**

Appraisal Results (all in 2010 prices)	
Total PVB	**£1,392,054.43**

Scheme Information	
Scheme ID	NT08
Scheme Name	A188/A189 Bus Priority
Location	*A188 Quorum Rbt - A188 SB Approach*

Appraisal methodology
Time savings to buses have been identified, based on the elements being delivered. These savings are then multiplied by value of time savings for both commuters and other users (as found in WebTAG databook).

Appraisal Inputs		
Time period	**AM**	**PM**
Time saved (s)	15	0
Patronage	2171	0

Appraisal Period	
Years	**60**

WebTAG Values of Time per hour, Market price (Nov 18 Databook, Table A1.3.1)	
Value of Time: Commuter	**£9.95**
Value of Time: Other	**£4.50**

Appraisal Results (all in 2010 prices)	
Total PVB	**£235,347.85**

Scheme Information	
Scheme ID	NT08
Scheme Name	A188/A189 Bus Priority
Location	*A188 Quorum Rbt - A188 NB Approach*

Appraisal methodology
Time savings to buses have been identified, based on the elements being delivered. These savings are then multiplied by value of time savings for both commuters and other users (as found in WebTAG databook).

Appraisal Inputs		
Time period	**AM**	**PM**
Time saved (s)	0	15
Patronage	0	806

Appraisal Period	
Years	**60**

WebTAG Values of Time per hour, Market price (Nov 18 Databook, Table A1.3.1)	
Value of Time: Commuter	**£9.95**
Value of Time: Other	**£4.50**

Appraisal Results (all in 2010 prices)	
Total PVB	**£93,885.03**

Scheme Information	
Scheme ID	NT08
Scheme Name	A188/A189 Bus Priority
Location	*A188 WFA / Goathland - A188 SB Approach*

Appraisal methodology
Time savings to buses have been identified, based on the elements being delivered. These savings are then multiplied by value of time savings for both commuters and other users (as found in WebTAG databook).

Appraisal Inputs		
Time period	**AM**	**PM**
Time saved (s)	20	30
Patronage	691	806

Appraisal Period	
Years	**60**

WebTAG Values of Time per hour, Market price (Nov 18 Databook, Table A1.3.1)	
Value of Time: Commuter	**£9.95**
Value of Time: Other	**£4.50**

Appraisal Results (all in 2010 prices)	
Total PVB	**£287,679.74**

Scheme Information	
Scheme ID	NT08
Scheme Name	A188/A189 Bus Priority
Location	*A188 WFA / Goathland - Goathland Approach*

Appraisal methodology
Time savings to buses have been identified, based on the elements being delivered. These savings are then multiplied by value of time savings for both commuters and other users (as found in WebTAG databook).

Appraisal Inputs		
Time period	**AM**	**PM**
Time saved (s)	10	0
Patronage	296	0

Appraisal Period	
Years	**60**

WebTAG Values of Time per hour, Market price (Nov 18 Databook, Table A1.3.1)	
Value of Time: Commuter	**£9.95**
Value of Time: Other	**£4.50**

Appraisal Results (all in 2010 prices)	
Total PVB	**£21,424.40**

Scheme Information	
Scheme ID	NT08
Scheme Name	A188/A189 Bus Priority
Location	*A188 WFA / Goathland - A188 NB Approach*

Appraisal methodology
Time savings to buses have been identified, based on the elements being delivered. These savings are then multiplied by value of time savings for both commuters and other users (as found in WebTAG databook).

Appraisal Inputs		
Time period	**AM**	**PM**
Time saved (s)	10	15
Patronage	1284	1517

Appraisal Period	
Years	**60**

WebTAG Values of Time per hour, Market price (Nov 18 Databook, Table A1.3.1)	
Value of Time: Commuter	**£9.95**
Value of Time: Other	**£4.50**

Appraisal Results (all in 2010 prices)	
Total PVB	**£269,598.30**

Scheme Information	
Scheme ID	NT08
Scheme Name	A188/A189 Bus Priority
Location	*A188 WFA / Goathland - West Farm Ave Approach*

Appraisal methodology
Time savings to buses have been identified, based on the elements being delivered. These savings are then multiplied by value of time savings for both commuters and other users (as found in WebTAG databook).

Appraisal Inputs		
Time period	**AM**	**PM**
Time saved (s)	10	0
Patronage	296	0

Appraisal Period	
Years	**60**

WebTAG Values of Time per hour, Market price (Nov 18 Databook, Table A1.3.1)	
Value of Time: Commuter	**£9.95**
Value of Time: Other	**£4.50**

Appraisal Results (all in 2010 prices)	
Total PVB	**£21,424.40**

Scheme Information	
Scheme ID	NT08
Scheme Name	A188/A189 Bus Priority
Location	*Four Lane Ends - A188 SB Approach*

Appraisal methodology
Time savings to buses have been identified, based on the elements being delivered. These savings are then multiplied by value of time savings for both commuters and other users (as found in WebTAG databook).

Appraisal Inputs		
Time period	**AM**	**PM**
Time saved (s)	150	150
Patronage	1284	1517

Appraisal Period	
Years	**60**

WebTAG Values of Time per hour, Market price (Nov 18 Databook, Table A1.3.1)	
Value of Time: Commuter	**£9.95**
Value of Time: Other	**£4.50**

Appraisal Results (all in 2010 prices)	
Total PVB	**£3,160,001.16**

Scheme Information	
Scheme ID	NT08
Scheme Name	A188/A189 Bus Priority
Location	*Four Lane Ends - Interchange Exit "Bus Gate"*

Appraisal methodology
Time savings to buses have been identified, based on the elements being delivered. These savings are then multiplied by value of time savings for both commuters and other users (as found in WebTAG databook).

Appraisal Inputs		
Time period	**AM**	**PM**
Time saved (s)	60	60
Patronage	1284	1517

Appraisal Period	
Years	**60**

WebTAG Values of Time per hour, Market price (Nov 18 Databook, Table A1.3.1)	
Value of Time: Commuter	**£9.95**
Value of Time: Other	**£4.50**

Appraisal Results (all in 2010 prices)	
Total PVB	**£1,264,000.46**

Scheme Information	
Scheme ID	NT10
Scheme Name	Metro Cycling & Walking Links

Economics Summary				
Element	**PVB**	**PVC**	**NPV**	**BCR**
All elements	£6,724,636.88			
Total	**£6,724,636.88**	**£3,362,318.44**	**£3,362,318.44**	**2.00**

Scheme Information	
Scheme ID	NT10
Scheme Name	Metro Cycling & Walking Links

Cost Details		
Total Scheme Cost		£5,000,000.00
TCF Ask		£4,500,000.00
Public match funding		£500,000.00
Private Funding		£0.00
Optimism Bias		TBC
Profile	2019	£0.00
	2020	£1,000,000.00
	2021	£2,500,000.00
	2022	£1,500,000.00
	2023	£0.00

Total PVC (discounted to 2010 prices)	**£3,362,318.44**

Scheme Information	
Scheme ID	NT10
Scheme Name	Metro Cycling & Walking Links
Location ref & location	*Northumberland Park, NT10-NP*

Appraisal methodology
Given the nature of this scheme in involving the community to identify a series of interventions to encourage more active mode travel in and around their communities and to access their local Metro Station, a detailed appraisal has not yet been undertaken as the precise outputs of the scheme are not yet defined. Similar schemes delivered across the North East Region have returned BCRs of in excess of 2. Therefore, scheme benefits double the cost have been assumed.

Scheme Information	
Scheme ID	NT10
Scheme Name	Metro Cycling & Walking Links
Location ref & location	*Northumberland Park, NT10-NP*

Appraisal Results (all in 2010 prices)	
Congestion benefit	
Infrastructure	
Accident	
Local air quality	
Noise	
Greenhouse gases	
Reduced risk of premature death	
Absenteeism	
Journey ambiance	
Total PVB	**£6,724,636.88**

Scheme Information	
Scheme ID	NX02
Scheme Name	Metro P&R Enhancements

Economics Summary				
Element	**PVB**	**PVC**	**NPV**	**BCR**
Scheme element (e.g. AMATs)	£1,441,930.00			
Total	**£1,441,930.00**	**£711,198.49**	**£730,731.51**	**2.03**

Scheme Information	
Scheme ID	NX02
Scheme Name	Metro P&R Enhancements

Cost Details		
Total Scheme Cost		£3,884,877.10
TCF Ask		£3,496,389.39
Public match funding		£388,487.71
Private Funding		£0.00
Optimism Bias		TBC
Profile	2019	£0.00
	2020	£449,511.80
	2021	£665,012.80
	2022	£2,770,352.00
	2023	£0.00

Total PVC (discounted to 2010 prices)	**£711,198.49**

Scheme Information	
Scheme ID	NX02
Scheme Name	Metro P&R Enhancements
Location	*Across the Metro Network*

Appraisal methodology
Underpinned by a modelling methodology, the scheme has been appraised, providing monetised benefits for noise, greenhouse gases, congestion, infrastuture, accidents, economic efficiency and indirect taxation impacts.

Appraisal Period	
Years	**60**

Appraisal Results (all in 2010 prices)	
Total PVB	**£1,441,930.00**

Scheme Information	
Scheme ID	NX03
Scheme Name	Metro Flow

Economics Summary				
Element	**PVB**	**PVC**	**NPV**	**BCR**
Scheme	£185,680,000.00			
Total	**£185,680,000.00**	**£91,709,000.00**	**£93,971,000.00**	**2.02**

Scheme Information	
Scheme ID	NX03
Scheme Name	Metro Flow

Cost Details		
Total Scheme Cost		£117,269,279.24
TCF Ask		£108,369,279.24
Public match funding		£8,900,000.00
Private Funding		£0.00
Optimism Bias		24%
Profile	2019	£0.00
	2020	£2,991,464.53
	2021	£22,781,810.05
	2022	£91,496,004.66
	2023	£0.00

Total PVC (discounted to 2010 prices)	**£91,709,000.00**

Scheme Information	
Scheme ID	NX03
Scheme Name	Metro Flow
Location	

Appraisal methodology
Following demand modelling, the scheme was assessed and produced monetised impacts for journey times, non user benefits and indirect tax *Additionally wider econic impacts have been calculated.*

Appraisal Period	
Years	**60**

Appraisal Results (all in 2010 prices)	
Total PVB	**£185,680,000.00**

Scheme Information	
Scheme ID	NX04
Scheme Name	Follingsby & Callerton P&R Sites

Appraisal ongoing

Scheme Information	
Scheme ID	ST04
Scheme Name	Smart / Healthier Metro Stations

Economics Summary				
Element	**PVB**	**PVC**	**NPV**	**BCR**
A - Chichester Metro Station	£323,434.81			
*B - Tyne Dk Stn to Middlefld*s	£159,455.01			
C -Tyne Dk Stn to Port of Tyne	£63,449.31			
Soft Factors	£5,161,916.91			
Total	**£5,708,256.04**	**£2,353,236.78**	**£3,355,019.26**	**2.43**

Scheme Information	
Scheme ID	ST04
Scheme Name	Smart / Healthier Metro Stations

Cost Details		
Total Scheme Cost		£3,450,000.00
TCF Ask		£2,800,000.00
Public match funding		£650,000.00
Private Funding		£0.00
Optimism Bias		TBC
Profile	2019	£0.00
	2020	£1,550,000.00
	2021	£900,000.00
	2022	£1,000,000.00
	2023	£0.00

Total PVC (discounted to 2010 prices)	**£2,353,236.78**

Scheme Information	
Scheme ID	ST04
Scheme Name	Smart / Healthier Metro Stations
Location ref & location	*Chichester Metro Station, ST04-A*

Appraisal methodology
This scheme was appraised using the Department for Transport's (DfT) Active Mode Appraisal Toolkit (AMAT)

Appraisal Inputs				
	Input Category	**Input Value**		**Assumptions and evidence**
	Appraisal Period	20		
Info	Scheme open year	2023		
Info	Last year of funding	2023		
Info	Area located	Inner and Outer Conurbations		
Info	Scheme length	480m		
	Input Category	**Current**	**Proposed**	**Assumptions and evidence**
Cycling	Number of Cyclists	23	35	PCT tool and 57% future growth
Cycling	Cycle Infrastructure	No provision	On-road non-segre	
Cycling	Shower facilities		No	
Cycling	Secure Storage		No	
Walking	Current Pedestrians	1860	1860	Calculated based on patronage information
Walking	Street Lighting	Yes	Yes	Desktop assessment and scheme info
Walking	Kerb level	No	Yes	Desktop assessment and scheme info
Walking	Crowding	No	No	Desktop assessment and scheme info
Walking	Pavement evenness	Yes	Yes	Desktop assessment and scheme info
Walking	Information Pannels	No	No	Desktop assessment and scheme info
Walking	Benches	No	No	Desktop assessment and scheme info
Walking	Directional Signage	No	Yes	Desktop assessment and scheme info

Scheme Information	
Scheme ID	ST04
Scheme Name	Smart / Healthier Metro Stations
Location ref & location	*Chichester Metro Station, ST04-A*

Appraisal Results (all in 2010 prices)	
Congestion benefit	£7,591.88
Infrastructure	£24.86
Accident	£745.67
Local air quality	£3.53
Noise	£49.71
Greenhouse gases	£138.71
Reduced risk of premature death	£77,374.38
Absenteeism	£16,992.96
Journey ambiance	£221,043.59
Indirect Taxation	-£505.62
Total PVB	**£323,434.81**

Scheme Information	
Scheme ID	ST04
Scheme Name	Smart / Healthier Metro Stations
Location ref & location	*Tyne Dock Station to Middlefields Industrial Estate, ST04-B*

Appraisal methodology
This scheme was appraised using the Department for Transport's (DfT) Active Mode Appraisal Toolkit (AMAT)

Appraisal Inputs				
	Input Category	**Input Value**		**Assumptions and evidence**
	Appraisal Period	20		
Info	Scheme open year	2022		
Info	Last year of funding	2022		
Info	Area located	Inner and Outer Conurbations		
Info	Scheme length	452m		
	Input Category	**Current**	**Proposed**	**Assumptions and evidence**
Cycling	Number of Cyclists	69	108	PCT tool and 57% future growth
Cycling	Cycle Infrastructure	Off-road segregated cycle track	Off-road segregated cycle track	
Cycling	Shower facilities		No	
Cycling	Secure Storage		No	
Walking	Current Pedestrians	487	389	Based on patronage information
Walking	Street Lighting	No	Yes	Desktop assessment and scheme info
Walking	Kerb level	No	Yes	Desktop assessment and scheme info
Walking	Crowding	No	Yes	Desktop assessment and scheme info
Walking	Pavement evenness	No	Yes	Desktop assessment and scheme info
Walking	Information Pannels	No	Yes	Desktop assessment and scheme info
Walking	Benches	No	Yes	Desktop assessment and scheme info
Walking	Directional Signage	No	Yes	Desktop assessment and scheme info

Scheme Information	
Scheme ID	ST04
Scheme Name	Smart / Healthier Metro Stations
Location ref & location	*Tyne Dock Station to Middlefields Industrial Estate, ST04-B*

Appraisal Results (all in 2010 prices)	
Congestion benefit	£11,107.84
Infrastructure	£36.79
Accident	£1,103.66
Local air quality	£5.44
Noise	£73.58
Greenhouse gases	£206.65
Reduced risk of premature death	-£1,500.15
Absenteeism	-£30,882.95
Journey ambiance	£180,112.34
Indirect Taxation	-£771.42
Total PVB	**£159,455.01**

Scheme Information	
Scheme ID	ST04
Scheme Name	Smart / Healthier Metro Stations
Location ref & location	*Tyne Dock Station to Port of Tyne, ST04-C*

Appraisal methodology
This scheme was appraised using the Department for Transport's (DfT) Active Mode Appraisal Toolkit (AMAT)

Appraisal Inputs				
	Input Category	**Input Value**		**Assumptions and evidence**
	Appraisal Period	20		
Info	Scheme open year	2022		
Info	Last year of funding	2022		
Info	Area located	Inner and Outer Conurbations		
Info	Scheme length	511m		
	Input Category	**Current**	**Proposed**	**Assumptions and evidence**
Cycling	Number of Cyclists	0	0	
Cycling	Cycle Infrastructure	No provision	No provision	
Cycling	Shower facilities		No	
Cycling	Secure Storage		No	
Walking	Current Pedestrians	487	487	Based on patronage information
Walking	Street Lighting	Yes	Yes	Desktop assessment and scheme info
Walking	Kerb level	No	Yes	Desktop assessment and scheme info
Walking	Crowding	Yes	Yes	Desktop assessment and scheme info
Walking	Pavement evenness	No	Yes	Desktop assessment and scheme info
Walking	Information Pannels	No	No	Desktop assessment and scheme info
Walking	Benches	No	No	Desktop assessment and scheme info
Walking	Directional Signage	No	No	Desktop assessment and scheme info

Scheme Information	
Scheme ID	ST04
Scheme Name	Smart / Healthier Metro Stations
Location ref & location	*Tyne Dock Station to Port of Tyne, ST04-C*

Appraisal Results (all in 2010 prices)	
Congestion benefit	£0.00
Infrastructure	£0.00
Accident	£0.00
Local air quality	£0.00
Noise	£0.00
Greenhouse gases	£0.00
Reduced risk of premature death	£0.00
Absenteeism	£0.00
Journey ambiance	£63,449.31
Indirect Taxation	£0.00
Total PVB	**£63,449.31**

Scheme Information	
Scheme ID	ST04
Scheme Name	Smart / Healthier Metro Stations
Location	Chichester and Tyne Dock Metro Stations

Appraisal methodology
To appraise the imrpoved secuiruty and station facilities, WebTAG soft factors have been used (CCTV and improved facilities). Annual station users have been provided (792,582 at Chichester and 645,838 at Tyne Dock). 75% of the generalise minutes value have been used in the appraisal (reflecting the improvements to these factors). The appraisal has taken place over 20 years.

Appraisal Results (all in 2010 prices)	
Chichester Journey Quality	**£2,844,261.36**
Tyne Dock Journey Quality	**£2,317,655.55**
Total PVB	**£5,161,916.91**

Scheme Information	
Scheme ID	ST08a
Scheme Name	South Shields - Newcastle Bus Improvements

Appraisal ongoing

Scheme Information	
Scheme ID	ST08b
Scheme Name	South Shields - Sunderland Bus Improvements

Appraisal ongoing

Scheme Information	
Scheme ID	SU03
Scheme Name	Sunderland Central Station

Economics Summary				
Element	**PVB**	**PVC**	**NPV**	**BCR**
AMAT	£26,080,605.00			
Total	**£26,080,605.00**	**£9,978,963.11**	**£16,101,641.89**	**2.61**

Scheme Information	
Scheme ID	SU03
Scheme Name	Sunderland Central Station

Cost Details		
Total Scheme Cost		£14,000,000.00
TCF Ask		£12,600,000.00
Public match funding		£1,400,000.00
Private Funding		£0.00
Optimism Bias		TBC
Profile	2019	£0.00
	2020	£14,000,000.00
	2021	£0.00
	2022	£0.00
	2023	£0.00

Total PVC (discounted to 2010 prices)	**£9,978,963.11**

Scheme Information	
Scheme ID	SU03
Scheme Name	Sunderland Central Station
Location	*Southern Entrance*

Appraisal methodology
A bespoke impact model was created to calculate the wider impacts of the scheme, with the economic appraisal being carried out to WebTAG guidance with impacts such as journey quality, decongestion, revenue, accidents (vehicles and pedestrians), noise, air quality, greenhouse gases and indirect tax (environmental) all being monetised.

Appraisal Period	
Years	**60**

Appraisal Results (all in 2010 prices)	
Total PVB	**£26,080,605.00**

Scheme Information	
Scheme ID	SU04
Scheme Name	Holmeside Bus Rationalisation

Appraisal ongoing

Scheme Information	
Scheme ID	SU05
Scheme Name	Sunderland Inner Ring Road Bus Priority

Appraisal ongoing

Scheme Information	
Scheme ID	SU07
Scheme Name	Sunderland Station Car Park

Appraisal ongoing

Scheme Information	
Scheme ID	SU09
Scheme Name	Chester Road Bus Corridor

Appraisal ongoing

Scheme Information	
Scheme ID	SU10
Scheme Name	A690 Bus Route Action Plan

Appraisal ongoing

Scheme Information	
Scheme ID	SU15
Scheme Name	A690 Strategic Cycling Corridor

Appraisal ongoing

Additional Costs		
Total Cost		£1,005,923.00
Profile	2019	£0.00
	2020	£390,960.00
	2021	£324,896.00
	2022	£290,067.00
	2023	£0.00

Total PVC (discounted to 2010 prices)	**£683,921.21**

APPENDIX N: APPRAISAL SUMMARY TABLE (AST)

Appraisal Summary Table

Date produced:	20	6	2019

Contact:	
Name	
Organisation	
Role	Promoter/Official

Name of scheme:	Transforming Cities Fund Tranche 2
Description of scheme:	This package of schemes offers improvements to walking and cycling, rail and bus links and the introduction of park and ride sites.

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 alterntaive mode of transport to educational and employment opportunities along key routes. All proposals should improve journeys to employment and educational sites.	Value of journey time changes(£)			Large Beneficial		
			Net journey time changes (£)					
			0 to 2min	2 to 5min	> 5min			
	Reliability impact on Business users	Business users should see improved reliability through better connected infrastructure which will improve onwards connections in particular. They will also benefit from regular bus and rail services as well as park and ride facilities which will run along key commuter routes.				Moderately Beneficial		
	Regeneration							
	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		
	Air Quality	The programmes will see a shift to more sustainable modes of transport and therefore improved air quality as a result of this.				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.	Change in non-traded carbon over 60y (CO2e)			Beneficial		
			Change in traded carbon over 60y (CO2e)					
	Landscape	The programmes will have a neutral impact on landscape.				Neutral		
	Townscape	The programmes will have a neutral impact on the townscape.				Neutral		
	Historic Environment	The programmes will have a neutral impact on the historic environment.				Neutral		
	Biodiversity	The programmes will have a neutral impact on biodiversity.				Neutral		
	Water Environment	Neutral impact on water environment				Neutral		
Social	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 and ride scheme will offer an alternative mode of transport to educational and employment opportunities along key routes. All proposals should improve journeys to employment and educational sites.	Value of journey time changes(£)					
			Net journey time changes (£)					
			0 to 2min	2 to 5min	> 5min			
	Reliability impact on Commuting and Other users	The programmes are expected to include ITS elements, the details of which are still being developed.						
	Physical activity	The programmes contain a large proportion of active mode schemes with new and improved cycle and pedestrian facilities targeting health benefits.						
	Journey quality	The schemes provided in the programmes will enhance journey ambience with less traffic resulting in a safer and more pleasant environment.						
	Accidents	The programmes will see a reduction in incidents not only from a modal shift resulting in reduced traffic, but also from improved cyclists facilities improving cyclist safety.						
	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 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 to severance.				Slight Beneficial		
	Option and non-use values	No significant impact.				Neutral		
Public Account	Cost to Broad Transport Budget							
	Indirect Tax Revenues							

APPENDIX O: COST PROFILES

Date: 18/06/2019
Revision: 6

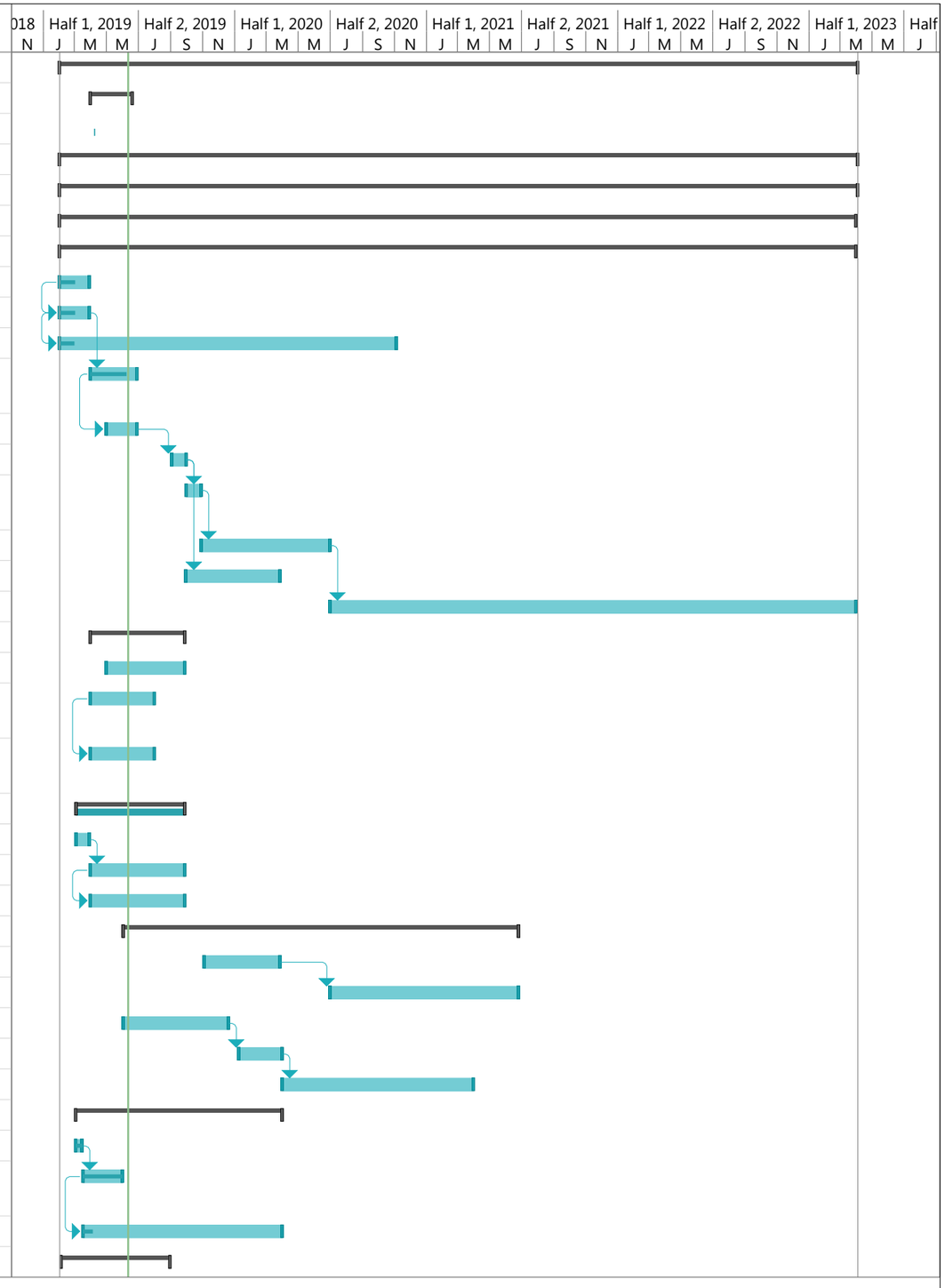
	COST SCENARIOS high	med	low	£m	2019/20	2020/21	2021/22	2022/23	Total	Match funding source
Newcastle City Council	Y	Y	Y	ITEM 1						
NE01 (Transforming Newcastle City Centre)	Y	Y	Y	Source TCF ask	£750,000.00	£4,500,000.00	£4,000,000.00	£3,000,000.00	£12,250,000.00	Local contribution- Local Authority Capital and ADZ (accelerated development zone) funding
	Y	Y	Y	Local Contribution	£150,000.00	£700,000.00	£1,000,000.00	£900,000.00	£2,750,000.00	S106 contributions from developers in the City Centre
	Y	Y	Y	Private Contribution	£0.00	£0.00	£0.00	£0.00	£0.00	
	Y	Y	Y	Total	£900,000.00	£5,200,000.00	£5,000,000.00	£3,900,000.00	£15,000,000.00	
	Y	Y	Y	ITEM 2						
NE02 (Newcastle Central Station- Central Gateway)	Y	Y	Y	Source TCF ask	£1,000,000.00	£3,000,000.00	£7,000,000.00	£7,400,000.00	£18,400,000.00	Local contribution- Local Growth Fund from Central Gateway Scheme
	Y	Y	Y	Local Contribution	£1,025,000.00	£2,300,000.00	£0.00	£0.00	£3,325,000.00	
	Y	Y	Y	Private Contribution	£0.00	£0.00	£0.00	£0.00	£0.00	
	Y	Y	Y	Total	£2,025,000.00	£5,300,000.00	£7,000,000.00	£7,400,000.00	£21,725,000.00	
	Y			ITEM 3						
NE03 (Newcastle-North Tyneside Strategic Cycling Infra)	Y			Source TCF ask	£330,000.00	£2,250,000.00	£2,420,000.00	£0.00	£5,000,000.00	
	Y			Local Contribution	£0.00	£300,000.00	£300,000.00	£0.00	£600,000.00	Local contribution- Portion of Integrated Transport Block Funding
	Y			Private Contribution	£0.00	£0.00	£0.00	£0.00	£0.00	
	Y			Total	£330,000.00	£2,550,000.00	£2,720,000.00	£0.00	£5,600,000.00	
	Y	Y	Y	ITEM 4						
NE04 (Newcastle Outer West)	Y	Y	Y	Source TCF ask	£1,500,000.00	£2,600,000.00	£0.00	£0.00	£4,100,000.00	Private contribution- Section 106 from developer contributions in the Outer West as defined in contribution model.
	Y	Y	Y	Local Contribution	£0.00	£1,680,000.00	£2,242,000.00	£2,670,000.00	£6,592,000.00	
	Y	Y	Y	Private Contribution	£545,000.00	£335,000.00	£428,000.00	0	£1,308,000.00	
	Y	Y	Y	Total	£2,045,000.00	£4,615,000.00	£2,670,000.00	£2,670,000.00	£12,000,000.00	Local contribution- Integrated Transport Block and Housing Infrastructure Fund
	Y	Y		ITEM 5						
NE07 / NO02 (Airport-Ponteland Cycle route)	Y	Y		Source TCF ask	£0.00	£200,000.00	£600,000.00	£0.00	£800,000.00	
	Y	Y		Local Contribution	£0.00	£0.00	£50,000.00	£0.00	£50,000.00	
	Y	Y		Private Contribution	£0.00	£0.00	£0.00	£0.00	£0.00	Local contribution- Integrated Transport Block
	Y	Y		Total	£0.00	£200,000.00	£650,000.00	£0.00	£850,000.00	
	Y	Y	Y	ITEM 6						
NE08 (Newcastle Streets for People)	Y	Y	Y	Source TCF ask	£0.00	£200,000.00	£800,000.00	£1,800,000.00	£2,800,000.00	
	Y	Y	Y	Local Contribution	£0.00	£0.00	£0.00	£200,000.00	£200,000.00	Local contribution- Integrated Transport Block
	Y	Y	Y	Private Contribution	£0.00	£0.00	£0.00	£0.00	£0.00	
	Y	Y	Y	Total	£0.00	£200,000.00	£800,000.00	£2,000,000.00	£3,000,000.00	
Gateshead Council	Y	Y	Y	ITEM 7						
GA01 (West Tyneside Cycle Route - Upgrade existing routes)	Y	Y	Y	Source TCF ask	£0.00	£600,000.00	£600,000.00	£600,000.00	£1,800,000.00	
	Y	Y	Y	Local Contribution	£20,000.00	£20,000.00	£60,000.00	£60,000.00	£160,000.00	Private contribution- Section 106
	Y	Y	Y	Private Contribution	£0.00	£40,000.00	£0.00	£0.00	£40,000.00	Local contribution- Capital / LTP
	Y	Y	Y	Total	£20,000.00	£660,000.00	£660,000.00	£660,000.00	£2,000,000.00	
	Y	Y	Y	ITEM 8						
GA05 (Metro Green Sustainable Access)	Y	Y	Y	Source TCF ask	£0.00	£1,500,000.00	£1,500,000.00	£1,500,000.00	£4,500,000.00	
	Y	Y	Y	Local Contribution	£20,000.00	£80,000.00	£170,000.00	£190,000.00	£460,000.00	Private contribution- Intu / developer
	Y	Y	Y	Private Contribution	£0.00	£20,000.00	£20,000.00	£0.00	£40,000.00	Local contribution- Capital / LTP
	Y	Y	Y	Total	£20,000.00	£1,600,000.00	£1,690,000.00	£1,690,000.00	£5,000,000.00	
	Y	Y	Y	ITEM 9						
GA07 (Askew Road)	Y	Y	Y	Source TCF ask	£0.00	£1,540,000.00	£0.00	£0.00	£1,540,000.00	
	Y	Y	Y	Local Contribution	£20,000.00	£151,000.00	£0.00	£0.00	£171,000.00	
	Y	Y	Y	Private Contribution	£0.00	£0.00	£0.00	£0.00	£0.00	Local contribution- Capital / LTP
	Y	Y	Y	Total	£20,000.00	£1,691,000.00	£0.00	£0.00	£1,711,000.00	
	Y	Y	Y	ITEM 10						
GA08 (Hills Street and Gateshead Quays sustainable access)	Y	Y	Y	Source TCF ask	£0.00	£300,000.00	£300,000.00	£200,000.00	£800,000.00	
	Y	Y	Y	Local Contribution	£0.00	£200,000.00	£220,000.00	£200,000.00	£620,000.00	Private contribution- section 106
	Y	Y	Y	Private Contribution	£0.00	£50,000.00	£30,000.00	£0.00	£80,000.00	Local contribution- Capital / LTP
	Y	Y	Y	Total	£0.00	£550,000.00	£550,000.00	£400,000.00	£1,500,000.00	
	Y			ITEM 11						
GA09 (A167 Birtley to Low Fell)	Y			Source TCF ask	£250,000.00	£1,400,000.00	£1,400,000.00	£1,450,000.00	£4,500,000.00	
	Y			Local Contribution	£50,000.00	£80,000.00	£150,000.00	£150,000.00	£430,000.00	Private contribution- Section 106
	Y			Private Contribution	£0.00	£70,000.00	£0.00	£0.00	£70,000.00	Local contribution- capital / LTP allocation
	Y			Total	£300,000.00	£1,550,000.00	£1,550,000.00	£1,600,000.00	£5,000,000.00	
	Y			ITEM 12						
GA10 (A184 Cycle route)	Y			Source TCF ask	£250,000.00	£820,000.00	£820,000.00	£810,000.00	£2,700,000.00	
	Y			Local Contribution	£50,000.00	£50,000.00	£100,000.00	£100,000.00	£300,000.00	
	Y			Private Contribution	£0.00	£0.00	£0.00	£0.00	£0.00	Local contribution- Capital / LTP
	Y			Total	£300,000.00	£870,000.00	£920,000.00	£910,000.00	£3,000,000.00	
	Y	Y	Y	ITEM 13						
GA11 (A195 bus lane)	Y	Y	Y	Source TCF ask	£0.00	£1,080,000.00	£0.00	£0.00	£1,080,000.00	
	Y	Y	Y	Local Contribution	£20,000.00	£100,000.00	£0.00	£0.00	£120,000.00	
	Y	Y	Y	Private Contribution	£0.00	£0.00	£0.00	£0.00	£0.00	Local contribution- Capital / LTP
	Y	Y	Y	Total	£20,000.00	£1,180,000.00	£0.00	£0.00	£1,200,000.00	
	Y			ITEM 14						
GA13 (Keelmans Way improvements)	Y			Source TCF ask	£0.00	£405,000.00	£810,000.00	£405,000.00	£1,620,000.00	
	Y			Local Contribution	£0.00	£35,000.00	£90,000.00	£45,000.00	£170,000.00	Private contribution- Section 106
	Y			Private Contribution	£0.00	£10,000.00	£0.00	£0.00	£10,000.00	Local contribution- Capital / LTP
	Y			Total	£0.00	£450,000.00	£900,000.00	£450,000.00	£1,800,000.00	
	Y	Y	Y	ITEM 15						
GA16 (Gateshead Interchange bus lane)	Y	Y	Y	Source TCF ask	£0.00	£450,000.00	£0.00	£0.00	£450,000.00	
	Y	Y	Y	Local Contribution	£0.00	£50,000.00	£0.00	£0.00	£50,000.00	
	Y	Y	Y	Private Contribution	£0.00	£0.00	£0.00	£0.00	£0.00	Local contribution- Capital / LTP
	Y	Y	Y	Total	£0.00	£500,000.00	£0.00	£0.00	£500,000.00	
North Tyneside Council	Y	Y		ITEM 16						
NT02 (Improvements to North Shields Transport Hub)	Y	Y		Source TCF ask	£500,000.00	£4,000,000.00	£7,000,000.00	£11,000,000.00	£22,500,000.00	
	Y	Y		Local Contribution	£0.00	£500,000.00	£1,000,000.00	£1,000,000.00	£2,500,000.00	
	Y	Y		Private Contribution	£0.00	£0.00	£0.00	£0.00	£0.00	Local contribution- Capital
	Y	Y		Total	£500,000.00	£4,500,000.00	£8,000,000.00	£12,000,000.00	£25,000,000.00	
	Y	Y	Y	ITEM 17						
NT08 (Bus priority improvements along A188 / A189 corridor - phase 1)	Y	Y	Y	Source TCF ask	£500,000.00	£1,500,000.00	£2,500,000.00	£0.00	£4,500,000.00	
	Y	Y	Y	Local Contribution	£0.00	£1,719,000.00	£0.00	£0.00	£1,719,000.00	Local contribution-In kind provision by way of S.278 works at A189/A1056 junction.
	Y	Y	Y	Private Contribution	£0.00	£0.00	£0.00	£0.00	£0.00	
	Y	Y	Y	Total	£500,000.00	£3,219,000.00	£2,500,000.00	£0.00	£6,219,000.00	
	Y	Y	Y	ITEM 18						
NT10 (Improved cycling / walking links to Metro)	Y	Y	Y	Source TCF ask	£0.00	£900,000.00	£2,250,000.00	£1,350,000.00	£4,500,000.00	
	Y	Y	Y	Local Contribution	£0.00	£100,000.00	£250,000.00	£150,000.00	£500,000.00	
	Y	Y	Y	Private Contribution	£0.00	£0.00	£0.00	£0.00	£0.00	Local contribution- Capital
	Y	Y	Y	Total	£0.00	£1,000,000.00	£2,500,000.00	£1,500,000.00	£5,000,000.00	
South Tyneside Council	Y	Y	Y	ITEM 19						
ST04 (Smart Metro Stations / Healthier Metro Stations)	Y	Y	Y	Source TCF ask	£200,000.00	£1,100,000.00	£700,000.00	£800,000.00	£2,800,000.00	
	Y	Y	Y	Local Contribution	£0.00	£250,000.00	£200,000.00	£200,000.00	£650,000.00	
	Y	Y	Y	Private Contribution	£0.00	£0.00	£0.00	£0.00	£0.00	Local contribution- Capital
	Y	Y	Y	Total	£200,000.00	£1,350,000.00	£900,000.00	£1,000,000.00	£3,450,000.00	
	Y	Y	Y	ITEM 20						
ST08a (Bus Corridor Improvments- South Shields to Newcastle)	Y	Y	Y	Source TCF ask	£200,000.00	£600,000.00	£1,200,000.00	£9,000,000.00	£11,000,000.00	
	Y	Y	Y	Local Contribution	£50,000.00	£150,000.00	£300,000.00	£2,000,000.00	£2,500,000.00	Private contribution- Network rail
	Y	Y	Y	Private Contribution	£0.00	£0.00	£0.00	£4,000,000.00	£4,000,000.00	Local contribution- Capital
	Y	Y	Y	Total	£250,000.00	£750,000.00	£1,500,000.00	£15,000,000.00	£17,500,000.00	
	Y	Y	Y	ITEM 21						
ST08b (Bus Corridor Improvments- South Shields to Newcastle)	Y	Y	Y	Source TCF ask	£200,000.00	£600,000.00	£400,000.00	£800,000.00	£2,000,000.00	
	Y	Y	Y	Local Contribution	£50,000.00	£150,000.00	£100,000.00	£200,000.00	£500,000.00	
	Y	Y	Y	Private Contribution	£0.00	£0.00	£0.00	£0.00	£0.00	Local contribution- Capital
	Y	Y	Y	Total	£250,000.00	£750,000.00	£500,000.00	£1,000,000.00	£2,500,000.00	

Sunderland City Council	Y	Y	Y	ITEM 22						
SU03 (Sunderland Central Station redevelopment)	Y	Y	Y	Source TCF ask	£400,000.00	£12,200,000.00	£0.00	£0.00	£12,600,000.00	
	Y	Y	Y	Local Contribution	£100,000.00	£1,300,000.00	£0.00	£0.00	£1,400,000.00	
	Y	Y	Y	Private Contribution	£0.00	£0.00	£0.00	£0.00	£0.00	Local contribution- Capital
	Y	Y	Y	Total	£500,000.00	£13,500,000.00	£0.00	£0.00	£14,000,000.00	
	Y	Y	Y	ITEM 23						
SU04 (Holmeside Bus Rationalisation and priority measures)	Y	Y	Y	Source TCF ask	£0.00	£900,000.00	£0.00	£0.00	£900,000.00	
	Y	Y	Y	Local Contribution	£0.00	£100,000.00	£0.00	£0.00	£100,000.00	
	Y	Y	Y	Private Contribution	£0.00	£0.00	£0.00	£0.00	£0.00	Local contribution- Capital
	Y	Y	Y	Total	£0.00	£1,000,000.00	£0.00	£0.00	£1,000,000.00	
	Y	Y	Y	ITEM 24						
SU05 (Inner Ring Road Improvements - bus priority)	Y	Y	Y	Source TCF ask	£0.00	£2,100,000.00	£1,700,000.00	£2,500,000.00	£6,300,000.00	
	Y	Y	Y	Local Contribution	£0.00	£230,000.00	£190,000.00	£280,000.00	£700,000.00	
	Y	Y	Y	Private Contribution	£0.00	£0.00	£0.00	£0.00	£0.00	Local contribution- Capital
	Y	Y	Y	Total	£0.00	£2,330,000.00	£1,890,000.00	£2,780,000.00	£7,000,000.00	
	Y	Y	Y	ITEM 25						
SU07 (Holmeside / Sunderland Station Car Park)	Y	Y	Y	Source TCF ask	£0.00	£450,000.00	£4,050,000.00	£0.00	£4,500,000.00	
	Y	Y	Y	Local Contribution	£0.00	£50,000.00	£450,000.00	£0.00	£500,000.00	
	Y	Y	Y	Private Contribution	£0.00	£0.00	£0.00	£0.00	£0.00	Local contribution- Capital
	Y	Y	Y	Total	£0.00	£500,000.00	£4,500,000.00	£0.00	£5,000,000.00	
	Y	Y	Y	ITEM 26						
SU09 (Chester Road Bus Corridor)	Y	Y	Y	Source TCF ask	£1,000,000.00	£2,040,000.00	£2,000,000.00	£0.00	£5,040,000.00	
	Y	Y	Y	Local Contribution	£100,000.00	£260,000.00	£200,000.00	£0.00	£560,000.00	
	Y	Y	Y	Private Contribution	£0.00	£0.00	£0.00	£0.00	£0.00	Local contribution- Capital
	Y	Y	Y	Total	£1,100,000.00	£2,300,000.00	£2,200,000.00	£0.00	£5,600,000.00	
	Y	Y	Y	ITEM 27						
SU10 (A690 Route Action Plan)	Y	Y	Y	Source TCF ask	£0.00	£3,400,000.00	£2,000,000.00	£0.00	£5,400,000.00	
	Y	Y	Y	Local Contribution	£0.00	£370,000.00	£230,000.00	£0.00	£600,000.00	
	Y	Y	Y	Private Contribution	£0.00	£0.00	£0.00	£0.00	£0.00	Local contribution- Capital
	Y	Y	Y	Total	£0.00	£3,770,000.00	£2,230,000.00	£0.00	£6,000,000.00	
	Y			ITEM 28						
SU15 (Strategic Cycle Network A690 Corridor)	Y			Source TCF ask	£0.00	£1,800,000.00	£1,800,000.00	£0.00	£3,600,000.00	
	Y			Local Contribution	£0.00	£200,000.00	£200,000.00	£0.00	£400,000.00	
	Y			Private Contribution	£0.00	£0.00	£0.00	£0.00	£0.00	Local contribution- Capital
	Y			Total	£0.00	£2,000,000.00	£2,000,000.00	£0.00	£4,000,000.00	
Northumberland	Y	Y	Y	ITEM 29						
NO01 (Reintroduction of passenger rail services between Ashington and Newcastle)	Y	Y	Y	Source TCF ask	£4,654,057	£7,077,651	£39,407,609	£48,407,203	£99,546,520	
	Y	Y	Y	Local Contribution	£5,000,000	£1,611,000	£10,512,000	£547,000	£17,670,000	
	Y	Y	Y	Private Contribution	£0	£0	£0	£0	£0	Local contribution- Capital
	Y	Y	Y	Total	£9,654,057	£8,688,651	£49,919,609	£48,954,203	£117,216,520	
Durham Council	Y	Y	Y	ITEM 30						
DU01 (Walking and Cycling Improvements)	Y	Y	Y	Source TCF ask	£25,000.00	£2,066,604.00	£1,890,000.00	£0.00	£3,981,604.00	
	Y	Y	Y	Local Contribution	£45,000.00	£270,756.00	£595,118.00	£0.00	£910,874.00	Private contribution- University development 106
	Y	Y	Y	Private Contribution	£0.00	£750,000.00	£500,000.00	£0.00	£1,250,000.00	Local contribution- Capital
	Y	Y	Y	Total	£70,000.00	£3,087,360.00	£2,985,118.00	£0.00	£6,142,478.00	
	Y	Y	Y	ITEM 31						
DU02 (Park and Ride expansion, Durham City)	Y	Y	Y	Source TCF ask	£0.00	£2,700,000.00	£0.00	£0.00	£2,700,000.00	
	Y	Y	Y	Local Contribution	£500,000.00	£1,285,000.00	£15,000.00	£0.00	£1,800,000.00	
	Y	Y	Y	Private Contribution	£0.00	£0.00	£0.00	£0.00	£0.00	Local contribution- Capital
	Y	Y	Y	Total	£500,000.00	£3,985,000.00	£15,000.00	£0.00	£4,500,000.00	
	Y	Y		ITEM 32						
DU03 (Bus Priority Measures)	Y	Y		Source TCF ask	£0.00	£52,720.00	£180,000.00	£0.00	£232,720.00	
	Y	Y		Local Contribution	£1,000.00	£20,360.00	£95,000.00	£0.00	£116,360.00	
	Y	Y		Private Contribution	£0.00	£0.00	£0.00	£0.00	£0.00	Local contribution- Capital
	Y	Y		Total	£1,000.00	£73,080.00	£275,000.00	£0.00	£349,080.00	
	Y	Y	Y	ITEM 33						
DU04 (Durham Rail Station access improvements)	Y	Y	Y	Source TCF ask	£0.00	£53,333.00	£80,000.00	£0.00	£133,333.00	
	Y	Y	Y	Local Contribution	£5,000.00	£41,667.00	£20,000.00	£0.00	£66,667.00	
	Y	Y	Y	Private Contribution	£0.00	£0.00	£0.00	£0.00	£0.00	Local contribution- Capital
	Y	Y	Y	Total	£5,000.00	£95,000.00	£100,000.00	£0.00	£200,000.00	
	Y	Y	Y	ITEM 34						
DU07 (Durham Bus Station)	Y	Y	Y	Source TCF ask	£0.00	£4,000,000.00	£250,000.00	£0.00	£4,250,000.00	
	Y	Y	Y	Local Contribution	£250,000.00	£2,000,000.00	£2,000,000.00	£0.00	£4,250,000.00	
	Y	Y	Y	Private Contribution	£0.00	£0.00	£0.00	£0.00	£0.00	Local contribution- Capital
	Y	Y	Y	Total	£250,000.00	£6,000,000.00	£2,250,000.00	£0.00	£8,500,000.00	
NEXUS	Y	Y		ITEM 35						
NX02 (Park and Ride Enhancements)	Y	Y		Source TCF ask	£39,383.20	£230,128.80	£665,012.80	£2,612,536.90	£3,547,061.70	
	Y	Y		Local Contribution	£180,000.00	£0.00	£0.00	£157,815.40	£337,815.40	Local contribution confirmed for 2019/20; remainder TBC
	Y	Y		Private Contribution	£0.00	£0.00	£0.00	£0.00	£0.00	
	Y	Y		Total	£219,383.20	£230,128.80	£665,012.80	£2,770,352.30	£3,884,877.10	
	Y	Y	Y	ITEM 36						
NX03 (Twin tracking of metro line between Pelaw and Bede/ Metro Capacity Enhacement)	Y	Y	Y	Source TCF ask	£148,800.00	£2,023,286.28	£23,372,745.82	£82,580,447.14	£108,125,279.25	
	Y	Y	Y	Local Contribution	£744,000.00			£8,400,000.00	£9,144,000.00	Local contribution confirmed for 2019/20; remainder subject to SR19 bid.
	Y	Y	Y	Private Contribution	£0.00	£0.00	£0.00	£0.00	£0.00	
	Y	Y	Y	Total	£892,800.00	£2,023,286.28	£23,372,745.82	£90,980,447.14	£117,269,279.25	
	Y	Y	Y	ITEM 37						
NX04 (Strategic Park and Ride Sites; Follingsby Park and Ride and Linkes to IAMP and Callerton Parkway)	Y	Y	Y	Source TCF ask	£136,583.05	£7,776,107.42	£0.00	£0.00	£7,912,690.47	
	Y	Y	Y	Local Contribution	£270,000.00	£483,590.00	£0.00	£0.00	£753,590.00	Local contribution confirmed for 2019/20; remainder TBC
	Y	Y	Y	Private Contribution	£0.00	£0.00	£0.00	£0.00	£0.00	
	Y	Y	Y	Total	£406,583.05	£8,259,697.42	£0.00	£0.00	£8,666,280.47	
Intu	Y	Y	Y	ITEM 38						
IN01 (Intu Cycle Storage)	Y	Y	Y	Source TCF ask	£0.00	£300,000.00	£0.00	£0.00	£300,000.00	
	Y	Y	Y	Local Contribution	£0.00	£0.00	£0.00	£0.00	£0.00	Private contribution- Rents in kind
	Y	Y	Y	Private Contribution	£14,000.00	£96,100.00	£96,100.00	£96,100.00	£302,300.00	
	Y	Y	Y	Total	£14,000.00	£396,100.00	£96,100.00	£96,100.00	£602,300.00	
Programme Delivery Support	Y	Y	Y	ITEM 39						
				Total	£0.00	£390,960.00	£324,896.00	£290,067.00	£1,005,923.00	

TOTALS								
				Total DfT funding requested	£12,083,823.25	£79,105,790.50	£112,020,263.62	£176,505,254.04	£379,715,131.42
				Local Contribution	£8,650,000.00	£16,837,373.00	£20,739,118.00	£17,449,815.40	£63,676,306.40
				Private Contribution	£559,000.00	£1,371,100.00	£1,074,100.00	£4,096,100.00	£7,100,300.00
				Total private / local contribution (match funding)	£9,209,000.00	£18,208,473.00	£21,813,218.00	£21,545,915.40	£70,776,606.40
				Total (DfT and Match)	£21,292,823.25	£97,314,263.50	£133,833,481.62	£198,051,169.44	£450,491,737.82

APPENDIX P: PROJECT DELIVERY PLAN

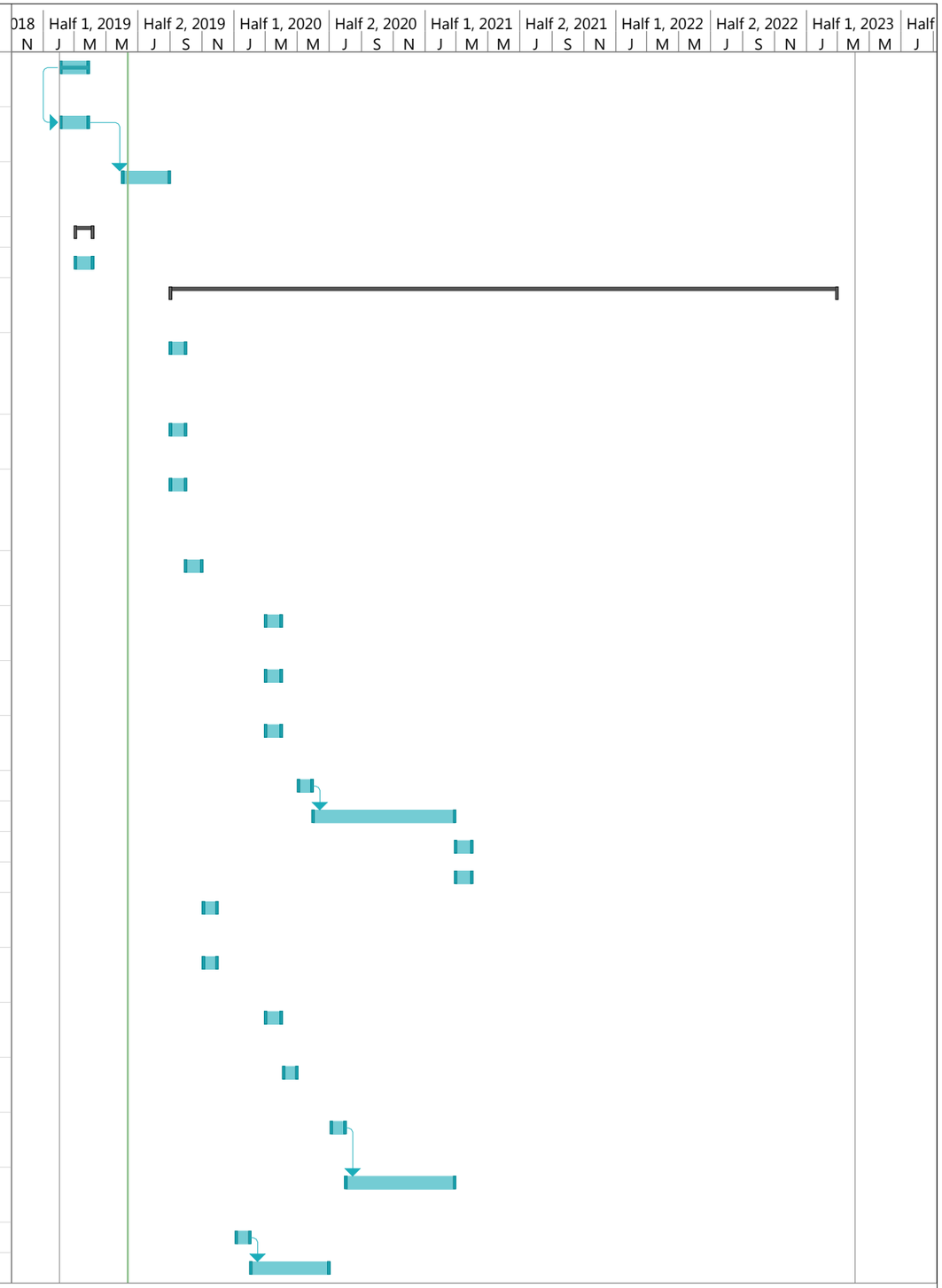
ID	Task Mode	Task Name	Duration	Start	Finish	% Complete
1		**Transforming Cities Fund - Tranche 2**	**1076 days**	**Fri 01/02/19**	**Mon 03/04/23**	**1%**
2		**DRAFT STRATEGIC OUTLINE BUSINESS CASE**	**54 days**	**Mon 01/04/19**	**Thu 20/06/19**	**41%**
55		**FINAL STRATEGIC OUTLINE BUSINESS CASE**				**0%**
67		**DELIVERY**	**1076 days**	**Fri 01/02/19**	**Mon 03/04/23**	**1%**
68		**Newcastle Schemes**	**1076 days**	**Fri 01/02/19**	**Mon 03/04/23**	**2%**
69		**NE01 (Transforming Newcastle City Centre)**	**1075 days**	**Fri 01/02/19**	**Fri 31/03/23**	**6%**
70		**Retail Core Schemes**	**1075 days**	**Fri 01/02/19**	**Fri 31/03/23**	**6%**
71		Bus Passenger Survey -evidence collection	41 days	Fri 01/02/19	Fri 29/03/19	51%
72		Cycle review process- evidence collection	41 days	Fri 01/02/19	Fri 29/03/19	51%
73		Discussions with developer	448 days	Fri 01/02/19	Wed 04/11/20	4%
74		Design workshops - Blackett / NBSW / Pilgrim	61 days	Mon 01/04/19	Fri 28/06/19	75%
75		Updated Blackett Street Designs	41 days	Wed 01/05/19	Fri 28/06/19	0%
76		Proposed public engagement	20 days	Tue 03/09/19	Mon 30/09/19	0%
77		Advertisement of TROs (incl. Objection period)	20 days	Tue 01/10/19	Mon 28/10/19	0%
78		Potential period for legal challenge	170 days	Tue 29/10/19	Tue 30/06/20	0%
79		Enabling Works- e.g. Bus Stop relocations etc	127 days	Mon 30/09/19	Fri 27/03/20	0%
80		Construction	718 days	Wed 01/07/20	Fri 31/03/23	0%
81		**Junctions**	**125 days**	**Mon 01/04/19**	**Fri 27/09/19**	**0%**
82		Gallowgate / Percy street - Junction design	105 days	Wed 01/05/19	Fri 27/09/19	0%
83		Market Street / John Dobson Street- Developer modelling	84 days	Mon 01/04/19	Wed 31/07/19	0%
84		Market Street / Pilgrim Street- Developer Modelling	84 days	Mon 01/04/19	Wed 31/07/19	0%
85		**Engagement**	**144 days**	**Tue 05/03/19**	**Fri 27/09/19**	**0%**
86		Soft Servicing and Delivery Engagement	19 days	Tue 05/03/19	Fri 29/03/19	0%
87		Soft engagement with key stakeholders	125 days	Mon 01/04/19	Fri 27/09/19	0%
88		Comms Plan / Strategy development	125 days	Mon 01/04/19	Fri 27/09/19	0%
89		**Cycling Schemes**	**533 days**	**Mon 03/06/19**	**Fri 25/06/21**	**0%**
90		Claremont Road- Detailed design	102 days	Mon 04/11/19	Fri 27/03/20	0%
91		Claremont Road- Construction	258 days	Wed 01/07/20	Fri 25/06/21	0%
92		St Nicholas / Bigg Market - Design	144 days	Mon 03/06/19	Fri 20/12/19	0%
93		St Nicholas / Bigg Market - Detailed design	59 days	Thu 09/01/20	Tue 31/03/20	0%
94		St Nicholas / Bigg Market - Construction	258 days	Wed 01/04/20	Wed 31/03/21	0%
95		**Mitigation Measures- Radial Routes**	**274 days**	**Mon 04/03/19**	**Tue 31/03/20**	**23%**
96	✓	Funding Award	10 days	Mon 04/03/19	Fri 15/03/19	100%
97	✓	Commission of counts and strategy development	51 days	Mon 18/03/19	Fri 31/05/19	100%
98		Infrastructure upgrades	264 days	Mon 18/03/19	Tue 31/03/20	5%
99		**Mitigation Measures- Bus Loop Designs**	**145 days**	**Mon 04/02/19**	**Fri 30/08/19**	**27%**



Project: TCF Bid - Draft SOBC a
Date: Wed 12/06/19

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	

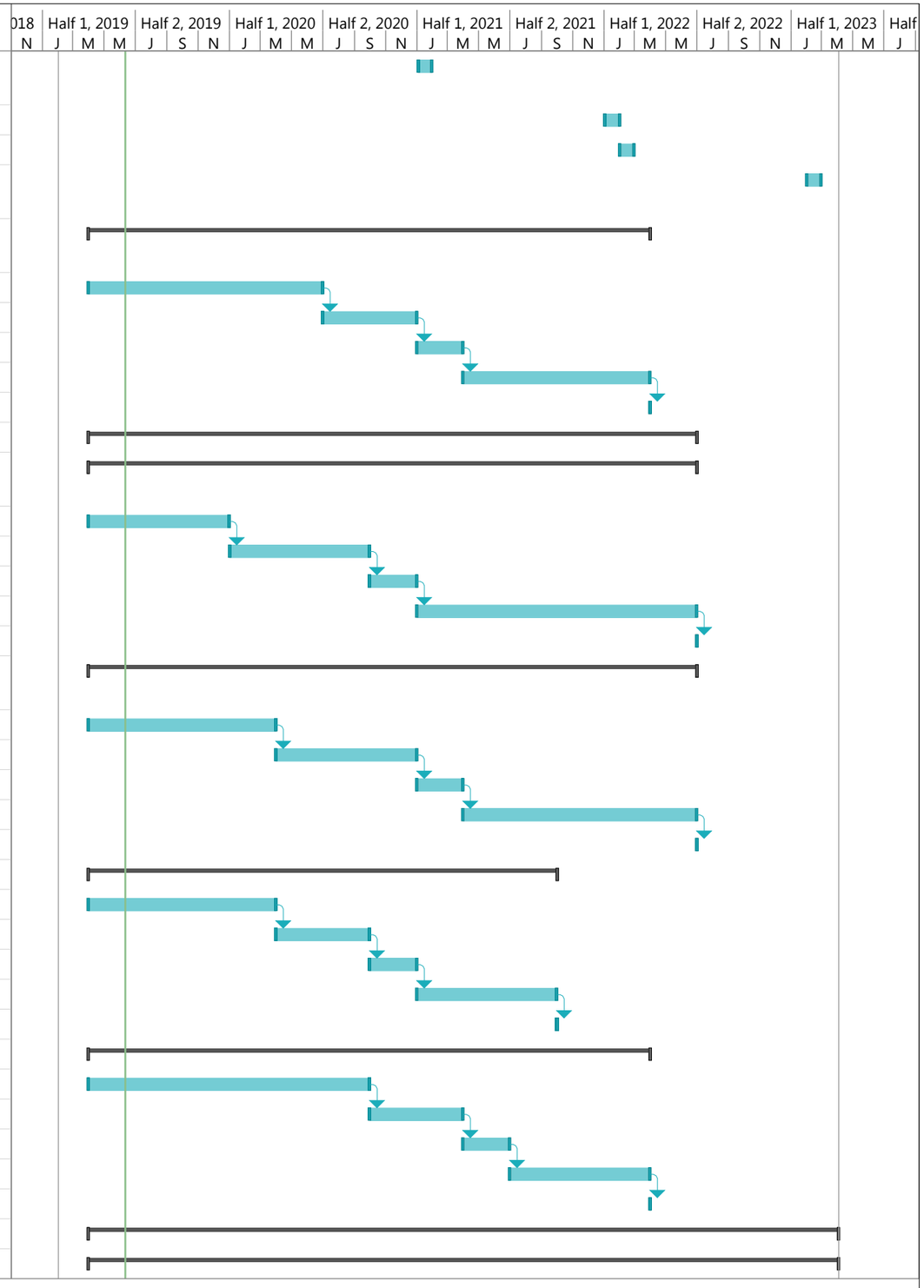
ID	Task Mode	Task Name	Duration	Start	Finish	% Complete
100		Newgate Street / Clayton Street Junction- indicator position design discussion	39 days	Mon 04/02/19	Thu 28/03/19	100%
101		Newgate Street / Clayton Street Junction- Detailed Design	39 days	Mon 04/02/19	Thu 28/03/19	0%
102		Newgate Street / Clayton Street Junction - Construction	64 days	Mon 03/06/19	Fri 30/08/19	0%
103		**Supporting Work - Hostile Vehicle Mitigation**	**25 days**	**Mon 04/03/19**	**Fri 05/04/19**	**0%**
104		Strategy / Framework Development	25 days	Mon 04/03/19	Fri 05/04/19	0%
105		**NE02 (Newcastle Central Station- Central Gateway)**	**906 days**	**Mon 02/09/19**	**Tue 28/02/23**	**0%**
106		Traffic signalling works undertaken to Westmorland Road/Marlborough Crescent junction	21 days	Mon 02/09/19	Mon 30/09/19	0%
107		RIBA Stage 3 Developed Design work for enabling works to west dock complete	21 days	Mon 02/09/19	Mon 30/09/19	0%
108		Planning and listed building consent applications submitted for new entrance and adaptation works within west dock	21 days	Mon 02/09/19	Mon 30/09/19	0%
109		RIBA Stage 4 Technical Design work for enabling works to West Dock commence	23 days	Tue 01/10/19	Thu 31/10/19	0%
110		RIBA Stage 4 Technical Design work for enabling works to West Dock complete	22 days	Mon 02/03/20	Tue 31/03/20	0%
111		Statuatory and Regulatory approval for works to West Dock	22 days	Mon 02/03/20	Tue 31/03/20	0%
112		Procurement of contractor for enabling works to west dock	22 days	Mon 02/03/20	Tue 31/03/20	0%
113		Enabling works commence to west dock	20 days	Mon 04/05/20	Fri 29/05/20	0%
114		Enabling works to west dock complete	195 days	Mon 01/06/20	Fri 26/02/21	0%
115		Station taxi rank relocated to west car park	23 days	Mon 01/03/21	Wed 31/03/21	0%
116		Orchard street closed to vehicular traffic	23 days	Mon 01/03/21	Wed 31/03/21	0%
117		Detailed design of Forth goods yard access junction works complete	20 days	Mon 04/11/19	Fri 29/11/19	0%
118		Planning application for Forth Goods Yard access junction submitted	20 days	Mon 04/11/19	Fri 29/11/19	0%
119		Planning consent for Forth Goods access junction obtained	22 days	Mon 02/03/20	Tue 31/03/20	0%
120		Procurement of contractor for Forth Goods Yard access junction	17 days	Mon 06/04/20	Thu 30/04/20	0%
121		Forth Goods Yard access junction works commence	20 days	Mon 06/07/20	Fri 31/07/20	0%
122		Forth Goods Yard access junction works complete	150 days	Mon 03/08/20	Fri 26/02/21	0%
123		East concourse design works begins	20 days	Mon 06/01/20	Fri 31/01/20	0%
124		East concourse design works complete	104 days	Mon 03/02/20	Tue 30/06/20	0%



Project: TCF Bid - Draft SOBC a
Date: Wed 12/06/19

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		

ID	Task Mode	Task Name	Duration	Start	Finish	% Complete
125		Eastern concourse car park adapted for relocation of short stay car park	20 days	Mon 04/01/21	Fri 29/01/21	0%
126		Eastern concourse new access ramp complete	21 days	Mon 03/01/22	Mon 31/01/22	0%
127		Orchard Street Tunnel works commence	20 days	Tue 01/02/22	Mon 28/02/22	0%
128		Orchard Street Tunnel works complete inc. access to central station	20 days	Wed 01/02/23	Tue 28/02/23	0%
129		**NE03 (Newcastle- North Tyneside Strategic Cycling Infra)**	**774 days**	**Mon 01/04/19**	**Fri 01/04/22**	**0%**
130		Design Work / Secure Funding	316 days	Mon 01/04/19	Tue 30/06/20	0%
131		Engagement	132 days	Wed 01/07/20	Thu 31/12/20	0%
132		Statutory Consultation	64 days	Fri 01/01/21	Wed 31/03/21	0%
133		Construction	261 days	Thu 01/04/21	Thu 31/03/22	0%
134		Completion	1 day	Fri 01/04/22	Fri 01/04/22	0%
135		**NE04 (Newcastle Outer West)**	**839 days**	**Mon 01/04/19**	**Fri 01/07/22**	**0%**
136		**Ponteland Rd/ Springfield Rd Ponteland Rd/ Etal Lane**	**839 days**	**Mon 01/04/19**	**Fri 01/07/22**	**0%**
137		Design Work / Secure Funding	190 days	Mon 01/04/19	Tue 31/12/19	0%
138		Engagement	192 days	Thu 02/01/20	Wed 30/09/20	0%
139		Statutory Consultation	66 days	Thu 01/10/20	Thu 31/12/20	0%
140		Construction	390 days	Fri 01/01/21	Thu 30/06/22	0%
141		Completion	1 day	Fri 01/07/22	Fri 01/07/22	0%
142		**Stamfordham Road / Pooley Rd; Stamfordham Rd/Springfield Rd**	**839 days**	**Mon 01/04/19**	**Fri 01/07/22**	**0%**
143		Design Work / Secure Funding	254 days	Mon 01/04/19	Tue 31/03/20	0%
144		Engagement	194 days	Wed 01/04/20	Thu 31/12/20	0%
145		Statutory Consultation	64 days	Fri 01/01/21	Wed 31/03/21	0%
146		Construction	326 days	Thu 01/04/21	Thu 30/06/22	0%
147		Completion	1 day	Fri 01/07/22	Fri 01/07/22	0%
148		**Rotary Way**	**644 days**	**Mon 01/04/19**	**Fri 01/10/21**	**0%**
149		Design Work / Secure Funding	254 days	Mon 01/04/19	Tue 31/03/20	0%
150		Engagement	128 days	Wed 01/04/20	Wed 30/09/20	0%
151		Statutory Consultation	66 days	Thu 01/10/20	Thu 31/12/20	0%
152		Construction	195 days	Fri 01/01/21	Thu 30/09/21	0%
153		Completion	1 day	Fri 01/10/21	Fri 01/10/21	0%
154		**NE07 / NO02 (Airport - Ponteland Cycle Route)**	**774 days**	**Mon 01/04/19**	**Fri 01/04/22**	**0%**
155		Design Work / Secure Funding	382 days	Mon 01/04/19	Wed 30/09/20	0%
156		Engagement	130 days	Thu 01/10/20	Wed 31/03/21	0%
157		Statutory Consultation	65 days	Thu 01/04/21	Wed 30/06/21	0%
158		Construction	196 days	Thu 01/07/21	Thu 31/03/22	0%
159		Completion	1 day	Fri 01/04/22	Fri 01/04/22	0%
160		**NE08 (Newcastle Streets for People)**	**1035 days**	**Mon 01/04/19**	**Mon 03/04/23**	**0%**
161		**Streets for People Byker / Ouseburn**	**1035 days**	**Mon 01/04/19**	**Mon 03/04/23**	**0%**



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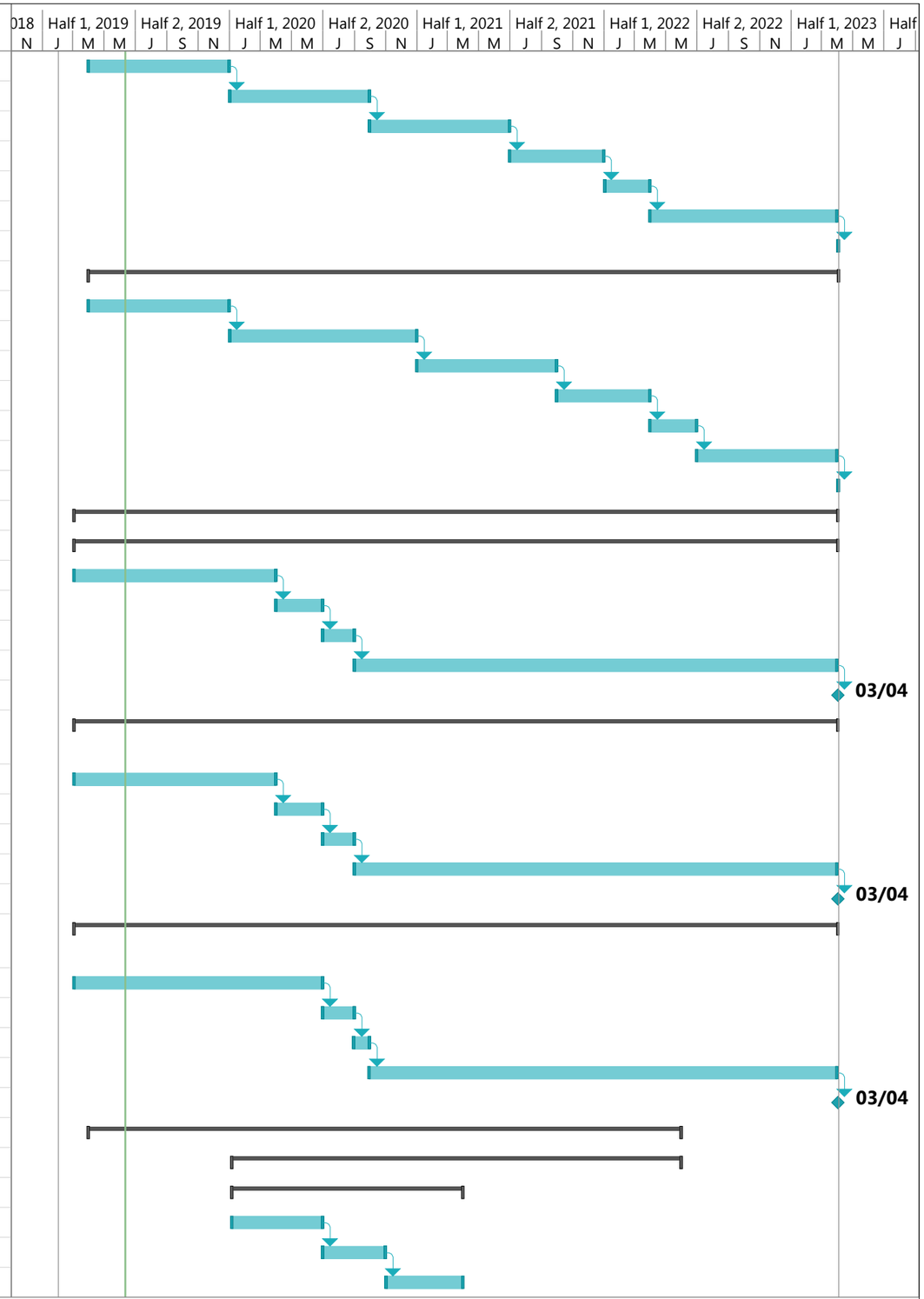
Task	Project Summary	Manual Task	Start-only	Deadline
Split	Inactive Task	Duration-only	Finish-only	Progress
Milestone	Inactive Milestone	Manual Summary Rollup	External Tasks	Manual Progress
Summary	Inactive Summary	Manual Summary	External Milestone	

ID	Task Mode	Task Name	Duration	Start	Finish	% Complete
162		Design Work / Secure Funding	190 days	Mon 01/04/19	Tue 31/12/19	0%
163		Engagement	192 days	Thu 02/01/20	Wed 30/09/20	0%
164		Design Work / Secure Funding	195 days	Thu 01/10/20	Wed 30/06/21	0%
165		Engagement	132 days	Thu 01/07/21	Fri 31/12/21	0%
166		Statutory Consultation	64 days	Mon 03/01/22	Thu 31/03/22	0%
167		Construction	261 days	Fri 01/04/22	Fri 31/03/23	0%
168		Completion	1 day	Mon 03/04/23	Mon 03/04/23	0%
169		**Streets for People Kingston Park / Fawdon**	**1035 days**	**Mon 01/04/19**	**Mon 03/04/23**	**0%**
170		Design Work / Secure Funding	190 days	Mon 01/04/19	Tue 31/12/19	0%
171		Engagement	258 days	Thu 02/01/20	Thu 31/12/20	0%
172		Design Work / Secure Funding	195 days	Fri 01/01/21	Thu 30/09/21	0%
173		Engagement	130 days	Fri 01/10/21	Thu 31/03/22	0%
174		Statutory Consultation	65 days	Fri 01/04/22	Thu 30/06/22	0%
175		Construction	196 days	Fri 01/07/22	Fri 31/03/23	0%
176		Completion	1 day	Mon 03/04/23	Mon 03/04/23	0%
177		**South Tyneside Schemes**	**1054 days**	**Mon 04/03/19**	**Mon 03/04/23**	**0%**
178		**ST04 (Healthier Metro Stations)**	**1054 days**	**Mon 04/03/19**	**Mon 03/04/23**	**0%**
179		Design Work / Secure Funding	274 days	Mon 04/03/19	Tue 31/03/20	0%
180		Engagement	62 days	Wed 01/04/20	Tue 30/06/20	0%
181		Statutory Consultation	44 days	Wed 01/07/20	Mon 31/08/20	0%
182		Construction	674 days	Tue 01/09/20	Fri 31/03/23	0%
183		Completion	0 days	Mon 03/04/23	Mon 03/04/23	0%
184		**ST08a (Bus Corridor Improvements- South Shields to Newcastle)**	**1054 days**	**Mon 04/03/19**	**Mon 03/04/23**	**0%**
185		Design Work / Secure Funding	274 days	Mon 04/03/19	Tue 31/03/20	0%
186		Engagement	62 days	Wed 01/04/20	Tue 30/06/20	0%
187		Statutory Consultation	44 days	Wed 01/07/20	Mon 31/08/20	0%
188		Construction	674 days	Tue 01/09/20	Fri 31/03/23	0%
189		Completion	0 days	Mon 03/04/23	Mon 03/04/23	0%
190		**ST08b (Bus Corridor Improvements- South Shields to Sunderland)**	**1054 days**	**Mon 04/03/19**	**Mon 03/04/23**	**0%**
191		Design Work / Secure Funding	336 days	Mon 04/03/19	Tue 30/06/20	0%
192		Engagement	44 days	Wed 01/07/20	Mon 31/08/20	0%
193		Statutory Consultation	23 days	Mon 31/08/20	Wed 30/09/20	0%
194		Construction	653 days	Wed 30/09/20	Fri 31/03/23	0%
195		Completion	0 days	Mon 03/04/23	Mon 03/04/23	0%
196		**Durham Schemes**	**816 days**	**Mon 01/04/19**	**Tue 31/05/22**	**0%**
197		**DU01 (Walking and Cycling Improvements)**	**624 days**	**Mon 06/01/20**	**Tue 31/05/22**	**0%**
198		**New Inn Junction Signals + South Road**	**320 days**	**Mon 06/01/20**	**Wed 31/03/21**	**0%**
199		Completion of Detailed Design	124 days	Mon 06/01/20	Tue 30/06/20	0%
200		PU Diversions	89 days	Wed 01/07/20	Sat 31/10/20	0%
201		Construction	108 days	Mon 02/11/20	Wed 31/03/21	0%



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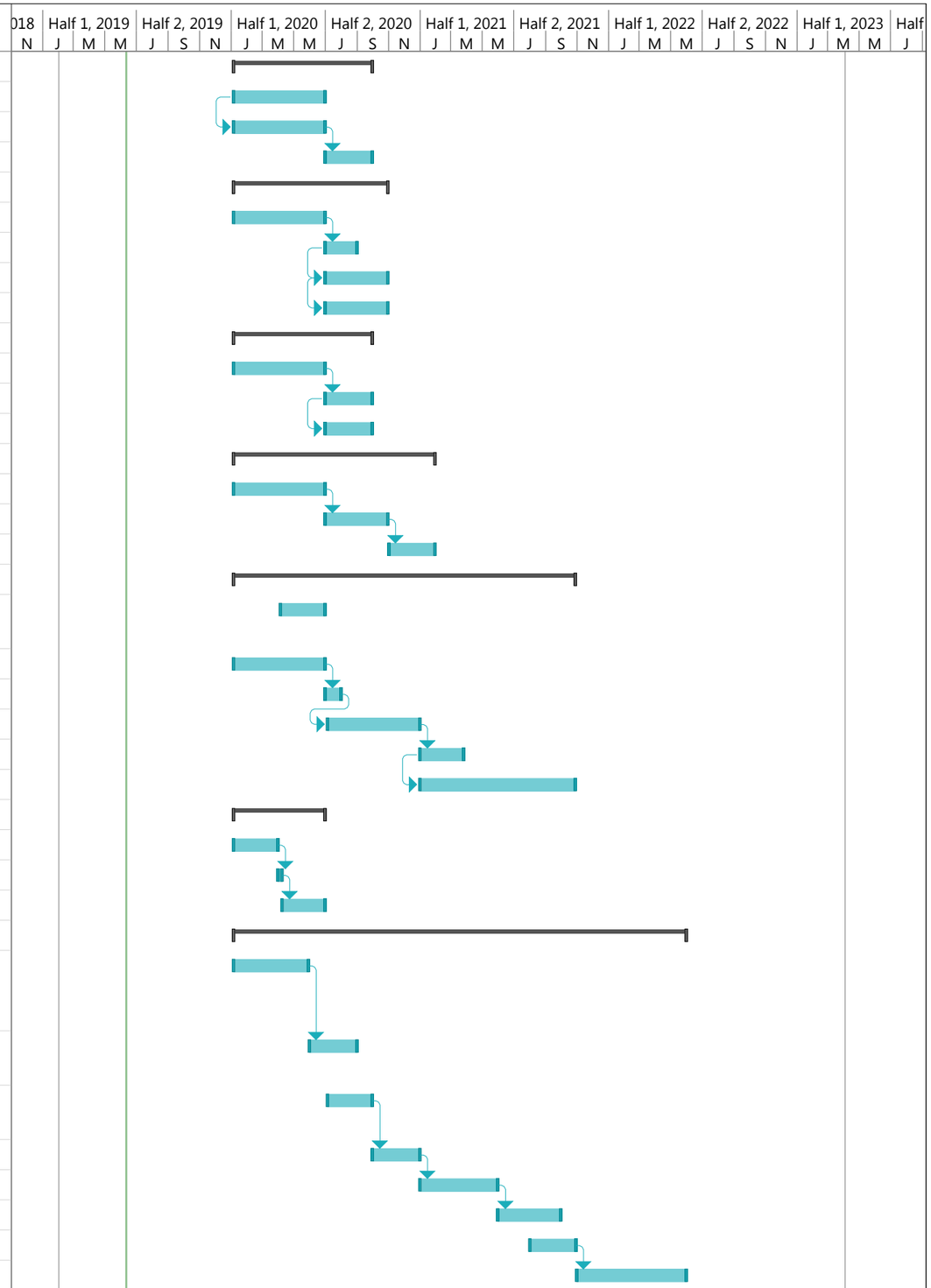
Task	Project Summary	Manual Task	Start-only	Deadline	
Split	Inactive Task	Duration-only	Finish-only	Progress	
Milestone	Inactive Milestone	Manual Summary Rollup	External Tasks	Manual Progress	
Summary	Inactive Summary	Manual Summary	External Milestone		

ID	Task Mode	Task Name	Duration	Start	Finish	% Complete
202		**Church Street FW Widening**	**190 days**	**Mon 06/01/20**	**Wed 30/09/20**	**0%**
203		TRO	124 days	Mon 06/01/20	Tue 30/06/20	0%
204		Completion of Detailed Design	124 days	Mon 06/01/20	Tue 30/06/20	0%
205		Construction	66 days	Wed 01/07/20	Wed 30/09/20	0%
206		**A691 Cycling Improvements**	**212 days**	**Mon 06/01/20**	**Fri 30/10/20**	**0%**
207		Completion of Detailed Design	124 days	Mon 06/01/20	Tue 30/06/20	0%
208		Low level retaining wall	44 days	Wed 01/07/20	Mon 31/08/20	0%
209		Route Construction	88 days	Wed 01/07/20	Fri 30/10/20	0%
210		Sniperley Rbt Crossings	88 days	Wed 01/07/20	Fri 30/10/20	0%
211		**Northern Employment Cycling Links**	**190 days**	**Mon 06/01/20**	**Wed 30/09/20**	**0%**
212		Completion of Detailed Design	124 days	Mon 06/01/20	Tue 30/06/20	0%
213		Bus stop alterations	66 days	Wed 01/07/20	Wed 30/09/20	0%
214		Construction	66 days	Wed 01/07/20	Wed 30/09/20	0%
215		**Sunderland Road Links**	**277 days**	**Mon 06/01/20**	**Fri 29/01/21**	**0%**
216		Completion of Detailed Design	124 days	Mon 06/01/20	Tue 30/06/20	0%
217		PU Diversions	88 days	Wed 01/07/20	Fri 30/10/20	0%
218		Construction	65 days	Mon 02/11/20	Fri 29/01/21	0%
219		**Belmont Business Park Links**	**471 days**	**Mon 06/01/20**	**Thu 28/10/21**	**0%**
220		Completion of detailed design (Phase 1- not involving utilities)	59 days	Mon 06/04/20	Tue 30/06/20	0%
221		Completion of detailed design (Phase 2)	124 days	Mon 06/01/20	Tue 30/06/20	0%
222		Consultation phase 2	23 days	Wed 01/07/20	Fri 31/07/20	0%
223		PU diversions	129 days	Mon 06/07/20	Thu 31/12/20	0%
224		Construction Phase 1	61 days	Fri 01/01/21	Fri 26/03/21	0%
225		Construction Phase 2	215 days	Fri 01/01/21	Thu 28/10/21	0%
226		**NCN 14 Route Improvements**	**124 days**	**Mon 06/01/20**	**Tue 30/06/20**	**0%**
227		Completion of detailed design	62 days	Mon 06/01/20	Tue 31/03/20	0%
228		Relocate VMS	6 days	Wed 01/04/20	Wed 08/04/20	0%
229		Construction	56 days	Thu 09/04/20	Tue 30/06/20	0%
230		**Pedestrian bridge at Milburngate House**	**624 days**	**Mon 06/01/20**	**Tue 31/05/22**	**0%**
231		Design up to a planning application stage, including further detailed cost estimate for FBC	102 days	Mon 06/01/20	Fri 29/05/20	0%
232		River Wear - Flood risk assessment and exemptions test	66 days	Mon 01/06/20	Mon 31/08/20	0%
233		River Wear - Water Framework Directive Assessment	63 days	Mon 06/07/20	Wed 30/09/20	0%
234		Planning determination	66 days	Thu 01/10/20	Thu 31/12/20	0%
235		Procurement	107 days	Fri 01/01/21	Mon 31/05/21	0%
236		Construction package production	88 days	Tue 01/06/21	Thu 30/09/21	0%
237		Flood risk activity permit from the EA	65 days	Mon 02/08/21	Fri 29/10/21	0%
238		Installation	152 days	Mon 01/11/21	Tue 31/05/22	0%



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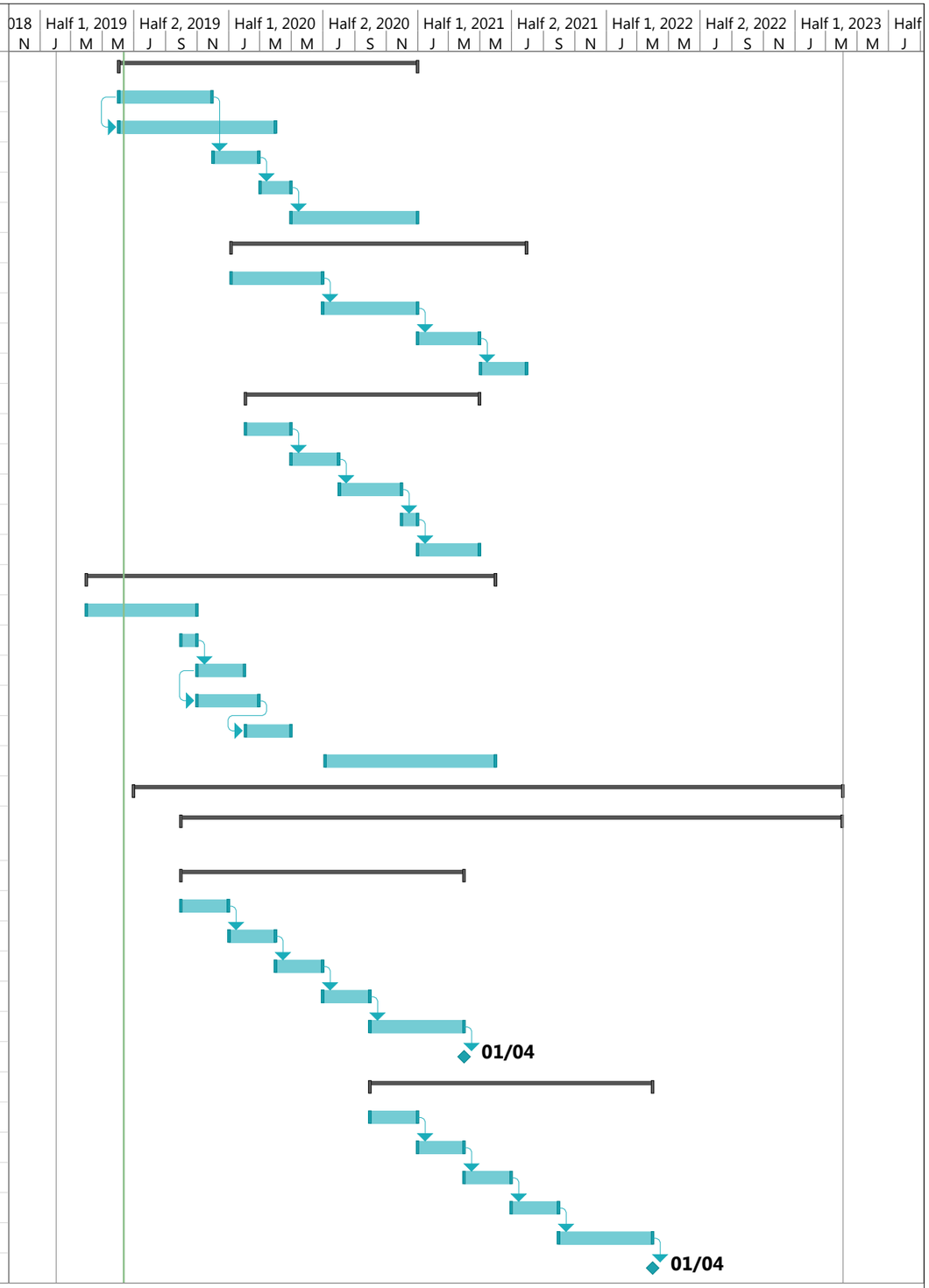
Task	Project Summary	Manual Task	Start-only	Deadline	
Split	Inactive Task	Duration-only	Finish-only	Progress	
Milestone	Inactive Milestone	Manual Summary Rollup	External Tasks	Manual Progress	
Summary	Inactive Summary	Manual Summary	External Milestone		

ID	Task Mode	Task Name	Duration	Start	Finish	% Complete
239		**DU02 (Park and Ride expansion, Durham City)**	**407 days**	**Mon 03/06/19**	**Thu 31/12/20**	**0%**
240		Completion of detailed design	129 days	Mon 03/06/19	Fri 29/11/19	0%
241		Land Acquisition	213 days	Mon 03/06/19	Tue 31/03/20	0%
242		Planning determination	62 days	Mon 02/12/19	Fri 28/02/20	0%
243		Utility diversion	42 days	Mon 02/03/20	Thu 30/04/20	0%
244		Construction	174 days	Fri 01/05/20	Thu 31/12/20	0%
245		**DU03 (Bus Priority Measures)**	**407 days**	**Mon 06/01/20**	**Fri 30/07/21**	**0%**
246		TRO	124 days	Mon 06/01/20	Tue 30/06/20	0%
247		Completion of detailed design	132 days	Wed 01/07/20	Thu 31/12/20	0%
248		Utility diversion	86 days	Fri 01/01/21	Fri 30/04/21	0%
249		Construction	65 days	Mon 03/05/21	Fri 30/07/21	0%
250		**DU04 (Durham Rail Station access improvements)**	**322 days**	**Mon 03/02/20**	**Fri 30/04/21**	**0%**
251		Investigations	62 days	Mon 03/02/20	Thu 30/04/20	0%
252		Network Rail Engagement	65 days	Fri 01/05/20	Fri 31/07/20	0%
253		Completion of detailed design	86 days	Mon 03/08/20	Mon 30/11/20	0%
254		Vegatation clearance	23 days	Tue 01/12/20	Thu 31/12/20	0%
255		Construction	86 days	Fri 01/01/21	Fri 30/04/21	0%
256		**DU07 (Durham Bus Station)**	**555 days**	**Mon 01/04/19**	**Mon 31/05/21**	**0%**
257		RIBA 0-3	149 days	Mon 01/04/19	Thu 31/10/19	0%
258		Consultation	23 days	Tue 01/10/19	Thu 31/10/19	0%
259		Planning application	63 days	Fri 01/11/19	Fri 31/01/20	0%
260		RIBA 4-5	83 days	Fri 01/11/19	Fri 28/02/20	0%
261		Demolition	62 days	Mon 03/02/20	Thu 30/04/20	0%
262		Construction	236 days	Mon 06/07/20	Mon 31/05/21	0%
263		**Gateshead Schemes**	**974 days**	**Mon 01/07/19**	**Mon 03/04/23**	**0%**
264		**GA01(West Tyneside Cycle Route- upgrade existing routes)**	**908 days**	**Tue 01/10/19**	**Mon 03/04/23**	**0%**
265		**Phase 1**	**386 days**	**Tue 01/10/19**	**Thu 01/04/21**	**0%**
266		Preliminary design	64 days	Tue 01/10/19	Tue 31/12/19	0%
267		Public consultation	64 days	Thu 02/01/20	Tue 31/03/20	0%
268		Detailed design	62 days	Wed 01/04/20	Tue 30/06/20	0%
269		Pre-construction planning	66 days	Wed 01/07/20	Wed 30/09/20	0%
270		Construction Phase	130 days	Thu 01/10/20	Wed 31/03/21	0%
271		Scheme Opening	0 days	Thu 01/04/21	Thu 01/04/21	0%
272		**Phase 2**	**391 days**	**Thu 01/10/20**	**Fri 01/04/22**	**0%**
273		Preliminary design	66 days	Thu 01/10/20	Thu 31/12/20	0%
274		Public consultation	64 days	Fri 01/01/21	Wed 31/03/21	0%
275		Detailed design	65 days	Thu 01/04/21	Wed 30/06/21	0%
276		Pre-construction planning	66 days	Thu 01/07/21	Thu 30/09/21	0%
277		Construction Phase	130 days	Fri 01/10/21	Thu 31/03/22	0%
278		Scheme Opening	0 days	Fri 01/04/22	Fri 01/04/22	0%



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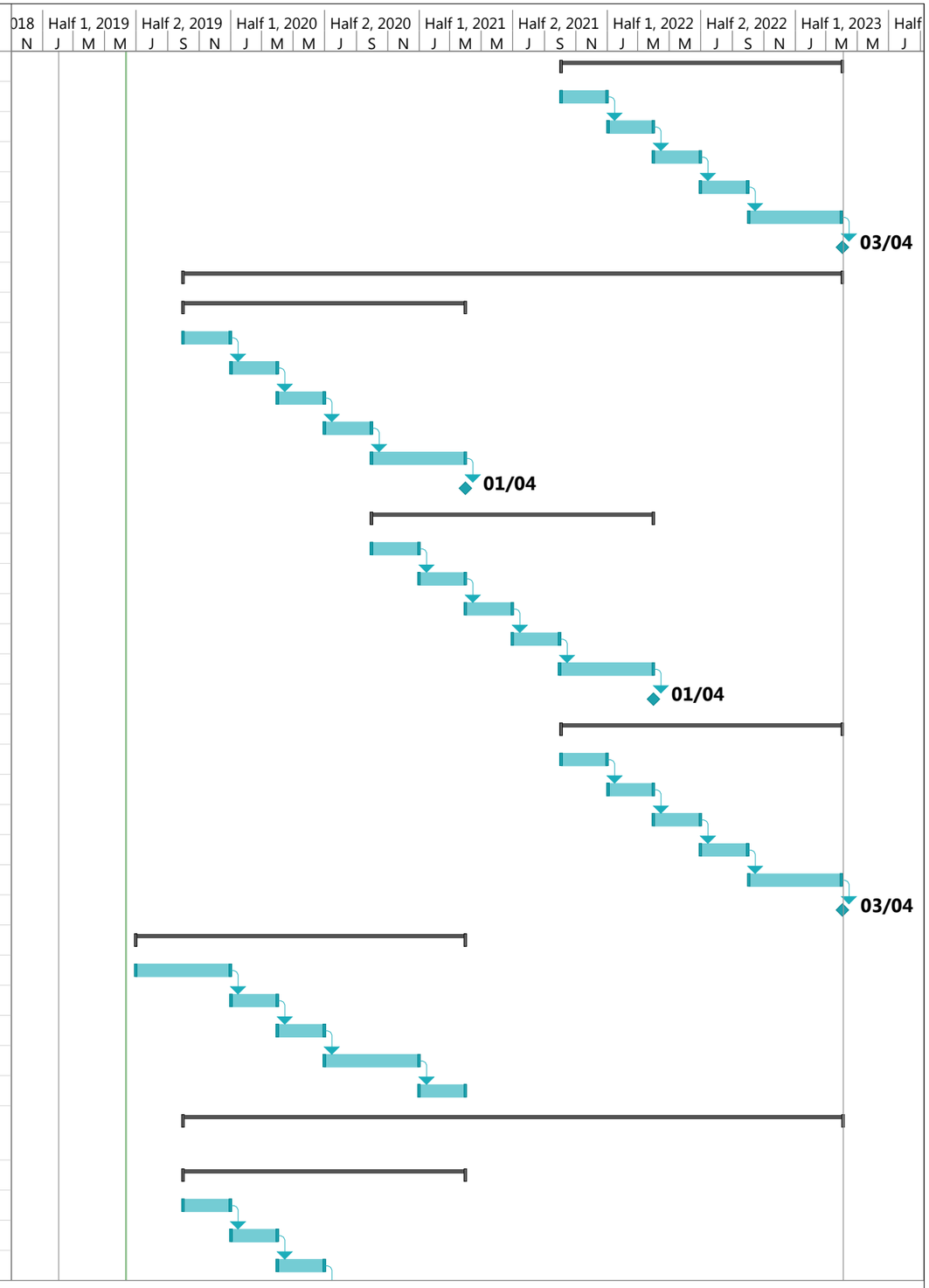
Task	Project Summary	Manual Task	Start-only	Deadline
Split	Inactive Task	Duration-only	Finish-only	Progress
Milestone	Inactive Milestone	Manual Summary Rollup	External Tasks	Manual Progress
Summary	Inactive Summary	Manual Summary	External Milestone	

ID	Task Mode	Task Name	Duration	Start	Finish	% Complete
279		**Phase 3**	**390 days**	**Mon 04/10/21**	**Mon 03/04/23**	**0%**
280		Preliminary design	65 days	Mon 04/10/21	Fri 31/12/21	0%
281		Public consultation	64 days	Mon 03/01/22	Thu 31/03/22	0%
282		Detailed design	65 days	Fri 01/04/22	Thu 30/06/22	0%
283		Pre-construction planning	66 days	Fri 01/07/22	Fri 30/09/22	0%
284		Construction Phase	130 days	Mon 03/10/22	Fri 31/03/23	0%
285		Scheme Opening	0 days	Mon 03/04/23	Mon 03/04/23	0%
286		**GA05 (Metro Green Sustainability Access)**	**908 days**	**Tue 01/10/19**	**Mon 03/04/23**	**0%**
287		**Phase 1**	**386 days**	**Tue 01/10/19**	**Thu 01/04/21**	**0%**
288		Preliminary design	64 days	Tue 01/10/19	Tue 31/12/19	0%
289		Public consultation	64 days	Thu 02/01/20	Tue 31/03/20	0%
290		Detailed design	62 days	Wed 01/04/20	Tue 30/06/20	0%
291		Pre-construction planning	66 days	Wed 01/07/20	Wed 30/09/20	0%
292		Construction Phase	130 days	Thu 01/10/20	Wed 31/03/21	0%
293		Scheme Opening	0 days	Thu 01/04/21	Thu 01/04/21	0%
294		**Phase 2**	**391 days**	**Thu 01/10/20**	**Fri 01/04/22**	**0%**
295		Preliminary design	66 days	Thu 01/10/20	Thu 31/12/20	0%
296		Public consultation	64 days	Fri 01/01/21	Wed 31/03/21	0%
297		Detailed design	65 days	Thu 01/04/21	Wed 30/06/21	0%
298		Pre-construction planning	66 days	Thu 01/07/21	Thu 30/09/21	0%
299		Construction Phase	130 days	Fri 01/10/21	Thu 31/03/22	0%
300		Scheme Opening	0 days	Fri 01/04/22	Fri 01/04/22	0%
301		**Phase 3**	**390 days**	**Mon 04/10/21**	**Mon 03/04/23**	**0%**
302		Preliminary design	65 days	Mon 04/10/21	Fri 31/12/21	0%
303		Public consultation	64 days	Mon 03/01/22	Thu 31/03/22	0%
304		Detailed design	65 days	Fri 01/04/22	Thu 30/06/22	0%
305		Pre-construction planning	66 days	Fri 01/07/22	Fri 30/09/22	0%
306		Construction Phase	130 days	Mon 03/10/22	Fri 31/03/23	0%
307		Scheme Opening	0 days	Mon 03/04/23	Mon 03/04/23	0%
308		**GA07 (Askew Road)**	**451 days**	**Mon 01/07/19**	**Wed 31/03/21**	**0%**
309		Detailed design	129 days	Mon 01/07/19	Tue 31/12/19	0%
310		Public consultation	64 days	Thu 02/01/20	Tue 31/03/20	0%
311		Pre-construcion planning	62 days	Wed 01/04/20	Tue 30/06/20	0%
312		Construction phase	132 days	Wed 01/07/20	Thu 31/12/20	0%
313		Scheme Opening	64 days	Fri 01/01/21	Wed 31/03/21	0%
314		**GA08 (Hills street and Gateshead quays sustainable access)**	**909 days**	**Tue 01/10/19**	**Mon 03/04/23**	**0%**
315		**Phase 1**	**386 days**	**Tue 01/10/19**	**Thu 01/04/21**	**0%**
316		Preliminary design	64 days	Tue 01/10/19	Tue 31/12/19	0%
317		Public consultation	64 days	Thu 02/01/20	Tue 31/03/20	0%
318		Detailed design	62 days	Wed 01/04/20	Tue 30/06/20	0%



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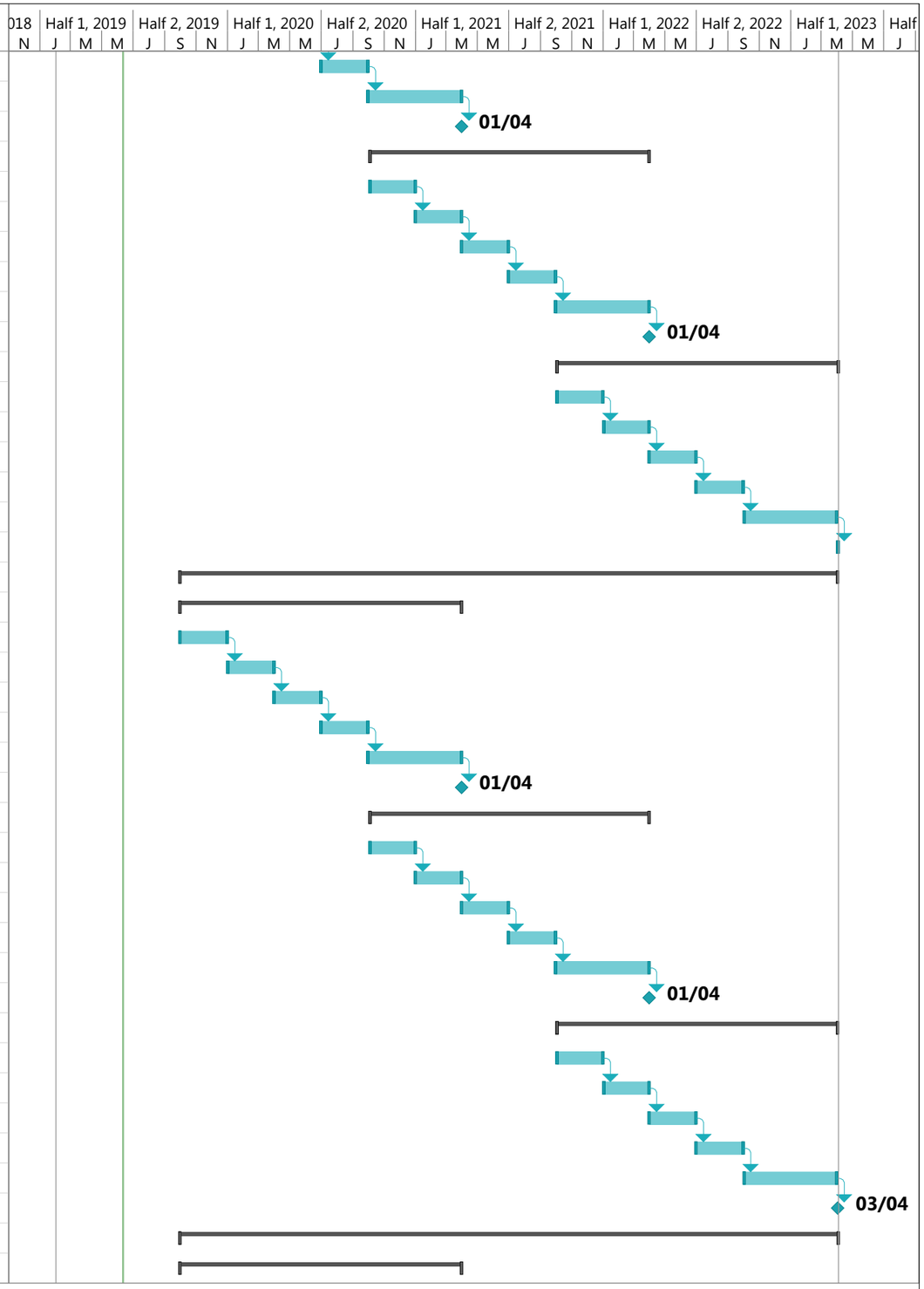
Milestone	Inactive Milestone	Manual Summary Rollup	External Tasks	Manual Progress
Summary	Inactive Summary	Manual Summary	External Milestone	

ID	Task Mode	Task Name	Duration	Start	Finish	% Complete
319		Pre-construction planning	66 days	Wed 01/07/20	Wed 30/09/20	0%
320		Construction Phase	130 days	Thu 01/10/20	Wed 31/03/21	0%
321		Scheme Opening	0 days	Thu 01/04/21	Thu 01/04/21	0%
322		**Phase 2**	**389 days**	**Mon 05/10/20**	**Fri 01/04/22**	**0%**
323		Preliminary design	64 days	Mon 05/10/20	Thu 31/12/20	0%
324		Public consultation	64 days	Fri 01/01/21	Wed 31/03/21	0%
325		Detailed design	65 days	Thu 01/04/21	Wed 30/06/21	0%
326		Pre-construction planning	66 days	Thu 01/07/21	Thu 30/09/21	0%
327		Construction Phase	130 days	Fri 01/10/21	Thu 31/03/22	0%
328		Scheme Opening	0 days	Fri 01/04/22	Fri 01/04/22	0%
329		**Phase 3**	**391 days**	**Mon 04/10/21**	**Mon 03/04/23**	**0%**
330		Preliminary design	65 days	Mon 04/10/21	Fri 31/12/21	0%
331		Public consultation	64 days	Mon 03/01/22	Thu 31/03/22	0%
332		Detailed design	65 days	Fri 01/04/22	Thu 30/06/22	0%
333		Pre-construction planning	66 days	Fri 01/07/22	Fri 30/09/22	0%
334		Construction Phase	130 days	Mon 03/10/22	Fri 31/03/23	0%
335		Scheme Opening	1 day?	Mon 03/04/23	Mon 03/04/23	0%
336		**GA09 (A167 Birtley to Eighton Lodge)**	**908 days**	**Tue 01/10/19**	**Mon 03/04/23**	**0%**
337		**Phase 1**	**386 days**	**Tue 01/10/19**	**Thu 01/04/21**	**0%**
338		Preliminary design	64 days	Tue 01/10/19	Tue 31/12/19	0%
339		Public consultation	64 days	Thu 02/01/20	Tue 31/03/20	0%
340		Detailed design	62 days	Wed 01/04/20	Tue 30/06/20	0%
341		Pre-construction planning	66 days	Wed 01/07/20	Wed 30/09/20	0%
342		Construction Phase	130 days	Thu 01/10/20	Wed 31/03/21	0%
343		Scheme Opening	0 days	Thu 01/04/21	Thu 01/04/21	0%
344		**Phase 2**	**389 days**	**Mon 05/10/20**	**Fri 01/04/22**	**0%**
345		Preliminary design	64 days	Mon 05/10/20	Thu 31/12/20	0%
346		Public consultation	64 days	Fri 01/01/21	Wed 31/03/21	0%
347		Detailed design	65 days	Thu 01/04/21	Wed 30/06/21	0%
348		Pre-construction planning	66 days	Thu 01/07/21	Thu 30/09/21	0%
349		Construction Phase	130 days	Fri 01/10/21	Thu 31/03/22	0%
350		Scheme Opening	0 days	Fri 01/04/22	Fri 01/04/22	0%
351		**Phase 3**	**390 days**	**Mon 04/10/21**	**Mon 03/04/23**	**0%**
352		Preliminary design	65 days	Mon 04/10/21	Fri 31/12/21	0%
353		Public consultation	64 days	Mon 03/01/22	Thu 31/03/22	0%
354		Detailed design	65 days	Fri 01/04/22	Thu 30/06/22	0%
355		Pre-construction planning	66 days	Fri 01/07/22	Fri 30/09/22	0%
356		Construction Phase	130 days	Mon 03/10/22	Fri 31/03/23	0%
357		Scheme Opening	0 days	Mon 03/04/23	Mon 03/04/23	0%
358		**GA10 (A184 Cycle Route)**	**909 days**	**Tue 01/10/19**	**Mon 03/04/23**	**0%**
359		**Phase 1**	**386 days**	**Tue 01/10/19**	**Thu 01/04/21**	**0%**



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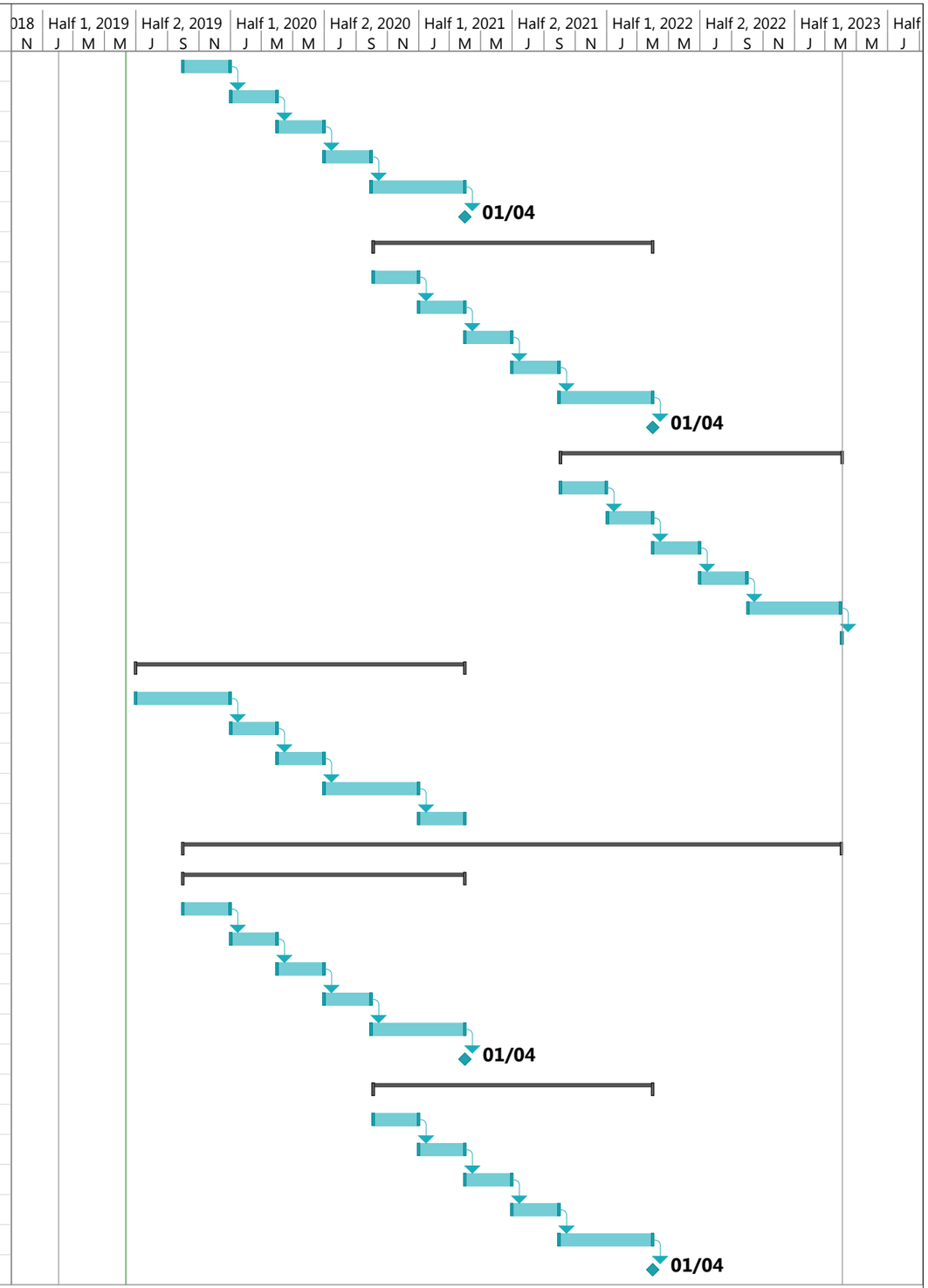
Summary	Inactive Summary	Manual Summary	External Milestone	

ID	Task Mode	Task Name	Duration	Start	Finish	% Complete
360		Preliminary design	64 days	Tue 01/10/19	Tue 31/12/19	0%
361		Public consultation	64 days	Thu 02/01/20	Tue 31/03/20	0%
362		Detailed design	62 days	Wed 01/04/20	Tue 30/06/20	0%
363		Pre-construction planning	66 days	Wed 01/07/20	Wed 30/09/20	0%
364		Construction Phase	130 days	Thu 01/10/20	Wed 31/03/21	0%
365		Scheme Opening	0 days	Thu 01/04/21	Thu 01/04/21	0%
366		**Phase 2**	**389 days**	**Mon 05/10/20**	**Fri 01/04/22**	**0%**
367		Preliminary design	64 days	Mon 05/10/20	Thu 31/12/20	0%
368		Public consultation	64 days	Fri 01/01/21	Wed 31/03/21	0%
369		Detailed design	65 days	Thu 01/04/21	Wed 30/06/21	0%
370		Pre-construction planning	66 days	Thu 01/07/21	Thu 30/09/21	0%
371		Construction Phase	130 days	Fri 01/10/21	Thu 31/03/22	0%
372		Scheme Opening	0 days	Fri 01/04/22	Fri 01/04/22	0%
373		**Phase 3**	**391 days**	**Mon 04/10/21**	**Mon 03/04/23**	**0%**
374		Preliminary design	65 days	Mon 04/10/21	Fri 31/12/21	0%
375		Public consultation	64 days	Mon 03/01/22	Thu 31/03/22	0%
376		Detailed design	65 days	Fri 01/04/22	Thu 30/06/22	0%
377		Pre-construction planning	66 days	Fri 01/07/22	Fri 30/09/22	0%
378		Construction Phase	130 days	Mon 03/10/22	Fri 31/03/23	0%
379		Scheme Opening	1 day?	Mon 03/04/23	Mon 03/04/23	0%
380		**GA11 (A195 bus lane)**	**451 days**	**Mon 01/07/19**	**Wed 31/03/21**	**0%**
381		Detailed design	129 days	Mon 01/07/19	Tue 31/12/19	0%
382		Public consultation	64 days	Thu 02/01/20	Tue 31/03/20	0%
383		Pre-construcion planning	62 days	Wed 01/04/20	Tue 30/06/20	0%
384		Construction phase	132 days	Wed 01/07/20	Thu 31/12/20	0%
385		Scheme Opening	64 days	Fri 01/01/21	Wed 31/03/21	0%
386		**GA13 (Keelmans way improvements)**	**908 days**	**Tue 01/10/19**	**Mon 03/04/23**	**0%**
387		**Phase 1**	**386 days**	**Tue 01/10/19**	**Thu 01/04/21**	**0%**
388		Preliminary design	64 days	Tue 01/10/19	Tue 31/12/19	0%
389		Public consultation	64 days	Thu 02/01/20	Tue 31/03/20	0%
390		Detailed design	62 days	Wed 01/04/20	Tue 30/06/20	0%
391		Pre-construction planning	66 days	Wed 01/07/20	Wed 30/09/20	0%
392		Construction Phase	130 days	Thu 01/10/20	Wed 31/03/21	0%
393		Scheme Opening	0 days	Thu 01/04/21	Thu 01/04/21	0%
394		**Phase 2**	**389 days**	**Mon 05/10/20**	**Fri 01/04/22**	**0%**
395		Preliminary design	64 days	Mon 05/10/20	Thu 31/12/20	0%
396		Public consultation	64 days	Fri 01/01/21	Wed 31/03/21	0%
397		Detailed design	65 days	Thu 01/04/21	Wed 30/06/21	0%
398		Pre-construction planning	66 days	Thu 01/07/21	Thu 30/09/21	0%
399		Construction Phase	130 days	Fri 01/10/21	Thu 31/03/22	0%
400		Scheme Opening	0 days	Fri 01/04/22	Fri 01/04/22	0%



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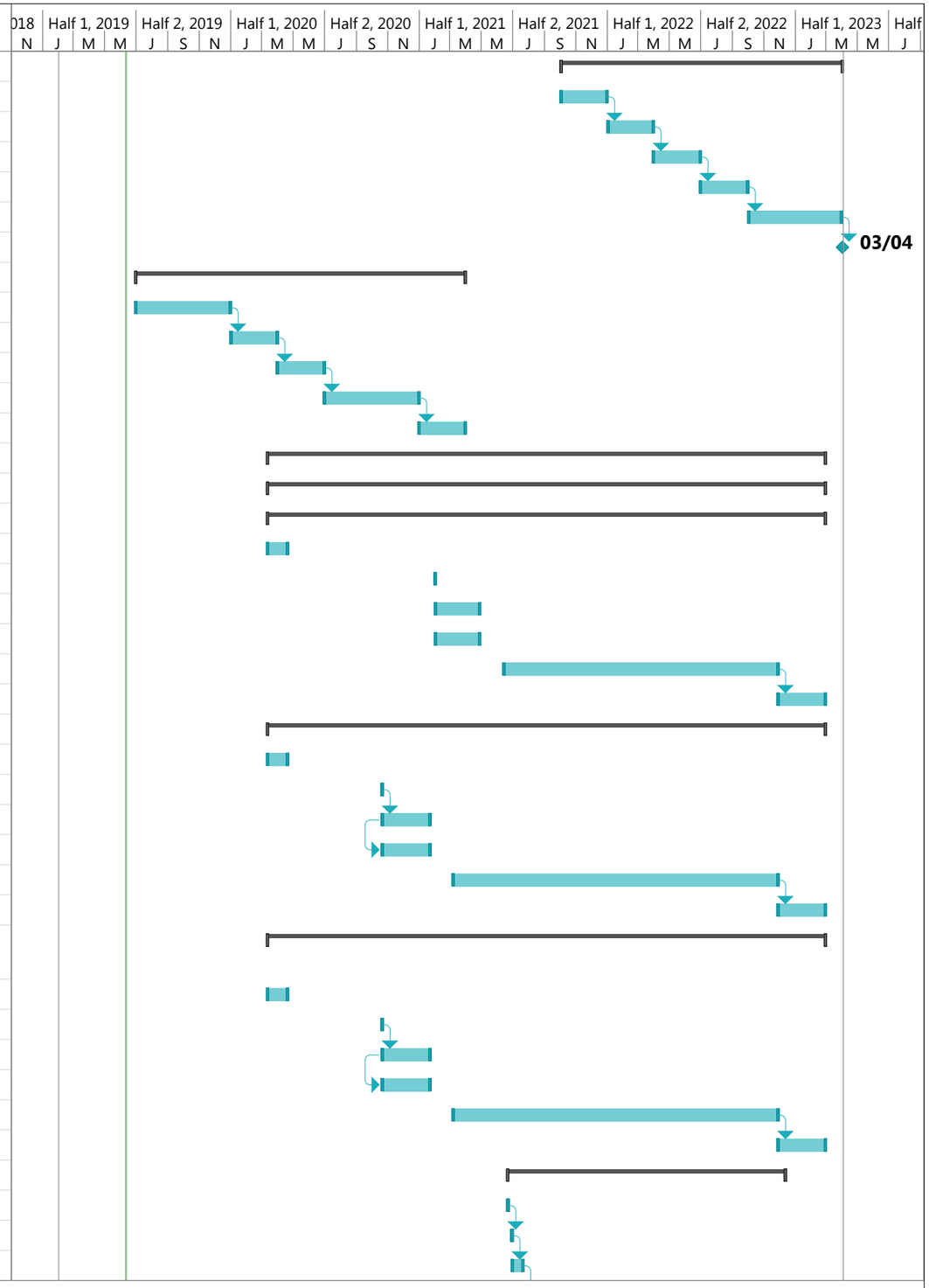
Task	Project Summary	Manual Task	Start-only	Deadline
Split	Inactive Task	Duration-only	Finish-only	Progress
Milestone	Inactive Milestone	Manual Summary Rollup	External Tasks	Manual Progress
Summary	Inactive Summary	Manual Summary	External Milestone	

ID	Task Mode	Task Name	Duration	Start	Finish	% Complete
401		**Phase 3**	**390 days**	**Mon 04/10/21**	**Mon 03/04/23**	**0%**
402		Preliminary design	65 days	Mon 04/10/21	Fri 31/12/21	0%
403		Public consultation	64 days	Mon 03/01/22	Thu 31/03/22	0%
404		Detailed design	65 days	Fri 01/04/22	Thu 30/06/22	0%
405		Pre-construction planning	66 days	Fri 01/07/22	Fri 30/09/22	0%
406		Construction Phase	130 days	Mon 03/10/22	Fri 31/03/23	0%
407		Scheme Opening	0 days	Mon 03/04/23	Mon 03/04/23	0%
408		**GA16 (Gateshead Interchange bus lane)**	**451 days**	**Mon 01/07/19**	**Wed 31/03/21**	**0%**
409		Detailed design	129 days	Mon 01/07/19	Tue 31/12/19	0%
410		Public consultation	64 days	Thu 02/01/20	Tue 31/03/20	0%
411		Pre-construcion planning	62 days	Wed 01/04/20	Tue 30/06/20	0%
412		Construction phase	132 days	Wed 01/07/20	Thu 31/12/20	0%
413		Scheme Opening	64 days	Fri 01/01/21	Wed 31/03/21	0%
414		**NEXUS Schemes**	**770 days**	**Fri 13/03/20**	**Tue 28/02/23**	**0%**
415		**NX02 (Park and Ride Enhacements)**	**770 days**	**Fri 13/03/20**	**Tue 28/02/23**	**0%**
416		**Digital Car Park Solution**	**770 days**	**Fri 13/03/20**	**Tue 28/02/23**	**0%**
417		Prepare tender documents	25 days	Fri 13/03/20	Mon 20/04/20	0%
418		Contract award	1 day	Mon 01/02/21	Mon 01/02/21	0%
419		Detailed designs	62 days	Tue 02/02/21	Wed 28/04/21	0%
420		Mobilisation	62 days	Tue 02/02/21	Wed 28/04/21	0%
421		Implementation	380 days	Tue 15/06/21	Mon 28/11/22	0%
422		Snagging	66 days	Tue 29/11/22	Tue 28/02/23	0%
423		**Improvements to security perceptions**	**770 days**	**Fri 13/03/20**	**Tue 28/02/23**	**0%**
424		Prepare tender documents	25 days	Fri 13/03/20	Mon 20/04/20	0%
425		Contract award	1 day	Wed 21/10/20	Wed 21/10/20	0%
426		Detailed designs	66 days	Thu 22/10/20	Thu 21/01/21	0%
427		Mobilisation	66 days	Thu 22/10/20	Thu 21/01/21	0%
428		Implementation	451 days	Mon 08/03/21	Mon 28/11/22	0%
429		Snagging	66 days	Tue 29/11/22	Tue 28/02/23	0%
430		**Car Park Occupancy Counting and Differentation**	**770 days**	**Fri 13/03/20**	**Tue 28/02/23**	**0%**
431		Prepare tender documents	25 days	Fri 13/03/20	Mon 20/04/20	0%
432		Contract award	1 day	Wed 21/10/20	Wed 21/10/20	0%
433		Detailed designs	66 days	Thu 22/10/20	Thu 21/01/21	0%
434		Mobilisation	66 days	Thu 22/10/20	Thu 21/01/21	0%
435		Implementation	451 days	Mon 08/03/21	Mon 28/11/22	0%
436		Snagging	66 days	Tue 29/11/22	Tue 28/02/23	0%
437		**NX03 (twin tracking between Pelaw and Bede)**	**385 days**	**Tue 22/06/21**	**Mon 12/12/22**	**0%**
438		Final contract award	1 day	Tue 22/06/21	Tue 22/06/21	0%
439		Inception meeting	1 day	Wed 30/06/21	Wed 30/06/21	0%
440		Base Design	15 days	Thu 01/07/21	Wed 21/07/21	0%



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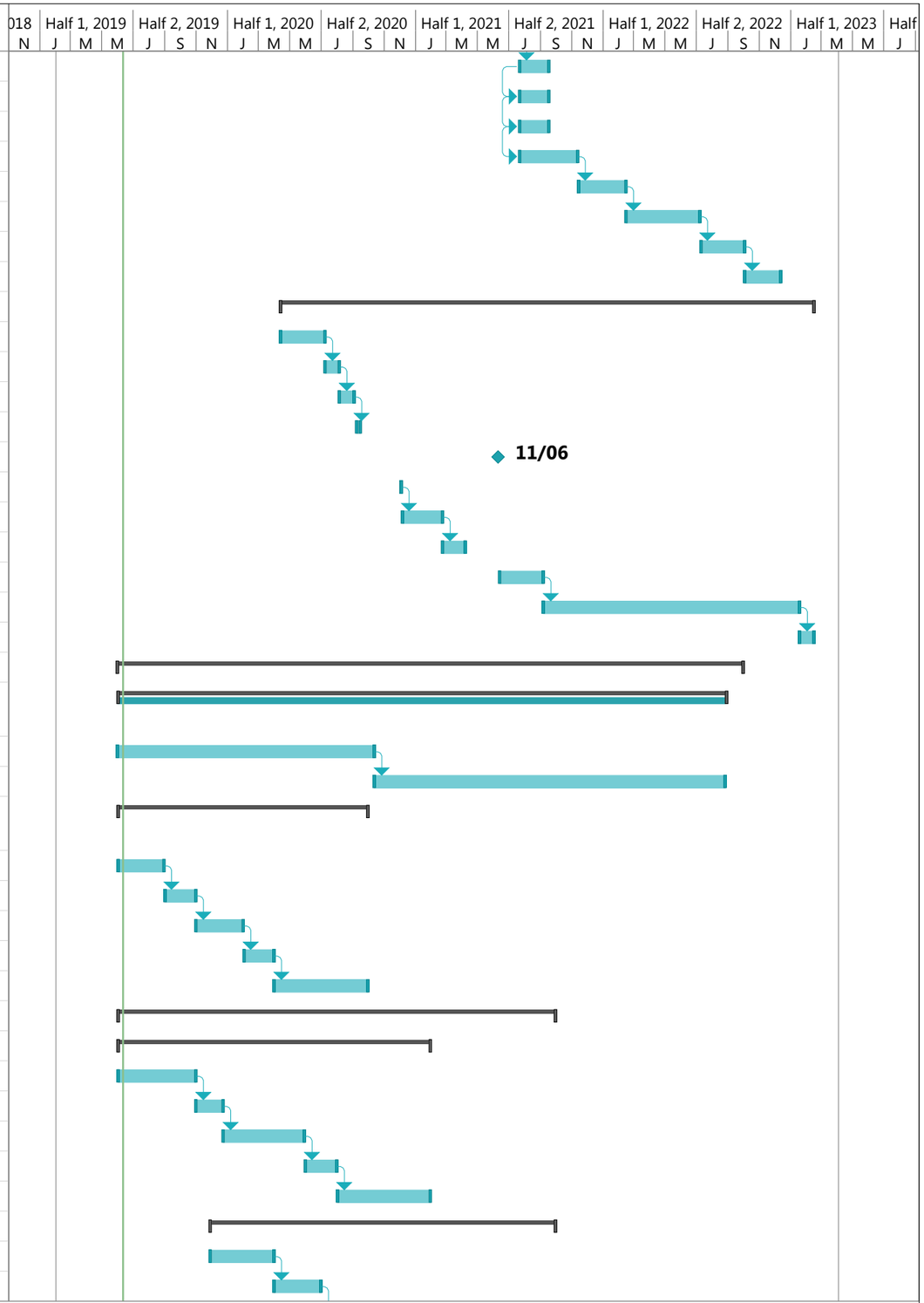
Task	Project Summary	Manual Task	Start-only	Deadline	
Split	Inactive Task	Duration-only	Finish-only	Progress	
Milestone	Inactive Milestone	Manual Summary Rollup	External Tasks	Manual Progress	
Summary	Inactive Summary	Manual Summary	External Milestone		

ID	Task Mode	Task Name	Duration	Start	Finish	% Complete
441		Civils design	41 days	Fri 23/07/21	Fri 17/09/21	0%
442		Pway design	41 days	Fri 23/07/21	Fri 17/09/21	0%
443		OLE design	41 days	Fri 23/07/21	Fri 17/09/21	0%
444		Signalling design	81 days	Fri 23/07/21	Fri 12/11/21	0%
445		Mobilisation	66 days	Mon 15/11/21	Mon 14/02/22	0%
446		Enabling	104 days	Tue 15/02/22	Fri 08/07/22	0%
447		Blockade	61 days	Mon 11/07/22	Mon 03/10/22	0%
448		Snagging	50 days	Tue 04/10/22	Mon 12/12/22	0%
449		**NX04 (Strategic Park and Ride Sities)**	**741 days**	**Tue 14/04/20**	**Wed 15/02/23**	**0%**
450		Detailed Design	61 days	Tue 14/04/20	Wed 08/07/20	0%
451		Detailed Design review	20 days	Thu 09/07/20	Wed 05/08/20	0%
452		Prepare tender documents	21 days	Thu 06/08/20	Thu 03/09/20	0%
453		Tender documents to procurement	5 days	Wed 09/09/20	Tue 15/09/20	0%
454		Contract award	0 days	Fri 11/06/21	Fri 11/06/21	0%
455		Issue ITT to selected bidders	1 day	Fri 04/12/20	Fri 04/12/20	0%
456		Tender period	56 days	Mon 07/12/20	Mon 22/02/21	0%
457		Tender evaluation	32 days	Tue 23/02/21	Wed 07/04/21	0%
458		Mobilisation	61 days	Mon 14/06/21	Mon 06/09/21	0%
459		Implementation	357 days	Tue 07/09/21	Wed 18/01/23	0%
460		Snagging	20 days	Thu 19/01/23	Wed 15/02/23	0%
461		**Sunderland Schemes**	**863 days**	**Sat 01/06/19**	**Fri 30/09/22**	**0%**
462		**SU03 (Sunderland Central Station Redevelopment)**	**839 days**	**Mon 03/06/19**	**Mon 29/08/22**	**0%**
463		Procurement	350 days	Sat 01/06/19	Mon 12/10/20	0%
464		Construction	489 days	Tue 13/10/20	Fri 26/08/22	0%
465		**SU04 (Holmeside Bus Rationalisation and Priority Measures)**	**341 days**	**Mon 03/06/19**	**Wed 30/09/20**	**0%**
466		Preliminary Design	64 days	Mon 03/06/19	Fri 30/08/19	0%
467		Consultation	44 days	Mon 02/09/19	Thu 31/10/19	0%
468		Detailed Design	63 days	Fri 01/11/19	Fri 31/01/20	0%
469		Procurement	42 days	Mon 03/02/20	Tue 31/03/20	0%
470		Construction	128 days	Wed 01/04/20	Wed 30/09/20	0%
471		**SU05 (Inner Ring Road Improvements)**	**602 days**	**Mon 03/06/19**	**Thu 30/09/21**	**0%**
472		**Priestman Road Roundabout**	**428 days**	**Mon 03/06/19**	**Fri 29/01/21**	**0%**
473		Preliminary Design	108 days	Mon 03/06/19	Thu 31/10/19	0%
474		Consultation	37 days	Fri 01/11/19	Mon 23/12/19	0%
475		Detailed Design	108 days	Tue 24/12/19	Fri 29/05/20	0%
476		Procurement	45 days	Mon 01/06/20	Fri 31/07/20	0%
477		Construction	130 days	Mon 03/08/20	Fri 29/01/21	0%
478		**Cowan Terrace**	**474 days**	**Fri 29/11/19**	**Thu 30/09/21**	**0%**
479		Preliminary Design	85 days	Fri 29/11/19	Tue 31/03/20	0%
480		Consultation	62 days	Wed 01/04/20	Tue 30/06/20	0%



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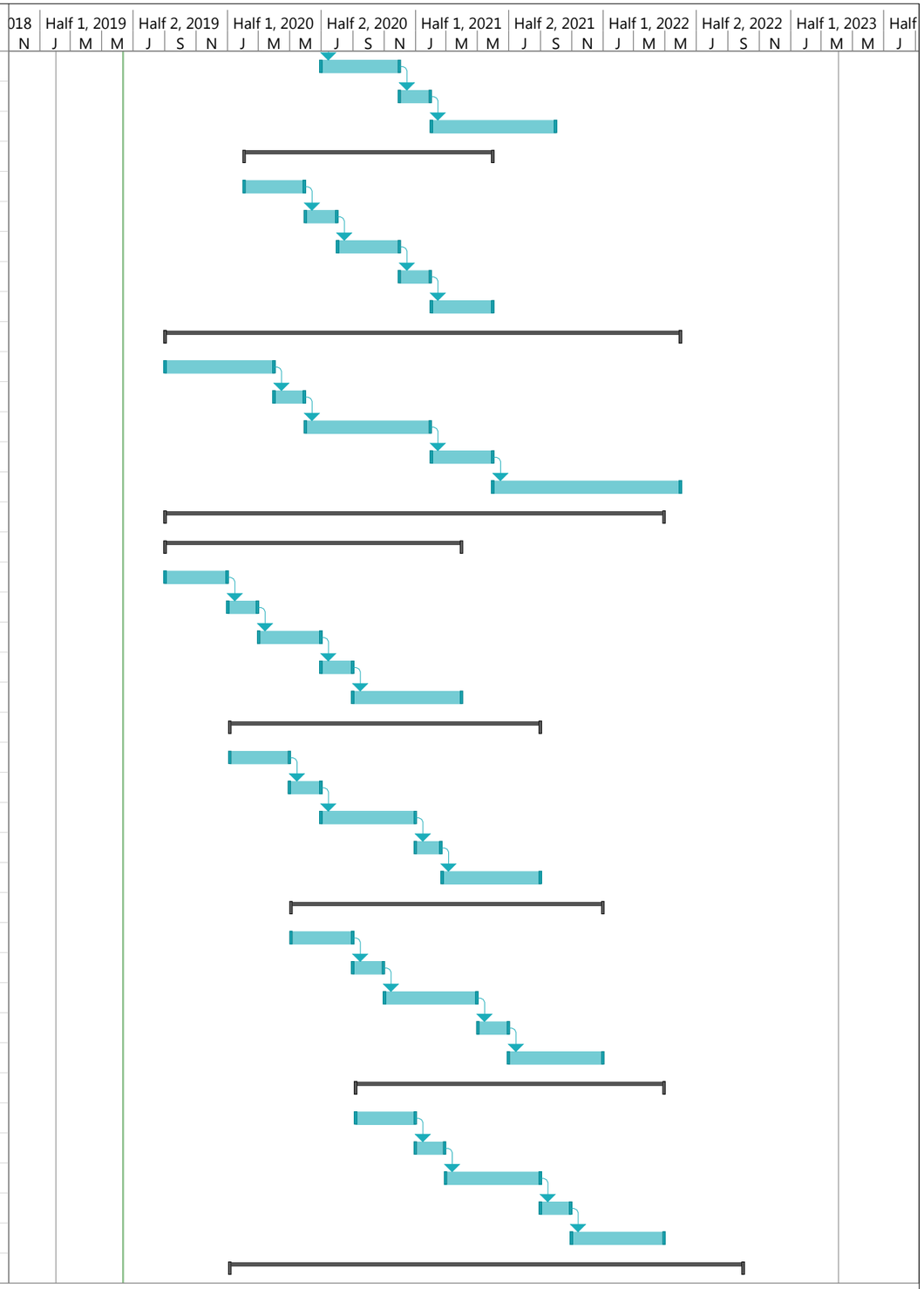
Task	Project Summary	Manual Task	Start-only	Deadline	
Split	Inactive Task	Duration-only	Finish-only	Progress	
Milestone	Inactive Milestone	Manual Summary Rollup	External Tasks	Manual Progress	
Summary	Inactive Summary	Manual Summary	External Milestone		

ID	Task Mode	Task Name	Duration	Start	Finish	% Complete
481		Detailed Design	109 days	Wed 01/07/20	Mon 30/11/20	0%
482		Procurement	44 days	Tue 01/12/20	Fri 29/01/21	0%
483		Construction	174 days	Mon 01/02/21	Thu 30/09/21	0%
484		**High Street West Junction**	**343 days**	**Mon 03/02/20**	**Mon 31/05/21**	**0%**
485		Preliminary Design	82 days	Mon 03/02/20	Fri 29/05/20	0%
486		Consultation	45 days	Mon 01/06/20	Fri 31/07/20	0%
487		Detailed Design	86 days	Mon 03/08/20	Mon 30/11/20	0%
488		Procurement	44 days	Tue 01/12/20	Fri 29/01/21	0%
489		Construction	86 days	Mon 01/02/21	Mon 31/05/21	0%
490		**SU07 (Holmeside / Sunderland Station Car Park)**	**711 days**	**Mon 02/09/19**	**Tue 31/05/22**	**0%**
491		Preliminary Design	149 days	Mon 02/09/19	Tue 31/03/20	0%
492		Consultation	40 days	Wed 01/04/20	Fri 29/05/20	0%
493		Detailed Design	175 days	Mon 01/06/20	Fri 29/01/21	0%
494		Procurement	86 days	Mon 01/02/21	Mon 31/05/21	0%
495		Construction	261 days	Tue 01/06/21	Tue 31/05/22	0%
496		**SU09 (Chester Road Bus Corridor)**	**689 days**	**Mon 02/09/19**	**Fri 29/04/22**	**0%**
497		**Broadway**	**407 days**	**Mon 02/09/19**	**Wed 31/03/21**	**0%**
498		Preliminary Design	85 days	Mon 02/09/19	Tue 31/12/19	0%
499		Consultation	42 days	Thu 02/01/20	Fri 28/02/20	0%
500		Detailed Design	84 days	Mon 02/03/20	Tue 30/06/20	0%
501		Procurement	44 days	Wed 01/07/20	Mon 31/08/20	0%
502		Construction	152 days	Tue 01/09/20	Wed 31/03/21	0%
503		**Grindon Lane**	**429 days**	**Mon 06/01/20**	**Tue 31/08/21**	**0%**
504		Preliminary Design	82 days	Mon 06/01/20	Thu 30/04/20	0%
505		Consultation	42 days	Fri 01/05/20	Tue 30/06/20	0%
506		Detailed Design	132 days	Wed 01/07/20	Thu 31/12/20	0%
507		Procurement	36 days	Fri 01/01/21	Fri 19/02/21	0%
508		Construction	137 days	Mon 22/02/21	Tue 31/08/21	0%
509		**Greenwood Road**	**434 days**	**Mon 04/05/20**	**Fri 31/12/21**	**0%**
510		Preliminary Design	86 days	Mon 04/05/20	Mon 31/08/20	0%
511		Consultation	44 days	Tue 01/09/20	Fri 30/10/20	0%
512		Detailed Design	130 days	Mon 02/11/20	Fri 30/04/21	0%
513		Procurement	43 days	Mon 03/05/21	Wed 30/06/21	0%
514		Construction	132 days	Thu 01/07/21	Fri 31/12/21	0%
515		**Royalty**	**430 days**	**Mon 07/09/20**	**Fri 29/04/22**	**0%**
516		Preliminary Design	84 days	Mon 07/09/20	Thu 31/12/20	0%
517		Consultation	41 days	Fri 01/01/21	Fri 26/02/21	0%
518		Detailed Design	132 days	Mon 01/03/21	Tue 31/08/21	0%
519		Procurement	43 days	Wed 01/09/21	Fri 29/10/21	0%
520		Construction	130 days	Mon 01/11/21	Fri 29/04/22	0%
521		**SU10 (A690 Route Action Plan)**	**712 days**	**Mon 06/01/20**	**Fri 30/09/22**	**0%**



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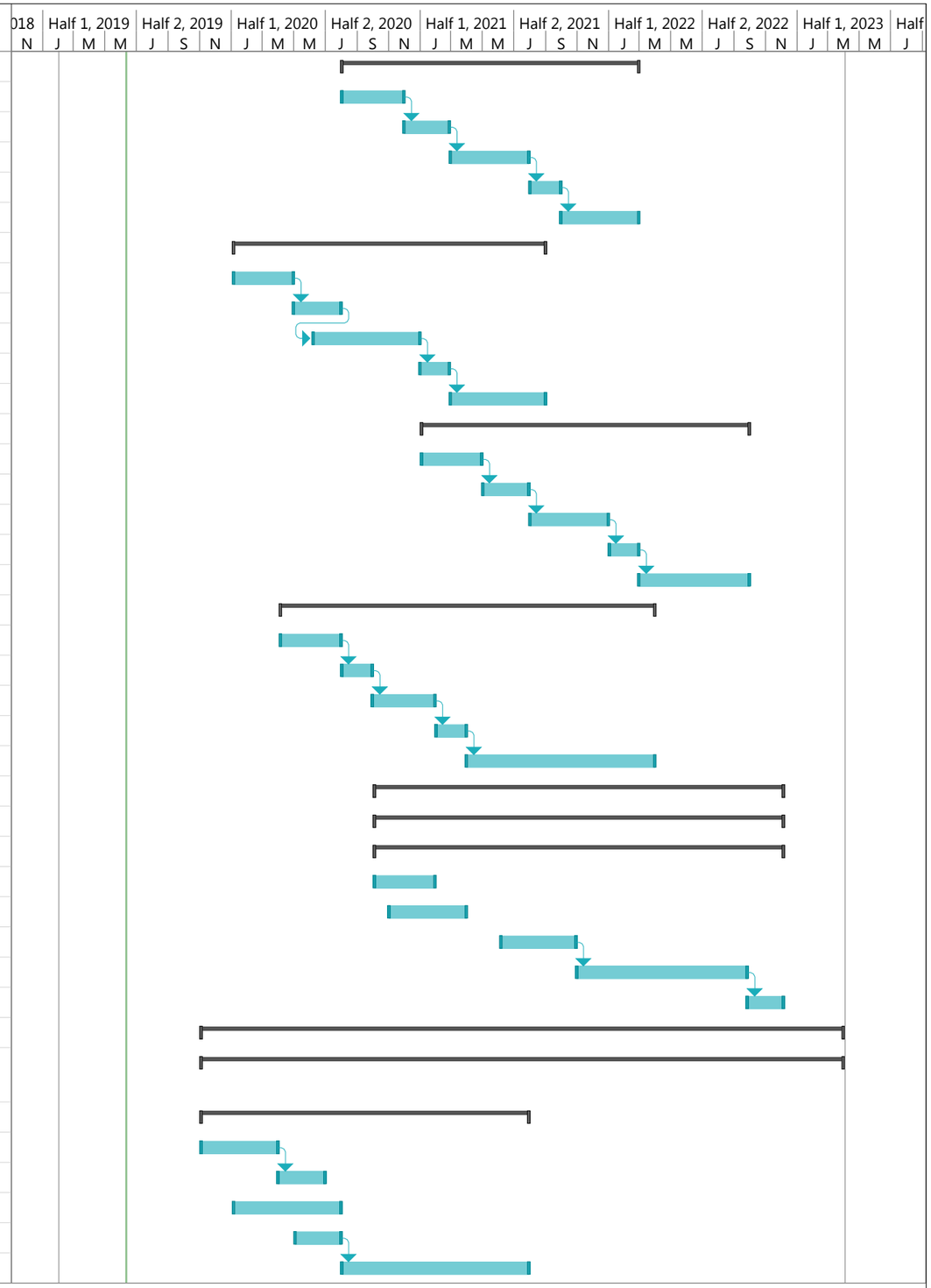
Task	Project Summary	Manual Task	Start-only	Deadline
Split	Inactive Task	Duration-only	Finish-only	Progress
Milestone	Inactive Milestone	Manual Summary Rollup	External Tasks	Manual Progress
Summary	Inactive Summary	Manual Summary	External Milestone	

ID	Task Mode	Task Name	Duration	Start	Finish	% Complete
522		**North Moor Lane**	**411 days**	**Mon 03/08/20**	**Mon 28/02/22**	**0%**
523		Preliminary Design	86 days	Mon 03/08/20	Mon 30/11/20	0%
524		Consultation	64 days	Tue 01/12/20	Fri 26/02/21	0%
525		Detailed design	110 days	Mon 01/03/21	Fri 30/07/21	0%
526		Procurement	44 days	Mon 02/08/21	Thu 30/09/21	0%
527		Construction	107 days	Fri 01/10/21	Mon 28/02/22	0%
528		**Grindon Lane**	**429 days**	**Mon 06/01/20**	**Tue 31/08/21**	**0%**
529		Preliminary design	82 days	Mon 06/01/20	Thu 30/04/20	0%
530		Consultation	65 days	Fri 01/05/20	Fri 31/07/20	0%
531		Detailed design	149 days	Mon 08/06/20	Thu 31/12/20	0%
532		Procurement	41 days	Fri 01/01/21	Fri 26/02/21	0%
533		Construction	132 days	Mon 01/03/21	Tue 31/08/21	0%
534		**Board Inn Roundabout**	**455 days**	**Mon 04/01/21**	**Fri 30/09/22**	**0%**
535		Preliminary Design	85 days	Mon 04/01/21	Fri 30/04/21	0%
536		Consultation	65 days	Mon 03/05/21	Fri 30/07/21	0%
537		Detailed Design	110 days	Mon 02/08/21	Fri 31/12/21	0%
538		Procurement	41 days	Mon 03/01/22	Mon 28/02/22	0%
539		Construction	154 days	Tue 01/03/22	Fri 30/09/22	0%
540		**SU15 (Strategic Cycle Network A690 Corridor)**	**516 days**	**Mon 06/04/20**	**Thu 31/03/22**	**0%**
541		Preliminary Design	82 days	Mon 06/04/20	Fri 31/07/20	0%
542		Consultation	43 days	Mon 03/08/20	Wed 30/09/20	0%
543		Detailed Design	87 days	Thu 01/10/20	Fri 29/01/21	0%
544		Procurement	43 days	Mon 01/02/21	Wed 31/03/21	0%
545		Construction	261 days	Thu 01/04/21	Thu 31/03/22	0%
546		**Northumberland Schemes**	**566 days**	**Mon 05/10/20**	**Mon 05/12/22**	**0%**
547		**NO01 (Reintroduction of passenger rail services)**	**566 days**	**Mon 05/10/20**	**Mon 05/12/22**	**0%**
548		**Phase 1**	**566 days**	**Mon 05/10/20**	**Mon 05/12/22**	**0%**
549		TCF / Funder FBC stage approval	85 days	Mon 05/10/20	Fri 29/01/21	0%
550		Procure D&B	108 days	Mon 02/11/20	Wed 31/03/21	0%
551		Detailed Design	105 days	Mon 07/06/21	Fri 29/10/21	0%
552		Construction	236 days	Mon 01/11/21	Mon 26/09/22	0%
553		Entry into service	50 days	Tue 27/09/22	Mon 05/12/22	0%
554		**North Tyneside Schemes**	**884 days**	**Mon 04/11/19**	**Fri 31/03/23**	**0%**
555		**NT02 (Improvements to North Shields transport hub)**	**884 days**	**Mon 04/11/19**	**Fri 31/03/23**	**0%**
556		**Bus Priority & Links**	**449 days**	**Mon 04/11/19**	**Fri 30/07/21**	**0%**
557		Design	104 days	Mon 04/11/19	Tue 31/03/20	0%
558		Stakeholder Engagement / Consultation	62 days	Wed 01/04/20	Tue 30/06/20	0%
559		Legals	147 days	Mon 06/01/20	Fri 31/07/20	0%
560		Contract tendering / procurement	65 days	Mon 04/05/20	Fri 31/07/20	0%
561		Delivery	260 days	Mon 03/08/20	Fri 30/07/21	0%



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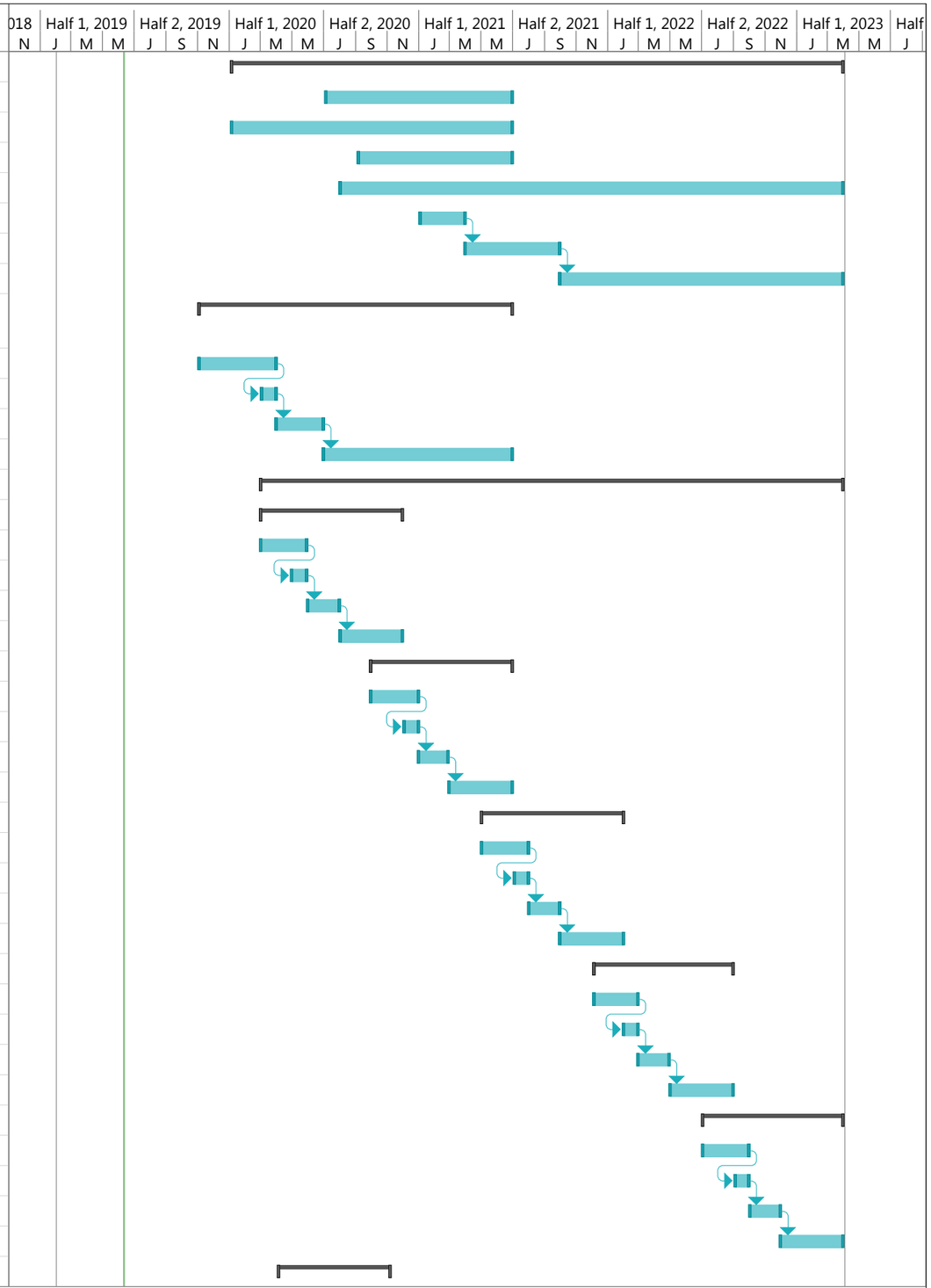
Split	Inactive Task	Duration-only	Finish-only	Progress
Milestone	Inactive Milestone	Manual Summary Rollup	External Tasks	Manual Progress
Summary	Inactive Summary	Manual Summary	External Milestone	

ID	Task Mode	Task Name	Duration	Start	Finish	% Complete
562		**Interchange**	**842 days**	**Mon 06/01/20**	**Fri 31/03/23**	**0%**
563		Design	258 days	Mon 06/07/20	Wed 30/06/21	0%
564		Land Acquisition	385 days	Mon 06/01/20	Wed 30/06/21	0%
565		Stakeholder Engagement / Consultation	213 days	Mon 07/09/20	Wed 30/06/21	0%
566		Legals	695 days	Mon 03/08/20	Fri 31/03/23	0%
567		Planning permission	63 days	Mon 04/01/21	Wed 31/03/21	0%
568		Contract tendering / procurement	131 days	Thu 01/04/21	Thu 30/09/21	0%
569		Delivery	391 days	Fri 01/10/21	Fri 31/03/23	0%
570		**NT08 (Bus priority improvements along A188 / A189 corridor phase 1)**	**427 days**	**Mon 04/11/19**	**Wed 30/06/21**	**0%**
571		Design	104 days	Mon 04/11/19	Tue 31/03/20	0%
572		Stakeholder Engagement / Consultation	20 days	Wed 04/03/20	Tue 31/03/20	0%
573		Contract tendering / procurement	62 days	Wed 01/04/20	Tue 30/06/20	0%
574		Delivery	261 days	Wed 01/07/20	Wed 30/06/21	0%
575		**NT10 (Improved Cycling / walking links to metro)**	**802 days**	**Mon 02/03/20**	**Fri 31/03/23**	**0%**
576		**Station 1**	**193 days**	**Mon 02/03/20**	**Mon 30/11/20**	**0%**
577		Design	62 days	Mon 02/03/20	Fri 29/05/20	0%
578		Stakeholder Engagement / Consultation	20 days	Fri 01/05/20	Fri 29/05/20	0%
579		Contract tendering / procurement	45 days	Mon 01/06/20	Fri 31/07/20	0%
580		Delivery	86 days	Mon 03/08/20	Mon 30/11/20	0%
581		**Station 2**	**195 days**	**Thu 01/10/20**	**Wed 30/06/21**	**0%**
582		Design	66 days	Thu 01/10/20	Thu 31/12/20	0%
583		Stakeholder Engagement / Consultation	20 days	Fri 04/12/20	Thu 31/12/20	0%
584		Contract tendering / procurement	41 days	Fri 01/01/21	Fri 26/02/21	0%
585		Delivery	88 days	Mon 01/03/21	Wed 30/06/21	0%
586		**Station 3**	**196 days**	**Mon 03/05/21**	**Mon 31/01/22**	**0%**
587		Design	66 days	Mon 03/05/21	Sat 31/07/21	0%
588		Stakeholder Engagement / Consultation	21 days	Mon 05/07/21	Sat 31/07/21	0%
589		Contract tendering / procurement	44 days	Mon 02/08/21	Thu 30/09/21	0%
590		Delivery	87 days	Fri 01/10/21	Mon 31/01/22	0%
591		**Station 4**	**193 days**	**Mon 06/12/21**	**Wed 31/08/22**	**0%**
592		Design	61 days	Mon 06/12/21	Mon 28/02/22	0%
593		Stakeholder Engagement / Consultation	20 days	Tue 01/02/22	Mon 28/02/22	0%
594		Contract tendering / procurement	44 days	Tue 01/03/22	Fri 29/04/22	0%
595		Delivery	88 days	Mon 02/05/22	Wed 31/08/22	0%
596		**Station 5**	**195 days**	**Mon 04/07/22**	**Fri 31/03/23**	**0%**
597		Design	65 days	Mon 04/07/22	Fri 30/09/22	0%
598		Stakeholder Engagement / Consultation	20 days	Mon 05/09/22	Fri 30/09/22	0%
599		Contract tendering / procurement	43 days	Mon 03/10/22	Wed 30/11/22	0%
600		Delivery	87 days	Thu 01/12/22	Fri 31/03/23	0%
601		**Intu Scheme**	**152 days**	**Mon 06/04/20**	**Fri 06/11/20**	**0%**



Project: TCF Bid - Draft SOBC a
Date: Wed 12/06/19

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	

ID	Task Mode	Task Name	Duration	Start	Finish	% Complete
602		**IN01 (Intu Cycle Storage)**	**152 days**	**Mon 06/04/20**	**Fri 06/11/20**	**0%**
603		**Appointments**	**13 days**	**Mon 06/04/20**	**Fri 24/04/20**	**0%**
604		Architect	13 days	Mon 06/04/20	Fri 24/04/20	0%
605		CDM	13 days	Mon 06/04/20	Fri 24/04/20	0%
606		Structural Engineer	13 days	Mon 06/04/20	Fri 24/04/20	0%
607		**Design Phase**	**39 days**	**Mon 27/04/20**	**Fri 19/06/20**	**0%**
608		Internal Layout	14 days	Mon 27/04/20	Fri 15/05/20	0%
609		External Layout	29 days	Mon 27/04/20	Fri 05/06/20	0%
610		Landscaping	29 days	Mon 27/04/20	Fri 05/06/20	0%
611		Specification of works	20 days	Mon 25/05/20	Fri 19/06/20	0%
612		**Planning Application**	**50 days**	**Mon 08/06/20**	**Fri 14/08/20**	**0%**
613		Prepare package	10 days	Mon 08/06/20	Fri 19/06/20	0%
614		Planning submission / review	40 days	Mon 22/06/20	Fri 14/08/20	0%
615		**Tender and Works**	**100 days**	**Mon 22/06/20**	**Fri 06/11/20**	**0%**
616		Tender works	30 days	Mon 22/06/20	Fri 31/07/20	0%
617		Contractor instruction	5 days	Mon 17/08/20	Fri 21/08/20	0%
618		Lead-in	10 days	Mon 24/08/20	Fri 04/09/20	0%
619		Works	40 days	Mon 07/09/20	Fri 30/10/20	0%
620		Snagging and hand-over	5 days	Mon 02/11/20	Fri 06/11/20	0%

Project: TCF Bid - Draft SOBC a
Date: Wed 12/06/19

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 Q: RISK REGISTER

Click here to insert a row

Risk / Opportunity Register - Transforming Cities Fund

									Pre - mitigation / realisation			Total Risk Allocated in Target Cost	Post - mitigation / realisation		
Risk / Opportunity 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	Probability 2	Risk Rating 2
R001	Open	Threat	Network Planning	Programme Preparation	Scheme Promoters	A number of large projects being delivered	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. Interdependancies and interfaces between projects to be highlighted in the project plan.	Medium	Medium	Medium
R002	Open	Threat	Communication	Programme Delivery	Scheme Promoters	Complaints from the public may occur	poor communication and disruption during delivery of schemes	Poor public satisfaction scores and a compliants being issued	Medium	Medium	Medium	A communication strategy will be developed and implemented.	Low	Low	Low
R003	Open	Threat	Whole life costings	Programme Preparation	Scheme Promoters	A lack of detail in cost build up	Revenue costs have not been factored into the project	Spend profiles inaccurate for bid submission	High	Medium	Medium	Scheme promoters to identify whole life cycle costs and ongoing delivery strategy	Medium	Low	Medium
R004	Open	Threat	Procurement	Programme Delivery	Scheme Promoters	Contractors with a lack of experience or knowledge appointed to deliver scheme	A lack of procurment strategy for the schemes to follow	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	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	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	Scheme Promoters	Process for descoping	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	Professional fees	Programme Preparation	Scheme Promoters	A lack of detail in cost build up	Unclear on the level of detail required at various stages	Spend profiles inaccurate for bid submission	Medium	Low	Medium	Spend profiles to take professional fees into account	Medium	Low	Medium
R009	Open	Threat	Surveys	Programme Delivery	Scheme Promoters	Unexpected results from surveys	Additional work which was not programmed will need to be carried out	Delay to delivery date	High	Medium	High	Assurance framework ensures scheme promoters identify survey requirements and engage relevant parties early in the design phase	Medium	Low	Medium
R010	Open	Threat	Monitoring and evaluation	Programme Delivery	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

R011	Open	Threat	Consents and Permissions	Programme Delivery	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
R012	Open	Threat	Scope Creep	Programme Preparation	NECA	The addition of projects and programmes late in the development of the overall TCF programme	Inadequate time given for feedback from leaders	Impact on the coherent nature of the bid and affect its quality. Not aligned with the strategic and transformative vision	High	Medium	High	Regular engagment and collaboration with stakeholders has been taking place at key stages and decision points. Clear steer where changes to scope have been presented. Strict timescales have been given to promoters. An assurance statement / framework has been prepared.	Low	Medium	Medium
R013	Open	Threat	Budget	Programme Preparation	NECA	Operational cost and available budget pressures to deliver a bid on time and of sufficient quality	Insufficient funds to manage cash flow; income and expenditure for duration of bid. Addition requirements identified by DfT not currently accounted for.	Failure to complete TCF bid due to lack of resource	High	Medium	High	TCF bid team is in place, solely working on bid and funding allocation to cover operation costs to submission date. Regular discussions with DfT to determine programme scope and resource implications	Low	Low	Low
R014	Open	Threat	Delay submission	Programme Preparation	NECA	Team fails to meet government deadlines associated with the submission of the bid	Lack of planning and monitoring against key milestones and dates	Bid rejected	Medium	High	High	TCF delivery timescales have been captured in a high level project plan. Regular reviews of the project plan and monitoring programme progress against key milestones.	Low	Low	Low
R015	Open	Threat	Resources	Programme Preparation	NECA	The team is unable to demonstrate to government and partners that it has the necessary operation capacity, skills and budget, to successfully deliver the bid	Failure to carry out skills gap-analysis and procure specialists in time	Sections of the bid lacking detail and level of robustness to give DfT confidence	Medium	Medium	Medium	A resource plan has been established. TCF team is in place.	Low	Low	Low
R016	Open	Threat	Quality Check	Programme Preparation	NECA	Insufficient time is allowed to review all aspects of the bid prior to submission leading to quality control issues arising	Failure to identify and build review work steps into the delivery programme	Inconsistencies in the way information has been reported and recorded- resulting in unsuccessful bid	Medium	Medium	Medium	Drafts issued for review with clear timescales for feedback.	Low	Medium	Medium
R017	Open	Threat	Political Endorsement Approval	Programme Preparation	NECA	Political Approval is not attained for signing off the bid resulting in non-delivery ahead of the deadlines set	Lack of defined project plan	Leaders do not support the package of schemes included in the bid. Need to demonstrate to DfT that there is full support, hence could cause bid	High	Medium	High	JTC briefings occur regularly to report on progress. Include details within the project plan	Low	Medium	Medium
R018	Open	Threat	External Support	Programme Preparation	NECA	External support such as from third party stakeholders is not attained resulting in a bid which could be disjointed in nature	Failure to identify who the key stakeholders are and expertise they bring to the bid. Insufficient time for stakeholders to comment on relevant pieces of work	Not enough representation for thematic packages from stakeholders and failure to approach bid from a strategic perspective- existing and proposed schemes	Medium	Medium	Medium	High level engagement with stakeholders has occurred. Workshops arranged. Scheme promoters have also provided information on stakeholder engagement within their bid.	Low	Low	Low
R019	Open	Threat	Match Funding	Programme Preparation and Delivery	NECA	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
R020	Open	Threat	Guidance alignment	Programme Preparation	NECA	Schemes submitted and packages overall deviate from the established objectives, risking non-approval.	Deviation from TCF guidance principles and failure to liaise with sense check with DfT	Unsuccessful bid, reduction in fund allocation, reduced impact 'non-transformative' programme.	Medium	Medium	Medium	Fortnighly meetings held with DfT to provide updates on programme development, to confirm that the proposed approach meets DfT's approval	Low	Medium	Medium
R021	Open	Threat	Insufficient or unclear scheme details	Programme Preparation	NECA	Schemes submitted lack clarity which could result in incorrect assumptions being made, schemes being withdrawn from the programme or incorrect benefit realisation.	Inadequate or poor programme management. Failure to issue consistent instructions leading to poor quality submissions.	Information submitted widely varies in quality and level of detail. Inability to collate into a coherent bid. Challenge in decision making- schemes ruled out due to poor proformas.	Medium	Medium	Medium	Scheme promoters have been issued with DfT TCF guidance materials. Proformas and standardised forms issued to ensure a consistent approach.	Low	Low	Low
R022	Open	Threat	Revenue considerations	Programme Preparation	NECA	Insufficient revenue considerations could impact on the ability to deliver and critically maintain an intervention	Resources not available for the duration of the bid development. Scheme promoters not able to commit time or financial pressures in developing the bid. Failure to develop detailed programme and robust SOBC.	Schemes initially shortlisted on basis of being deliverable may not be if resources are no longer available to develop schemes	Medium	Medium	Medium	Ongoing revenue requirements made clear to scheme promoters.	Low	Low	Low
R023	Open	Threat	VFM / BCR calculation issues	Programme Preparation	NECA	Not calculating a VfM score / BCR for an individual project could have implications on a wider programme BCR / VfM.	Failure to adhere to TCF guidance on VfM / BCR in development of bid.	DfT decision making based on evidence in business case. Unconvincing business case would result in bid failure.	Medium	Medium	Medium	Measures VfM in accordance with DfT's VfM Framework. Continual dialogue with consultants as scheme progresses, consultancy meetings and AECOm presence at DfT co-development bi monthly meetings	Low	Low	Low

R024	Open	Threat	Stakeholder agreement for sifting, packaging and sequencing	Programme Preparation	NECA	Non- agreement on the methodology used to sift schemes, build the packages and work up a SOBC could delay the process in finalising the bid.	Lack of methodology, inconsistencies in scoring, failure to consult and seek agreement with leaders on proposed methods. Failure to address concerns and adapt approach to meet expectations.	Inability to present rationale for judgement / evidence of process being undertaken resulting in division in partnership and escalation to Leaders and DfT.	Low	Medium	Medium	Results of sift will be shared with HOTG, recommended programme will be reviewed with JTC.	Low	Low	Low
R025	Open	Threat	Overlapping / duplication of schemes	Programme Preparation	NECA	Where schemes overlap or concepts are duplicated this risks impacting on the overall strategic narrative and vision we are seeking to achieve	Lack of coordinated approach- information gathering.	Higher programme costs, over programming, overcommitting to delivery, impact on quality of SOBC submission	Low	Medium	Medium	Scheme proformas have been collated from all of the promoters. Any duplicated projects have been identified, removed and discussed with the relevant authorities. Scheme mapping has also been carried out	Low	Medium	Medium
R026	Open	Threat	Unclear or incoherent strategic narrative	Programme Preparation	NECA	Detract from the vision we are seeking to deliver	Failure to utilise overarching strategies. Failure to align programme with strategies. The Strategic narrative also needs to be consistent with the impacts identified in the economic business case. Need to align with carbon and air quality challenge.	Weak narrative that a higher-level does not clearly set out. Problems and challenges the bid addresses. Alignment with TCF objectives and wider transformational benefits.	Low	Medium	Medium	Programme has been developed to ensure it aligns with NE TCF vision and expression of interest. Consistent with expectations set out in EOI.	Low	Medium	Medium
R027	Open	Threat	Evidence / data gaps	Programme Preparation	NECA	Missing data or incorrect use could result in an incoherent or unjustified bid. The bid needs to be evidence led.	Lack of consideration and lead-in time for developing robust evidence base.	Impact and benefit of bid fails to deliver a programme that is transformative.	Medium	Medium	Medium	Discussions with scheme promoters is ongoing to identify gaps and build a robust evidence base.	Low	Low	Low
R028	Open	Threat	Unclear management case	Programme Preparation	NECA	This could result in onward delivery issues and ultimately a challenge to benefits realisation	Failure to put in place robust arrangements for programme delivery, monitoring and evaluation of those schemes. Scheme promoters fail to provide convincing case for delivery, risk management, stakeholder management.	Failure to meeting DfT funding requirements could result in project failure.	Medium	Low	Medium	Alignment with DfT guidance. High level discussions have taken place with scheme promoters around the arrangements for delivering individual schemes.	Low	Medium	Medium
R029	Open	Threat	Insufficient attention applied to monitoring and evaluation	Programme Preparation	NECA	A longer term consideration which could result in the bid not being funded or the success of future bids being affected.	Monitoring and evaluation strategy not developed	No evidence base of 'benefits' of intervention - impact on future funding decisions / interventions. Poor quality information for DfT own evaluation and contribution.	Medium	Medium	Medium	Proformas have been issued to scheme promoter to capture the approach to monitoring and evaluation.	Low	Low	Low
R030	Open	Threat	Assurance and a clear financial and commercial case	Programme Preparation	NECA	One aspect of the agreement of the authority to sign up to the submission of the bid is hinged on a clear financial case which does not expose parties to unknown, unintended and unplanned financial risks.	High level financial information provided in build up costs and failure to demonstrate robust cash flow; TCF and match contributions.	Unable to provide assurance and demonstrate financial viability to DfT, resulting in reduced offer	Low	Medium	Medium	One of the key sifting criteria for the programme is for scheme promoters to demonstrate that they can meet DfT requirements- private and or local contribution towards project cost. Proformas have captured information. Further analysis of spend profiles required for TCF and Match funding.	Low	Low	Low
R031	Open	Threat	DfT review period unknown for draft and final SOBC	Programme Preparation	NECA	Final SOBC does not capture DfT comments from draft SOBC submission	DfT not providing feedback on June SOBC submission	A lack of quality for final SOBC which results in failure of bid	Medium	Low	Medium	Communication with DfT to gain a better understanding of their internal review durations.	Low	Low	Low
R032	Open	Threat	Third parties	Programme Delivery	NECA	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	Low	Low	Low

APPENDIX R: SCHEME RISKS

North East Transforming Cities Fund

Summary of Risks (collated from scheme proformas)

Code	Scheme name	Scheme promoter	Summary	Risks
DU01	Walking and cycling improvements	Durham County Council	Improved walking and cycling links into the city as well as links to Sunderland and Newcastle: • 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.	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. Environment Agency approval for Milburngate Bridge, although positive dialogue has already taken place. Planning approval would be needed, although not thought to be contentious. Potential delays/unexpected costs relating to statutory undertaker's apparatus and diversions Openreach apparatus along Carrville High Street to be diverted/lowered. Cost estimate for this within overall estimate Planning Application required for areas with change of use Unknown outcome of consultation required for shared-use areas, especially in built-up areas.
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	Land acquisition, although willing sellers at both sites. Planning permission would be needed, although not though to be contentious.

Code	Scheme name	Scheme promoter	Summary	Risks
			demand and inclusion of EV charging.	
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).	Objections to Bus Lane TRO's could lead to Highways Committee. However strong justification for the proposals.
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.	Network Rail GRIP approval. Not thought to be contentious, given we have recently provided similar facilities linking to the northbound platform.
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.	Below risks not high risk and can be managed. Party walls Grade II listed building consent – current station attached to manse. Network management clashes/events Planning application
GA01	West Tyneside cycle route	Gateshead Council	Upgrading of existing cycle routes along A1 corridor. Links the North/South Great North cycle route	Progressing detailed design – current proposals are in outline only and delivery timescales could be affected if detailed design was delayed.

Code	Scheme name	Scheme promoter	Summary	Risks
	(upgrading existing routes)		in Harlow Green area to East/West Keelmans' Way, via Team Valley and Metrocentre / MetroGreen area, continuing to Blaydon.	
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 priority measures.	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	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.	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	Gateshead Council	Upgrading of pedestrian, cycle and public transport environment on key link to Tyne Bridge: • Provision of a segregated cycleway alongside a new north/south road through the Baltic quarter • Improved pedestrian/cycle provision in the Tyne	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.

Code	Scheme name	Scheme promoter	Summary	Risks
			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.	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.
GA10	A184 cycle route	Gateshead Council	Creation of new shared use pedestrian and cycle route along north side of A184 (Felling Bypass) and improvement of facilities for crossing side roads with traffic signals.	Scheme is within existing highway boundary and so presents little risk other than through the design and consultation stages.
GA11	A195 bus lane	Gateshead Council	Northbound bus lane on A195 north of A194(M) on the approach to its	The proposed delivery timescales are dependent on not requiring third party land purchase for the scheme. If that is the case, the scheme would be delivered within the

Code	Scheme name	Scheme promoter	Summary	Risks
			junction with New Road. Buses using the route link Heworth interchange with Follingsby/Washington/Houghton le Spring.	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	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.	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	Gateshead Council	A reconfiguration of the north bound bus lane out of Gateshead interchange towards Newcastle. Current arrangements has been causing delays to GNE buses due to need to switch lanes under traffic signal control on the approach to Askew Road. This route carries	No obvious risks

Code	Scheme name	Scheme promoter	Summary	Risks
			almost all Gateshead to Newcastle buses.	
NE01	Transforming Newcastle City Centre	Newcastle City Council	Significant upgrades to Newcastle City Centre. This includes: • Restriction of vehicles on Blackett Street • Public transport priority improvements on Percy Street • Improvements to Gallowgate/Percy Street Junction • 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	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). 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). Risk of utilities discovery within congested urban environment (Mitigation: Intensive detailed design process and engagement with statutory undertakers). Dependencies between individual elements of schemes (Mitigation: Programming of works to minimise dependences).

Code	Scheme name	Scheme promoter	Summary	Risks
			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	• East Concourse - new access ramp to improved car park/public realm; access from Orchard Street,	Delivery of works within Network Rail land rather than highway land (Mitigation: Formation of Station Board, including Network Rail)

Code	Scheme name	Scheme promoter	Summary	Risks
			upgrade Orchard Street and Clavering Place tunnels • Westmorland Road junction upgrade	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 Delivery of works on or around ECML, introducing delay risk (Mitigation: Station Board and integration with Network Change process) Availability of match funding from LGF (Mitigation: Agreement that LGF is eligible source of match funding)
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	Long lead-in times for high-quality materials (Mitigation: Programme works based on materials available, develop lower cost option which prioritises delivery) Objections to Traffic Regulation Orders or poor response to consultation(Mitigation: extensive consultation with statutory consultees and intense consultation process) Risk of utilities discovery within congested urban environment (Mitigation: Intensive detailed design process and engagement with statutory undertakers)
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	Availability of S106 match funding (Mitigation: Detailed examination of relevant trigger points and phasing of construction) Development of improvements on Highways England land (A1/A696/A167) (Mitigation: Early engagement with Highways England) Delivery of Scotswood to North Brunton A1 scheme (Mitigation: Early engagement with Highways England)

Code	Scheme name	Scheme promoter	Summary	Risks
				Agreement of develops on most appropriate solution (Mitigation: Previous development of an agreed joint study to propose solutions – completed)
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	Availability of match funding need to confirm with Nexus / third parties. (Mitigation: Early agreement of LTP funding) 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)
NX02	Park and ride enhancements	Nexus	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: • Northumberland Park • Four Lane Ends • Callerton	Risk Register available Value engineering may be required. Timescale pressures Uncertainty around locations May require OJEU dep on value Potential GDPR requirements Back office interface / testing

Code	Scheme name	Scheme promoter	Summary	Risks
			• Regent Centre • Stadium of Light • Bank Foot	
NX03	Twin tracking of Metro line between Pelaw and Bede / Metro capacity enhancement	Nexus	The Metro twin tracking scheme entails Nexus taking over 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 twin tracking 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 five new Metro trains. Freight trains will still be able to run over the tracks taken over by Nexus	Risk Register available. Availability of match funding must be confirmed through SR19. Current timescales are autumn 2019. Proposals at scope stage. Form A progressing. Industry Objections. Extensive consultation programme, involving DfT Freight and ORR, progressing. Fleet affordability. ITT prices received on 24th March confirm current estimates are acceptable.

Code	Scheme name	Scheme promoter	Summary	Risks
NX04	Strategic park and ride sites – Follingsby park and ride and links to IAMP and Callerton Parkway	Nexus	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. Capacity doubled at existing park and ride site at Callerton, whilst future proofing for further development, 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	Risk Register available Availability of match funding need to confirm with third parties. Need for further technical analysis in April. Need to confirm exact requirements
NO01	Northumberland Line	Northumberl and County Council	The Northumberland Line proposals will introduce passenger trains on the existing freight railway between Ashington, Bedlington, Blyth, Northumberland Park and the East Coast Main Line at Benton. Trains will operate hourly between Newcastle and Ashington, more regularly in peak hours. Stations will	Scheme risk register available. Need to confirm availability of match funding and approach to third party funding. Delivery capacity of Network Rail is currently being mitigated through the addition of consultant support. Initial risks are detailed on page 101 of business case (SOBC) and include:

Code	Scheme name	Scheme promoter	Summary	Risks
			be constructed at Ashington, Bedlington Station, Newsham (for Blyth) and Northumberland Park (integrating with Metro services). Further stations may be constructed in future, but these require regulatory permissions that cannot be obtained within the funding timeframe of TCF. The principal cost items for this project are the upgrade of several level crossings to accommodate a more frequent train service and the provision of new stations, parking and highway infrastructure	NR require increased signalling scope for futureproofing/preferential design, causing higher cost and programme delays Industry review/current issues reduces resources to assist third party projects, causing programme delays and loss of funding opportunities Increased Freight Traffic Forecast causing higher scope and increased cost Need to use Transport and Works Act instead of Planning, LX Orders causing programme delays for early phase delivery and increased cost Programme delays and increased costs caused by land assembly/acquisition, unforeseen ground conditions (former coal mining area), poor NR asset condition (track, formation, structures).
NE07 / NO02	Callerton - Airport -Ponteland cycle route	Northumberland County Council (lead); Newcastle City Council	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	Availability of match funding Multi agency approach required (mitigation: Early establishment of a Project Board, which will include Newcastle Airport) Confirmation of role of Highways England and match funding (mitigation: written confirmation from HE on status of works on the A696 for cyclists) Integration with upcoming Newcastle scheme around Callerton Parkway (mitigation: same design team on both schemes) Confirm match funding as this is cross boundary.

Code	Scheme name	Scheme promoter	Summary	Risks
NT02	Improvements to 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, limited new retail and improved public realm, cycle hub, improved cycling and walking links into interchange, bus priority measures on routes into town centre and Shields Ferry landing	Availability of match funding need to confirm with Nexus / third parties. Land acquisition. 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.
NT08	Bus priority improvements along A188/A189 corridor phase 1	North Tyneside Council	• Bus priority improvements along A188/A189 corridor including Four Lane Ends interchange • Enhancement of existing park and ride facility at Four Lane Ends interchange. The possible provision of a new bus Park & Ride site in the A189 corridor (between Northumberland and Newcastle) will be considered as part of phase 2 of this project	Availability of match funding. Scheme is at the concept stage of development and needs refinement. Need to understand delivery mechanisms through working with operators.

Code	Scheme name	Scheme promoter	Summary	Risks
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)	Local contribution.
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	Availability of match funding. Delivery requires a multi-agency approach including Nexus, the Constabulary, Council and local user groups. All parties need to be satisfied. Scheme is at early stage development and needs refinement over time Identify Nexus requirements for station improvements (external / internal).
ST08a	Bus corridor improvements	South Tyneside Council	South Shields to Newcastle City Centre and to Durham City Centres: • Whiteleas Way Bus Lane • Stanhope Road / Boldon Lane Junction • Boldon / Tileshed Level Crossing Removal - New Bridge	Availability of match funding. Delivery requires a multi-agency approach, Scheme is at early stage development and needs refinement Private Land Take will be required as part of some of the infrastructure improvements.

<table>
<tr><th>Code</th><th>Scheme name</th><th>Scheme promoter</th><th>Summary</th><th>Risks</th></tr>
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New Road / Boker Lane Junction
Boldon ASDA/ New Road / Junction Improvements

</td>
<td>
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.
<table>
<tr><th colspan="2">Name/Category</th><th>No Assessment</th><th>Feasibility Study</th><th>Indicative Designs</th><th>Major Assessment</th></tr>
<tr><td rowspan="6">South Shields to Newcastle</td><td>UTMC / Traffic Signal Upgrades</td><td>✓</td><td></td><td></td><td></td></tr>
<tr><td>Whiteleas Way Bus Lane</td><td></td><td>✓</td><td>✓</td><td></td></tr>
<tr><td>Stanhope Road / Boldon Lane Junction</td><td></td><td>✓</td><td>✓</td><td></td></tr>
<tr><td>Boldon / Tileshed Level Crossing Removal - New Bridge</td><td></td><td>✓</td><td>✓</td><td>✓</td></tr>
<tr><td>New Road / Boker Lane Junction</td><td></td><td>✓</td><td>✓</td><td></td></tr>
<tr><td>Boldon ASDA/ New Road / Junction Improvements</td><td></td><td>✓</td><td></td><td></td></tr>
</table>
The principle risks associated with this scheme are as follows;
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.

Match funding needs to be identified with the Council to support this through existing funding sources, but also through capital investment bids.
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</table>

<table>
<tr><th>Code</th><th>Scheme name</th><th>Scheme promoter</th><th>Summary</th><th>Risks</th></tr>
<tr><td>ST08b</td><td></td><td>South Tyneside Council</td><td>South Shields to Sunderland City Centre:
Westoe Fountain / Dean Road / Sunderland Road Junction
The Nook PT Improvements
A183 Bus Lane into Whitburn</td><td>Availability of match funding.

Delivery requires a multi-agency approach,

Scheme is at early stage development and needs refinement

Private Land Take may be required as part of some of the infrastructure improvements.

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.

<table>
<tr><th colspan="2">Name/Category</th><th>No Assessment</th><th>Feasibility Study</th><th>Indicative Designs</th></tr>
<tr><td rowspan="5">South Shields to Sunderland</td><td>UTMC Upgrades / Traffic Signal Upgrades (Estimated at 10 key traffic signalised junction throughout corridor)</td><td>✓</td><td></td><td></td></tr>
<tr><td>Westoe Fountain / Dean Road / Sunderland Road Junction</td><td></td><td>✓</td><td>✓</td></tr>
<tr><td>The Nook PT Improvements</td><td></td><td>✓</td><td>✓</td></tr>
<tr><td>A183 Bus Lane into Whitburn</td><td></td><td>✓</td><td>✓</td></tr>
<tr><td>Bus Infrastructure Improvements</td><td></td><td>✓</td><td>✓</td></tr>
</table>
The principle risks associated with this scheme are as follows;</td></tr>
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Code	Scheme name	Scheme promoter	Summary	Risks
				Land Take Requirements – although discussions with the Council's Asset Management Team have commenced. Match funding will need to be provided from existing Council Budgets. Utilities within the highway;
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	GRIP 3 Stage Gates Cost Report (Jan 19) Risk Register available
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: • Super crossing provision • Signalised shuttle working • Potential one way system	To be confirmed

Code	Scheme name	Scheme promoter	Summary	Risks
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	To be confirmed
SU07	Holmeside / Sunderland station car park	Sunderland City Council	To provide park and ride facilities for national and local rail passengers encouraging modal transfer- linked to Holmeside proposals. Includes electric vehicle charging infrastructure. The location of the scheme is approximately 150m from the southern entrance to Sunderland Station, the upgrade of station facilities is included in SU03. The plans are currently for a 160 multi storey car park with retail facilities at ground floor level, this could be downscaled to a surface level car park or upscaled to include more storeys	To be confirmed
SU09	Chester Road bus corridor	Sunderland City Council	To provide bus priority measures resulting in journey saving time	To be confirmed

Code	Scheme name	Scheme promoter	Summary	Risks
			(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	
SU10	A690 route action plan	Sunderland City Council	Aim is 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.	To be confirmed
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	Public opposition, Scheme proving to be costlier than originally anticipated, Dependencies are inaccurate, Inability to secure sufficient resources for the project.
IN01	Intu cycle storage	Intu	• Secure cycle storage facility for use by all staff working across Intu Eldon Square	Agreement on access solution from Percy Street mindful of the wider Newcastle City Centre Transformational scenario.

Code	Scheme name	Scheme promoter	Summary	Risks
			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 • 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	Remodelling of the planted area on Percy Street owned by Newcastle City Council - initial discussions with NCC have taken place and appear positive. Structural considerations in creating the external access door from/to Percy Street.
ITS01	ITS Package of works - Regionwide	Regionwide – being developed by Gary Macdonald (AECOM)	Intelligent Transport Systems (ITS) technology is required to facilitate corridor-based improvements across the region and to support non-corridor schemes. ITS will collect data from various sources and implement strategies to better inform mode and departure time choice. The scheme specifically focuses on carbon reduction through improved traffic flow and improving the reliability of motorised modes.	To be developed as part of Final SOBC

Code	Scheme name	Scheme promoter	Summary	Risks
			The scheme provides the foundations for a Future Grand Mobility Challenge that will see a phased roll-out of ride-sharing and slow modes as alternatives to single-occupancy car travel whilst improving conditions for public transport users. The scheme will also support the development of Future Mobility Zones for the area	